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IMPLEMENTATION COMPLETION AND RESULTS REPORT

(IDA Grant H903-ST; IDA Grant H977-ST; GPE Grant TF16391)

ON

GRANTS

IN THE AMOUNT OF

SDR 0.6 MILLION

(US\$0.9 MILLION EQUIVALENT – ORIGINAL IDA GRANT);

SDR 2.26 MILLION

(US\$3.5 MILLION EQUIVALENT – ADDITIONAL FINANCING IDA GRANT);

AND

A GLOBAL PARTNERSHIP FOR EDUCATION TRUST FUND GRANT

IN THE AMOUNT OF US\$1.1 MILLION

TO THE

DEMOCRATIC REPUBLIC OF SÃO TOMÉ AND PRÍNCIPE

FOR THE

QUALITY EDUCATION FOR ALL PROJECT

December 24, 2019

Education Global Practice
Africa Region

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 28, 2019)

Currency Unit = Dobras (STD)

STD 21,572.75 = US\$ 1

STD 24,528.06 = EUR 1

FISCAL YEAR

July 1 - June 30

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ABBREVIATIONS AND ACRONYMS

AALEB	National Large-Scale Assessment in Basic Education (<i>Avaliação Aferida de Larga Escala no Ensino Básico</i>)
AF	Additional Financing
AFAP	Fiduciary and Implementation Agency (<i>Agência Fiduciária e de Administração de Projetos</i>)
CPS	Country Partnership Strategy
DPEI	Directorate of Planning and Education Innovation (<i>Direcção Geral de Planeamento e Inovação Educativa</i>)
EDUTIC	Directorate of Information and Communications Technology (<i>Direcção de Tecnologia de Informação e Comunicação</i>)
EFA	Education for All
EFOPE	Teacher Training Institute (<i>Escola de Formação de Professores e Educadores</i>)
EGRA	Early Grade Reading Assessment
EMIS	Education Management Information System
ESP	Education Sector Plan
FA	Financing Agreement
FM	Financial Management
FY	Fiscal Year
GDP	Gross Domestic Product
GER	Gross Enrollment Rate
GPE	Global Partnership for Education
GRM	Grievance Redress Mechanism
HBS	Household Budget Survey
ICR	Implementation Completion and Results Report
ICT	Information and Communications Technology
IDA	International Development Association
IE	Impact Evaluation
IFR	Interim Financial Report
IRI	Intermediate Results Indicator
IRR	Internal Rate of Return
ISEC	Teacher Training Institute (<i>Instituto Superior de Educação e Comunicações</i>)
ISR	Implementation Status and Results Report
LEG	Local Education Group
M&E	Monitoring and Evaluation
MDG	Millennium Development Goal
MECC	Ministry of Education, Science, and Culture (<i>Ministério da Educação, Ciência, e Cultura</i>)
MECCC	Ministry of Education, Science, Culture, and Communications (<i>Ministério da Educação, Ciência, Cultura e Comunicações</i>)
MEES	Ministry of Education and Higher Education (<i>Ministério da Educação e Ensino Superior</i>)
MTR	Mid-Term Review
M&E	Monitoring and Evaluation
NPV	Net Present Value
PDO	Project Development Objective
PEQPT	Quality Education for All Project (<i>Projeto Educação de Qualidade para Todos</i>)
PSC	Project Steering Committee

PRSP	Poverty Reduction Strategy Paper
RESEN	Education Sector Analysis Report (<i>Relatório sobre o Estado do Sistema Educativo Nacional</i>)
RF	Results Framework
SE	Supervising Entity
SIGE	Education Management Information System (Sistema de Gestão Escolar)
STP	São Tomé and Príncipe
TA	Technical Assistance
TEE	Total Expenditure on Education
TF	Trust Fund
TGE	Total Government Expenditure
UIS-UNESCO	Institute for Statistics - United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
UPE	Universal Primary Education

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DATA SHEET

BASIC INFORMATION

Product Information

Project ID	Project Name
P146877	STP- Quality Education for All Project
Country	Financing Instrument
Sao Tome and Principe	Investment Project Financing
Original EA Category	Revised EA Category
Not Required (C)	

Organizations

Borrower	Implementing Agency
Ministry of Education and Higher Education	AFAP - Agência Fiduciária e de Administração de Projectos

Project Development Objective (PDO)

Original PDO

The Development Objective is to improve the system of in-service teacher training and to strengthen the management of human resources in the education sector in São Tomé and Príncipe.



FINANCING

	Original Amount (US\$)	Revised Amount (US\$)	Actual Disbursed (US\$)
World Bank Financing			
IDA-H9030	900,000	794,550	738,119
TF-16391	1,100,000	1,080,363	1,080,363
IDA-H9770	3,500,000	3,500,000	3,127,435
Total	5,500,000	5,374,913	4,945,917
Non-World Bank Financing			
Borrower/Recipient	0	0	0
Total	0	0	0
Total Project Cost	5,500,000	5,374,913	4,945,917

KEY DATES

Approval	Effectiveness	MTR Review	Original Closing	Actual Closing
20-Dec-2013	19-May-2014	02-May-2016	30-Jun-2017	28-Jun-2019

RESTRUCTURING AND/OR ADDITIONAL FINANCING

Date(s)	Amount Disbursed (US\$M)	Key Revisions
27-Jun-2014	0	Additional Financing Change in Results Framework
16-May-2017	2.74	Change in Results Framework Change in Loan Closing Date(s) Reallocation between Disbursement Categories Change in Implementation Schedule

KEY RATINGS

Outcome	Bank Performance	M&E Quality
Moderately Satisfactory	Moderately Satisfactory	Substantial



RATINGS OF PROJECT PERFORMANCE IN ISRs

No.	Date ISR Archived	DO Rating	IP Rating	Actual Disbursements (US\$M)
01	27-May-2014	Satisfactory	Satisfactory	0
02	15-Dec-2014	Satisfactory	Satisfactory	.15
03	23-Jun-2015	Satisfactory	Satisfactory	.57
04	31-Dec-2015	Moderately Satisfactory	Moderately Satisfactory	1.38
05	27-Jun-2016	Moderately Satisfactory	Moderately Satisfactory	1.63
06	24-Dec-2016	Moderately Satisfactory	Moderately Satisfactory	2.36
07	30-Jun-2017	Satisfactory	Moderately Satisfactory	2.86
08	29-Dec-2017	Moderately Satisfactory	Moderately Unsatisfactory	2.86
09	29-Jun-2018	Moderately Satisfactory	Moderately Satisfactory	3.10
10	27-Dec-2018	Moderately Satisfactory	Moderately Satisfactory	3.62
11	28-Jun-2019	Moderately Satisfactory	Moderately Satisfactory	4.62

SECTORS AND THEMES

Sectors

Major Sector/Sector (%)

Education 100

Public Administration - Education 40

Primary Education 60

Themes

Major Theme/ Theme (Level 2)/ Theme (Level 3) (%)



Human Development and Gender	0
Education	100
Access to Education	25
Science and Technology	25
Teachers	25
Standards, Curriculum and Textbooks	25

ADM STAFF

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I. PROJECT CONTEXT AND DEVELOPMENT OBJECTIVES

A. CONTEXT AT APPRAISAL

Country Context

1. **At the time of project appraisal in 2012, São Tomé and Príncipe (STP) was facing several complex development challenges due to its small size and vulnerability to external shocks, as well as its weak institutional capacity and aid dependence.** Frequent changes in Government leadership led to protracted periods of political instability. The country is one of the smallest economies in Africa. It is an archipelago of just over 1,000 km² and with fewer than 200,000 inhabitants. It is a small island nation with an open economy, and its gross domestic product (GDP) per capita was only about US\$2,500 in 2012. The country was also experiencing a demographic transition, with a decrease in fertility, mortality and birth rates. Demographic trends showed that the number of school-age children was expected to stabilize or even decrease. This decrease in pressure on the education system provided an opportunity to turn greater attention towards and invest further in education quality.

2. **After a decade of relatively accelerated growth, poverty and unemployment were serious concerns in 2012.** STP became a lower middle-income country in 2008, after experiencing the highest economic growth since its independence in 1975. Between 2001 and 2011, the GDP grew about 5 percent per year, compared to an average of 1.4 percent during the 1990s. However, in the five years prior to appraisal the country's economy was hit by two consecutive external shocks: (i) a spike in international food and fuel prices in mid-2008; and (ii) the global financial crisis of 2009, which partially offset the effects of fiscal consolidation and inflation-reducing policies. In 2010, the national poverty rate was 66.2 percent and the unemployment rate reached 13.4 percent.¹

3. **Despite the aforementioned challenges, progress had been made on social policy objectives and some of the Millennium Development Goals (MDGs).** STP was on track to achieve its targets in Universal Primary Education (UPE), reducing under-5 mortality, and combatting the spread of HIV/AIDS.² These achievements were primarily driven by substantial increases in education and public health expenditures. The education sector was a priority in public spending, with the country placing education at the center of its development agenda over the preceding eight years. Public expenditure in the sector increased from 2.7 percent of GDP in 2002 to 8.6 percent in 2012, and recurrent expenditures increased from 17.3 percent in 2002 to 37.9 percent in 2011.

Sector context

4. **During the 2000s, access in both primary and secondary education increased, and completion rates more than doubled in secondary education.** STP had virtually achieved UPE in 2011/12. Data on intake rates showed that since 2002/03, the capacity to accommodate new students in the first cycle of primary education (1st to 4th grades) was higher or equivalent to the number of children of the official age group (6 to 9 years old). For the second cycle (5th to 6th grades) the capacity to accommodate the entire population of 10 to 11 year-old children was achieved in 2010/11, and progress

¹ World Bank, World Development Indicators Database.

² Over the last 50 years, under-5 mortality reached its highest level in 1991/92, at 108.8 deaths per 1,000 live births. Since then it steadily decreased, reaching 75.1 and 40.4, in 2002 and 2012, respectively.



in enrollment in primary education was impacting the demand for secondary education. From 2003 to 2012, while enrollment in primary education grew 15.5 percent, in secondary education enrollment numbers increased by 108 percent.³ The transition rate from primary to lower secondary education was 97 percent, and in general secondary education, the completion rate increased significantly from 19.8 percent in 2000/01 to 45.2 percent in 2010/11. These conditions represented an opportunity to focus efforts and limited resources on improving the quality of primary education in the country.

5. **Despite these important achievements in access, the education system continued to face challenges in respect to efficiency, quality and governance.** Even though repetition rates had decreased over the previous five years, in 2012/13 they still remained high, at 13.7 and 21.5 percent for primary and secondary education, respectively.⁴ Additionally, the dropout rate through grade 6 was almost 34 percent. Although the country had not conducted any national assessments of student learning outcomes, education quality was believed to be low. Around 60 percent of primary education teachers were unqualified without any prior pedagogical training.⁵ While the teaching environment had improved with the provision of new, equipped classrooms and textbooks to all primary education students and teachers' guides, teachers lacked adequate academic and pedagogical competencies to teach.⁶ The supply of trained preschool and primary school teachers was heavily impacted when the only teacher training school in STP was closed in 1996. For more than 10 years, there were no pre-service teacher training opportunities in the country. During this time, new teachers were recruited from secondary schools and sent directly to the classroom. In 2007/08, a new teacher training school – *Escola de Formação de Professores e Educadores* (EFOPE)⁷ – was created; in 2010/11, there were 102 students were enrolled in this teacher training school.

6. **In 2012, there was no national learning assessment system in place, nor had the country participated in any regional or international assessments.** In 2010/11, a first effort to conduct end-of-cycle national examinations for students in grades 2 and 4 was made. These test results provided a snapshot of the student learning outcomes in primary education, although they could not be used for regional or comparative purposes. Furthermore, the Ministry of Education⁸ did not have a system in place that allowed for systematic planning and implementation of a fully developed learning assessment program that included a feedback mechanism for policy analysis and decision-making.

7. **The management of the education system was particularly weak.** While there were some positive features such as 95 percent of teachers being allocated to schools according to the number of students and some capacity for data collection for monitoring and evaluation (M&E) purposes, overall management of teachers was an issue. There was no reliable human resources management system to oversee recruitment, assignment and career development. Moreover, teachers' time-on-task in STP was among the lowest in Africa. In primary education, teachers spent, on average, only 3.5 hours a day in school and even this short amount of time was not fully dedicated to student learning and pedagogical tasks. Data showed that nearly 58 percent of primary education teachers spent less than 14 hours per week in the

³ UIS-UNESCO Database.

⁴ In 2007, repetition rates were 25.1 and 33.2 percent, for primary and secondary education, respectively.

⁵ For the purposes of this project, unqualified teachers were defined as those without any pedagogical training.

⁶ The previous project (P114824 – US\$3.6m) successfully supported the construction of 22 and 16 new classrooms in primary and early childhood education, respectively. In addition, 60 new teachers received pre-service training, 350 received in-service training, 200,000 textbooks were purchased and distributed to primary education students, and various training activities were delivered to technical staff in the education sector.

⁷ Due to changes in overall governance structures and political leadership, the name of this school has gone back and forth between EFOPE and the *Instituto Superior de Educação e Comunicações* (ISEC). In this ICR, ISEC is used throughout the document, as the most recent reference, but EFOPE and ISEC refers to the exact same teacher training school.

⁸ From the time of project preparation until closure, the name of the Ministry of Education changed three times. It was initially the Ministry of Education, Science, and Culture (MECC), then became the Ministry of Education, Science, Culture, and Communication (MECCC) and then most recently became the Ministry of Education and Higher Education (MEES). For the purposes of this ICR, the generic term “the Ministry of Education” has been used throughout.



classroom. This was partially due to: (i) the system's inability to effectively manage teachers in a context of geographically dispersed schools; and (ii) the use of multiple shifts in primary schools.

8. **The absence of an Education Management Information System (EMIS) and little to no classroom administrative and pedagogical supervision were considered key contributors to poor education quality.** There was no reliable EMIS to link the centrally based Ministry with decentralized structures. Inspectors and Pedagogical Supervisors rarely visited schools and classrooms and even when a visit was undertaken, there were no management and reporting tools in place to effectively support schools and overall teachers' development. Although education statistics were regularly published, institutional capacity for data analysis and reporting was weak and indicators were seldom used for policy or decision-making purposes.

Project context

9. **The STP Quality Education for All Project was designed to support key activities that were part of a recently endorsed Government's overall strategy for education, the Letter of Education Policy and Education Sector Plan (ESP) (2012-2021).** In the ESP, improvements in the quality and efficiency of primary education were described as high priorities. Additionally, the World Bank's Country Partnership Strategy (CPS) (2014-2018) and STP's Second Poverty Reduction Strategy Paper (PRSP) 2012-2016, both highlighted the need to target resources to promote a higher quality education for all in STP. Finally, by addressing issues of quality of education and learning outcomes, the project's aims were closely aligned with key priority areas of the Global Partnership for Education (GPE) at that time.

10. **At the time of preparation, the Bank already had a longstanding presence and engagement in the education sector and was well placed to design and support an operation directly aligned with the ESP and to tackle the pervasive challenges in providing quality education.** The Bank had just financed the Social Sector Support Project for education and health (2004-2012, including its AF), and was responsible for the country's first GPE-funded project (2008-2011). As the Supervising Entity (SE)⁹ for GPE financing in STP, the Bank also had been given resources to lead dialogue and provide technical and financial support for the preparation of the 2012 Education Sector Analysis Report (*Relatório sobre o Estado do Sistema Educativo Nacional* - RESEN) and the development of the ESP.

Theory of Change (Results Chain)

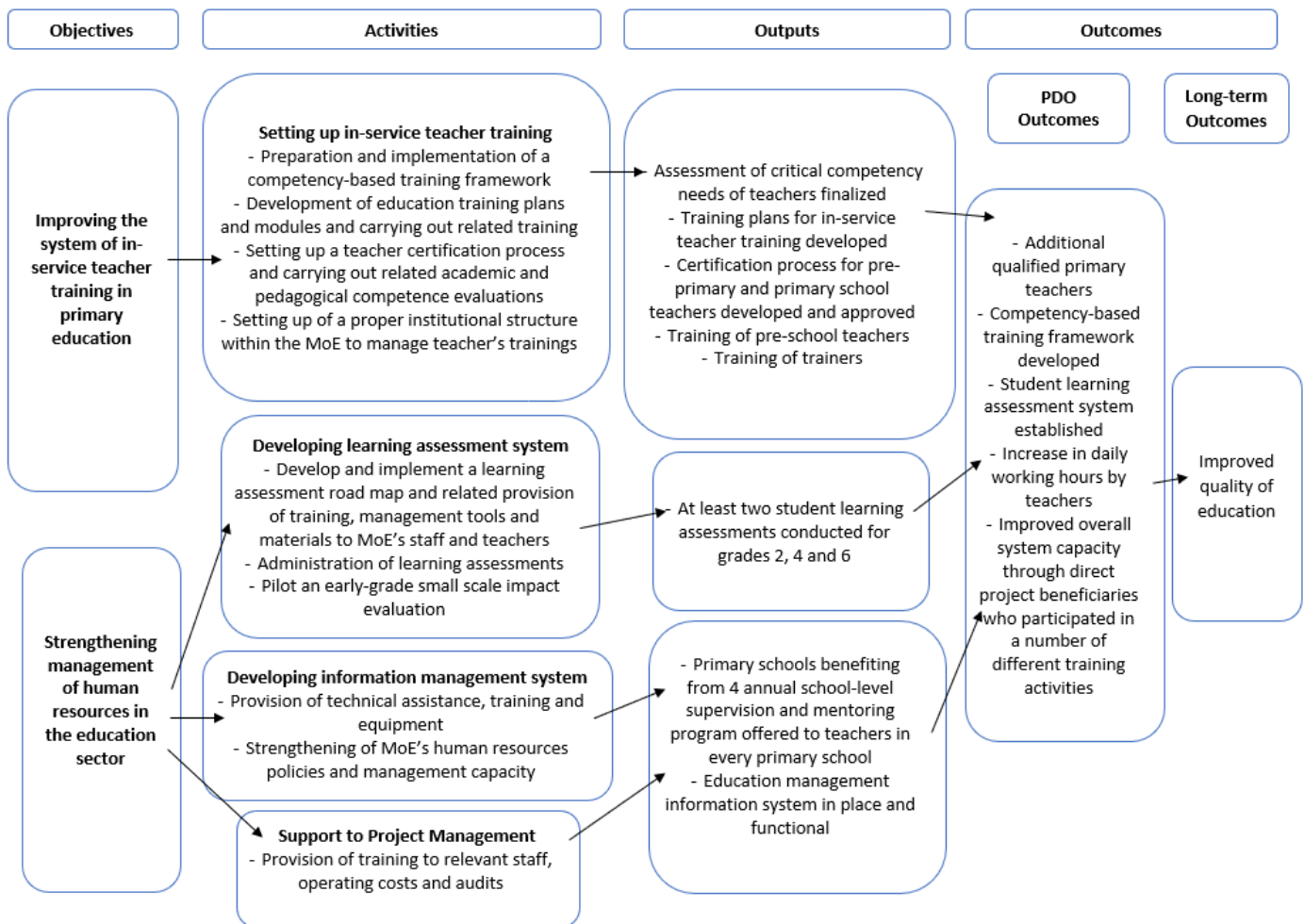
11. **The project's underlying assumption was that the lack of a coherent system to train teachers (with 60 percent having never received any pedagogical training) was one of the main factors contributing to poor learning outcomes.** It was expected that by setting up a program to provide effective in-service training to teachers would result in better qualified teachers and, consequently, better learning outcomes. Improvements to teacher training would require creating a teacher qualifications framework to guide the training content and establishing a certification process for primary school teachers. Additionally, the system for pre- and in-service teacher training would be based upon a common framework which would include minimum content knowledge and competencies of teachers – and standards as to how they were to be evaluated.

⁹ GPE currently refers to this role as Grant Agent.



12. The project’s results chain below illustrates the key interventions (activities), outputs and outcomes, grouped by the project’s two major objectives.¹⁰ The long-term outcome (beyond the life of the project) to which the project expected to contribute was an improvement in the quality of education in STP which would be achieved through improvements to the system of in-service teacher training and strengthening the management of human resources in the sector. The project’s design supported the development of the learning assessment system under the first main objective. It was expected that the learning assessment system results would eventually be used to improve the quality and content of in-service training programs. Since the in-service teacher training program and learning assessment system were being established in parallel during the life of the project, the learning assessment results would not yet be available to inform teacher training plans. However, moving forward, results from the student assessment reports are expected to play a major role in guiding teacher training and teacher professional development.

Figure 1. Results Chain



¹⁰ The project documents did not include a specific results chain as this was not required at the time of appraisal. Figure 1 was prepared by the ICR team based on the information available.



Project Development Objectives (PDOs)

13. The PDO was “to improve the system of in-service teacher training and to strengthen the management of human resources in the education sector in São Tomé and Príncipe”.

14. The primary beneficiaries of the project were to be the primary school teachers who would benefit from training opportunities and a professional career framework to guide their professional development. Education leaders would benefit from capacity building activities and systems to enhance management of the sector including improvements in data collection and monitoring through national learning assessments, a new EMIS, and a new inspection system. With the AF, preschool teachers and trainers of trainers would also benefit from capacity development activities.

Key Expected Outcomes and Outcome Indicators

15. Progress towards the PDO was to be measured by the five PDO-level indicators listed in Table 1 below.

Table 1: PDO-level Indicators, including baseline and end-of-project targets

Outcome Indicator	Baseline	End-of-project target*
Number of additional qualified teachers resulting from project intervention	0	515
Competency-based training framework developed	No	Yes
Students learning assessment system established	No	Yes
Daily working hours of teachers	3.5	4.5
Direct project beneficiaries (number, and percentage of female beneficiaries)	0	2,500

Note: * The original targets for the number of additional qualified teachers and direct project beneficiaries were 400 and 2,000, respectively. Table 1 presents the end-of-project targets, as these were the values used to assess the project’s efficacy.

Components

16. The project comprised the following two components:

17. **Component 1. Improving the system of in-service teacher training in primary education** (Original Cost: US\$1.1 million; Revised Cost with AF: US\$4.2 million; Actual Disbursement: US\$3.4 million). Component 1 included the following two subcomponents:

- a. **Subcomponent 1.1. Setting up of an in-service teacher training system.** This subcomponent included: (i) the preparation and implementation of a competency-based training framework for teachers; (ii) the development and implementation of an overall training plan together with modules to train primary education teachers; (iii) the setting up of a teacher certification process and carrying out evaluations of teachers academic and pedagogical abilities; and (iv) the setting up of an institutional structure within the Ministry of Education to manage teacher trainings, including the establishment of a certification body, and the provision of equipment, capacity building, management tools and TA to Ministry of Education staff.



- b. **Subcomponent 1.2 Development of a student learning assessment.** This subcomponent included: (i) the development and implementation of a learning assessment roadmap and related provision of training, management tools and materials to Ministry of Education staff and teachers for the administration of tests; (ii) the administration of the Early Grade Reading Assessment (EGRA) for the 3rd grade of primary education; and (iii) a small impact evaluation (IE) of a pilot activity in early-grades to improve education quality.

18. **Component 2. Strengthening management of human resources in the education sector** (Original Cost: US\$0.9 million; Revised Cost with AF: US\$1.3 million; Actual Disbursement: US\$1.6 million). Component 2 included the following two subcomponents as described below.

- a. **Subcomponent 2.1. Development of a management information system within the Ministry of Education.** This subcomponent included: (i) provision of TA, training and equipment at the central and decentralized levels; and (ii) strengthening of the Ministry of Education’s human resource policies and capacity for the management and supervision of teachers, including provision of management tools, re-defined roles and responsibilities of education professionals and reestablishing a pre-existing supervision structure. This included the installation of a new EMIS that would be housed at the Directorate of Planning and Education Innovation (DPEI).¹¹ In addition to TA for the development of the system, computer equipment would be purchased and installed at the central level, each primary school would receive a computer for data management, and schools would be connected to DPEI through an online platform.
- b. **Subcomponent 2.2. Support to project management.** This subcomponent included: (i) provision of training to relevant staff; (ii) financing of project audits; and (iii) financing of operating costs associated with project implementation.

B. SIGNIFICANT CHANGES DURING IMPLEMENTATION

19. **The Quality Education for All Project in STP (in the amount of US\$2.0 million) was co-financed by an IDA grant (in the amount of US\$0.9 million) approved on December 20, 2013 and a GPE grant (in the amount of US\$1.1 million) approved on February 6, 2014.** Both grants became effective on May 19, 2014. Before implementation of any project supported activities had even begun, an additional US\$3.5 million of IDA funding was made available but these funds had to be allocated before the end of FY15. In less than two months, an AF (IDA grant in the amount of US\$3.5 million) that nearly tripled the amount of project financing was prepared and approved on June 27, 2014 and became effective on December 16, 2014. This timeframe for preparation did not allow sufficient time to fully prepare the design of several scaled-up activities nor did the AF include an extension of the original closing date. During the Mid-Term Review (MTR) in May 2016, it was agreed that all planned project-supported activities could not be completed by the original closing date of June 30, 2017. The project was restructured on May 16, 2017 which included a two-year extension of the closing date and introduced some minor modifications to project indicators and target values based on the latest information available and Government priorities (see the Results Framework (RF) in Annex 1, Section C.)

¹¹ The acronym EMIS is used throughout this document to represent STP’s National Education Management Information System. This system is also known as the SIGE in Portuguese – “Sistema de Gestão Escolar”.



Revised PDOs and Outcome Targets

20. **There were no changes to the PDO.** However, with the AF, several targets of PDO-level indicators were revised given the total financing available was almost three times greater than the amount provided under the original project. Some of the targets which were increased were the number of primary teachers to be trained and new activities such as the training of preschool and teacher trainers was included as well. The learning assessment was revised to include an additional grade and the total number of direct project beneficiaries was increased.

Revised PDO Indicators

21. **Under the AF, activities supported under the original project were scaled up and others were introduced in order to enhance the original project's development impact.** The following PDO-level indicators were scaled up: (i) training of 267 additional primary education teachers from 400 to 667 (equivalent to the total number of unqualified primary teachers in the system); and (ii) the number of direct beneficiaries from 2,000 to 2,500. The following intermediate results indicators (IRIs) were also scaled up: (i) the development and approval of a certification process was scaled up to include preschool teachers; and (ii) an assessment for 6th grade was included in addition to the 4th grade student learning assessment already planned under the original project. Two new IRIs were added: (i) training of 100 preschool teachers; and (ii) training of 100 teacher trainers. Moreover, among other activities financed by the project, one was scaled up - 20 additional schools were added to the small-scale IE – and two new ones were added - support to develop a new preschool curriculum and the purchase of ICT equipment, furniture and pedagogical materials for the teacher training school.

22. **The project was restructured in 2017 resulting in minor adjustments to one PDO-level indicator and 3 IRIs.** During the MTR, a detailed review of the entire RF, including each indicator and end-of-project targets, was conducted. The World Bank and the Government jointly decided which activities needed additional time to reach their expected targets. The Ministry of Education also provided updated information on the number of teachers to be trained. The Ministry of Education decided to only target *unqualified primary school teachers that were not already enrolled in other trainings* offered by the Institute of Higher Education and Communications (ISEC, the teacher training institution previously referred to as EFOPE) and teachers who had more than three years until retirement. This, together with overall attrition brought the total number of unqualified primary teachers down from 667 to 515. In addition to this change, one IRI was scaled up and two others were combined into one scaled up indicator as described above. First, given that the total number of unqualified preschool teachers was more than 100 (and to account for the decrease in the number of primary school teachers to be trained) the number of preschool teachers to be trained was increased from 100 to 175. Second, the two initial activities – at least one student learning assessment conducted for grades 4 and 6 and at least one EGRA carried out for grade 3 students – were revised and replaced by one indicator – at least two student learning assessments conducted for grades 2, 4 and 6. The project's overall scope did not materially change.

Revised Components

23. The components of the original project largely remained unchanged, though some new activities were added under the AF.



Other Changes

24. In addition to the aforementioned changes, the 2017 restructuring included: (i) a two-year extension in the project closing date; (ii) a revised implementation schedule; (iii) a reallocation across disbursement categories; and (iv) revised disbursement estimates.

25. **Extension of the project closing date.** Due to initial delays and the expanded scope of some activities due to the AF (the distance learning teacher training program in particular), a number of project activities critical to the full achievement of the PDO could not be completed by the initial closing date. To allow the project to fully implement all activities (with an available remaining balance of US\$2.19 million under the AF at the time of the project restructuring), a two-year extension of the closing date of the AF was approved.

26. **Revised implementation schedule.** The initial project implementation schedule was revised to account for lags in implementation and the expanded scope of activities introduced under the AF. Several critical activities were launched and underway during the pre-restructuring period, but many were completed during the extension period, namely: (i) the teacher qualifications framework and certification processes; (ii) the in-service teacher training activities; (iii) the second National Large-Scale Assessment in Basic Education (*Avaliação Aferida de Larga Escala no Ensino Básico - AALEB*); (iv) the small IE of a pilot activity in early-grades to improve education quality; (v) the EMIS ; and (vi) revamping the inspection system.

27. **Reallocation between Disbursement Categories.** The original project Financing Agreements (FAs) specified one overall financing category for all project expenditures split by 45 percent of expenditures under IDA and 55 percent under GPE. The IDA AF included a few new activities while also expanding the scope and resources available for several activities under the original project. At the time of the restructuring in 2017, it was agreed that the FAs for the original IDA and GPE grants would not be extended, just the FA for the AF. To allow all activities under implementation to be completed during the final two years of the project (granted by the extension), it was agreed to revise the project description for the AF to cover all remaining activities and create one financing category to be financed at 100 percent with the remaining funds.

28. **Change in Disbursement Estimates.** To account for initial delays and based on the revised implementation schedule prepared jointly by the World Bank and the Government, new annual disbursement estimates were calculated based on actual expenditures to date, the proposed two-year extension, a decrease in the overall total financing available due to exchange rate losses, and the implementation plan for each project-supported activity.

Rationale for Changes and Their Implication on the Original Theory of Change

29. **The majority of the activities proposed under the AF were initially intended to be part of the original project, but IDA resources were insufficient at the time of appraisal.** The AF provided an opportunity to scale-up activities in the initial project design and also to add selected new activities which would enhance the original project's impact.

30. **The MTR held in May 2016 determined that the original timeline was unrealistic given the expanded scope of project activities being supported with the AF.** The original project design included a very limited face-to-face in-service training program for just 400 primary school teachers. With the AF, the scope of the training activities was expanded to: (i) allow for the delivery of a much more complex distance learning program using technology; (ii) develop training programs not only for primary school teachers but preschool teachers and teacher trainers as well; and (iii) reach many



more teachers and especially those in more rural areas far from the capital. The proposed extension would compensate for some initial delays after project approval and allow sufficient time to implement the expanded activities introduced under the AF.

31. **During project implementation, the Ministry of Education developed a national assessment program to evaluate learning outcomes in grades 2, 4, and 6 and not just grades 4 and 6.** This national assessment program known as AALEB was the first national learning assessment ever to be implemented in STP. A new unit, the Department of Assessment and Accreditation, was created within the Ministry of Education and newly assigned staff benefitted from training to increase their capacity to oversee and implement assessment activities. Based on the success of AALEB I, the Ministry of Education adopted a plan to implement AALEB every three years. Rather than introduce another assessment, EGRA (as originally planned), the Ministry requested instead to use these funds to repeat another round of AALEB in grades 2, 4, and 6. Replacing EGRA with another round of AALEB allowed the new unit to strengthen their capacity to oversee this assessment program and ensure sustainability. Further, the results of AALEB I could be used as baseline data for the IE and data from AALEB II used for the evaluation of the pilot program.

32. **These modifications did not affect the original theory of change but contributed to expand the project focus and overall number of beneficiaries, as well as provided the time needed for the project to fully achieve its PDO.** Not only were activities scaled up, but new activities were also added (e.g., training for preschool teachers and teacher trainers). The additional resources also provided sufficient funding to incorporate the use of technology to deliver the teacher training program as a distance learning program. To do so, required the purchase of equipment, setting up training centers and identifying a qualified international firm to help with the training delivery. These changes increased the complexity of the original project design and required additional time for successful implementation.

II. OUTCOME

A. RELEVANCE OF PDOs

Assessment of Relevance of PDOs and Rating

Rating: **High**

33. **The PDOs were highly relevant as they responded to key issues and challenges faced by the education sector in STP,** including: (i) the large portion of unqualified primary school teachers with no pedagogical training; (ii) a fragmented teacher training system that lacked harmonization and a need to professionalize the teaching career; (iii) lack of a student assessment system in place and data on learning outcomes; and (iv) a severe lack of supervision at the school level. At the time of appraisal, STP had some of the lowest numbers in terms of instructional hours and time-on-task for teachers when compared to other countries in the region.

34. **The objectives of the project were strongly aligned with the priorities in the ESP (2012-2021) and were consistent with the CPS (2014-2018).**¹² The Government of STP's ten-year ESP (2012-2021) clearly outlined a long-term goal of improving quality and overall efficiency of the sector. The CPS also highlighted the importance of improving the quality of education under its third pillar – human capital development and improvement of social service delivery.

¹² The CPS (2014-2018) was recently extended until 2020.



Through the project, the Bank supported the Government to implement its ESP and its objectives remained highly relevant throughout the whole period of project implementation.

35. **The project aimed to improve education quality by focusing on improving the system of in-service teacher training and strengthening the management of human resources in the education sector in STP.** First, the project focused on training unqualified primary teachers already in the system, while developing the teacher qualification framework and corresponding certification process, to benefit current and prospective teachers – and contribute to the quality of education in the medium to long-term. Second, the project’s support to the development and implementation of a national learning assessment system aimed to provide information on learning outcomes to guide improvements in education quality. Lastly, it implemented activities to enhance human resources’ management, such as the establishment of an integrated EMIS and a revamped inspection system to supervise and monitor teacher performance.

36. **The objectives also remain highly relevant as they continue to respond to the key issues faced by the sector today.** The Government’s updated ESP (2019-2023) prioritizes addressing the low learning outcomes at all education levels and to improve the efficiency and equality of the education system. The updates to the ESP were based on the findings from the 2018 RESEN and findings from AALEB I and II. While the RESEN demonstrated clear improvements in access, particularly in preschool, secondary and tertiary education, it also showed that there is a need to reduce even further repetition rates, improve learning outcomes, and strengthen initiatives to improve teacher recruitment and deployment. To ensure further improvement in the quality education for all until 2023, priorities include: (i) enforcing teacher standards, implementing the recently developed teacher certification processes, and continuing to deliver high-quality teacher training programs; (ii) strengthening the use of evidence-based decision-making by improving the use of data collected through the newly established EMIS and national learning assessments; and (iii) using the EMIS and revamped inspection system to continue to make improvements in efficiency and the overall management human resources.

37. Based on the assessments above, the rating for the relevance of the PDO is **High**.

B. ACHIEVEMENT OF PDOs (EFFICACY)

Assessment of Achievement of Each Objective/Outcome

Rating: **Substantial**

38. **Nearly all PDO-level and intermediate results indicators’ targets were achieved or exceeded.** The assessment of achievement of the PDOs is organized around the two main outcomes/components of the project, which were expected to lead to higher education quality in STP as described below.

Outcome 1: Improving the system of in-service teacher training in primary education

Sub-rating: **Substantial**

39. **Improved system of in-service teacher training in primary education was measured by the following three PDO-level indicators:** (i) number of additional qualified teachers resulting from project interventions; (ii) competency-based training framework developed; and (iii) student learning assessment system established; **and by the following six IRIs:** (i) assessment of critical competency needs of teachers finalized; (ii) training plans for in-service teacher training developed; (iii) certification processes for preschool and primary school teachers developed and approved; (iv) training



of preschool teachers delivered; (v) training of trainers delivered; and (vi) at least two student learning assessments conducted for grades 2, 4 and 6.

40. **The first outcome of improved system of in-service teacher training in primary education was achieved through a combination of interventions to support the adoption of minimum quality standards in the teaching workforce.** These interventions targeted primarily teachers, but also teacher trainers and staff at the Ministry of Education and the teacher training institute, ISEC. These interventions resulted in substantial progress towards building the foundation for guaranteeing the quality of future teachers and towards improving the quality of those currently teaching.

41. **A competency-based training framework for teacher professional development was developed, teacher competencies were assessed and training plans for in-service teacher training were developed.** A competency-based training and related teacher qualifications framework were successfully developed and formally adopted by the Ministry. Per the project design, this framework was used to guide the development of the teacher certification process and teacher training activities supported by the project. The assessment of teacher competencies at the beginning of the project informed the design of the in-service teacher training activities. The increased scope with the AF included the development of training activities for preschool teachers and teacher trainers as well.

42. **General processes for the certification for preschool and primary school teachers were developed.** The target of the IRI related to this activity was partially achieved. While the regulatory/legal frameworks were developed, including the establishment of a new department responsible for both teacher certification and national learning assessments within the Ministry of Education – the Department for Assessment and Accreditation, changes in Government leadership in the last few months of project implementation prevented official approval and issuance of the formal decree by the Council of Ministers prior to project completion. However, the entire certification process including the test to evaluate teachers' competencies according to the officially adopted teacher qualifications framework was developed. Formal adoption and implementation of this new system should be included under the project currently under preparation.

43. **Under the project, a new preschool curriculum was developed and 312 preschool teachers benefitted from training.** In partnership with the United Nations Children's Fund (UNICEF), the project supported the development of a new curriculum for 4 and 5-year-olds and the purchase of pedagogical materials. Initially, 26 preschool teachers traveled to Brazil to learn and be trained on the new curriculum. Later, training sessions on the new curriculum were conducted for 100 pre-service preschool teachers to ensure they would be better prepared to deliver the new curriculum. Lastly, there were another 186 in-service preschool teachers that benefitted from the 150 hours of face-to-face training sessions on Portuguese and Mathematics delivered by ISEC. These three training activities brought the total number of beneficiaries to 312 exceeding the initial target of 175 preschool teachers.

44. **By the end of the project, a total of 528 unqualified primary school teachers had participated in teacher training activities.** The first training activity corresponded to 150 hours of face-to-face training in Portuguese and Mathematics for in-service preschool and primary school teachers who had 9 years or less of previous schooling. This training was delivered by ISEC – it reached a total of 558 teachers, of which 372 were primary school teachers. The second training activity was a distance learning training program that included 375 hours of training focused on effective teaching pedagogies. This training was delivered by the Paula Frassinetti Institute in Portugal and took place over the course of a year in nine different distance learning teacher training centers established across the country. The majority of primary school teachers who participated in the first face-to-face training also participated in the distance learning program.¹³

¹³ In the end, there were 15 teachers that only participated in the face-to-face training.



In total, 513 teachers participated in the distance learning program with 499 of them graduating according to the minimum performance criteria. Teachers were evaluated based on their attendance and grades on class assignments.

45. **The distance learning program also included 150 hours of training for 123 teacher trainers.** The training for teacher trainers included staff from ISEC, pedagogical supervisors, inspectors and other Ministry of Education staff at the central ministry. The same institution responsible for the delivery of the distance learning program for in-service primary school teachers also delivered 150 hours of training on teacher supervision and effective teaching pedagogies to 123 trainers/supervisors (exceeding the original target of 100 trainers).

46. **An evaluation of the distance learning training showed overall high levels of satisfaction with the training received.** Beneficiaries' perceptions were collected by the Paula Frassinetti Institute. Despite significant challenges during implementation, especially in terms of power outages, weak internet connections, and lapses in paying transportation subsidies, the feedback from participating teachers and teacher trainers was very positive. Among those benefitting from the training for teacher trainers, 57 percent of them had participated in previous trainings, and 71 percent of these considered the distance learning program better than the previous training provided. Further, 65 percent of these trainers considered this training opportunity as *extremely important* (with the remaining 35 percent considering it *important*). Among primary school teachers, nearly 90 percent were highly satisfied with the quality of the training. Content was highly valued with 78 percent of primary school teachers considering the activity as *extremely important* (and the remaining 22 percent classifying it as *important*). More details on this assessment can be found in Annex 6.

47. **Finally, in addition to the establishment of the Department for Assessment and Accreditation which is responsible for overseeing student learning assessments, two rounds of national assessments in grades 2, 4 and 6 were carried out.** The AALEB, carried out in 2016 and then again in 2019, is the country's first national learning assessment program (evaluating Portuguese and Math in grades 2, 4 and 6). These assessments were conducted so the Ministry could have nationally representative results on learning outcomes at the district-level and better target additional support where most needed. There are 4-5 staff now trained with the capacity to lead and continue these efforts.¹⁴ The results of these assessments have been broadly disseminated, discussed in-depth with all key stakeholders, and are being used to inform the national discourse on the need to ensure and pay greater attention to education quality. These results were also used to inform the 2018 RESEN and in identifying key priorities to be included in the updated ESP (2019-2023). Furthermore, the Ministry has adopted an official strategy to repeat this same assessment exercise every 3 years. The project's goal of establishing a national student assessment system was fully achieved.

Outcome: Strengthening management of human resources in the education sector

Sub-rating: **Substantial**

48. **Strengthened management of human resources in the education system was measured by the following two PDO-level indicators:** (i) daily working hours of teachers; (ii) direct project beneficiaries (including percentage of which are female); **and by the following two IRIs:** (i) percentage of primary schools that benefit from four annual school-level supervision visits and mentoring program offered to teachers in every primary school; and (ii) education management information system in place and functional.

¹⁴ In 2017, given the expertise developed within the Ministry of Education, a national assessment covering grades 9 and 12 was also conducted with financing from the Portuguese Cooperation.



49. **The second outcome of strengthening management of human resources in the education sector was achieved through activities that focused on improving the capacity to produce timely and reliable evidence for better resources allocation and management.** These interventions mainly targeted inspectors, supervisors, school directors, and staff at the Ministry of Education and led to improvements in the supervision system, including inspection, and data collection capacity at the schools and analytical capacity at the Ministry of Education.

50. **By the end of the project, the number of daily working hours for teachers had increased from 3.5 hours to 4.5 hours and regular school-level supervision and mentoring programs had been reestablished.** The Ministry of Education, under the Project, nearly eliminated the use of triple shifts resulting in this increase in work hours. This may not have been an ideal PDO-level indicator since its achievement was related to a change in policy. A better PDO indicator attributable to the significant improvements in the management of human resources may be the IRI that measured the percentage of primary schools that benefit from four annual school-level supervision visits and a mentoring program offered to teachers. To monitor time on task and support teachers in the classroom, the frequency of visits by inspectors and supervisors increased significantly. The project supported an in-depth study of the existing inspection system and the development of a revised model based on the findings. As a result, new inspection tools aligned with the new system were developed, school inspectors were trained, and more than 300 inspection visits used these new tools. Additionally, seven inspectors attained a Masters' level, semi-presence course with the University of Evora in Portugal on school inspection and quality assurance mechanisms. Another part of the new system for supervision focused on providing greater support for teachers and included the hiring of 54 Pedagogical Supervisors at the district level with the responsibility of regularly visiting schools and providing mentoring to teachers in their classrooms. The revamped school inspection system and program to provide additional pedagogical support to teachers had a significant impact on strengthening system monitoring and the management of resources.

51. **The new EMIS has been established and data from all schools have been collected and entered in the new system.** All schools with electricity (approximately 66 out of 88 primary schools) received a computer and an internet connection, and head teachers and other staff at the school level were trained over a three-year period on data collection, entry and utilization. The system was officially launched in 2018 which highlighted the use of technology to improve data collection and the system of M&E to improve the quality of the education system.

52. **Finally, the total number of direct beneficiaries was exceeded.** This measure included pre-service and in-service preschool teachers, in-service primary school teachers, trainers/supervisors, administrative staff and school directors, inspectors, instructional leaders, ISEC administration staff and trainers, and department leaders and technical staff within the Ministry of Education who participated in several different training activities including workshops, face-to-face and distance learning training programs, on-the-job training, Masters' degrees, among others. The target for the total of beneficiaries was increased from 2,000 to 2,500 with the AF. Based on figures available, the number of direct project beneficiaries was 2,579.¹⁵ According to the 2018 RESEN, in 2016 there were approximately 2,621 teachers, 1,124 administrative and support staff at the schools, and 146 other Ministry of Education staff in the country. As such, the Project effectively reached and benefitted nearly 66 percent of the entire education system.

53. **Based on available data, the percentage of female beneficiaries of the project reached or was slightly above 50 percent.**¹⁶ Of the current teaching force, there are more male primary school teachers than female ones. However, in

¹⁵ This included 123 Training of Trainers/Supervisors; 312 preschool teachers; 528 in-service primary school teachers; 528 Administrative Staff and School Directors; 110 Inspectors, Instructional Leaders, and Supervisors; 20 ISEC Administration Staff and Teacher Trainers; 708 additional in-service primary school teachers; and more than 250 Department leaders and technical staff within the central Ministry.

¹⁶ The project was unable to determine the exact percentage of female beneficiaries, since gender was not always provided. Based on the data available, the percentage is believed to be close to 50 percent.



preschool education, the proportion of female teachers is currently much higher. It is important to note however, that particularly in the design of the original project this target may not have been achieved simply due to the fact of the greater presence of male primary school teachers and that the gender of all unqualified primary school teachers to be trained was predetermined.

Justification of Overall Efficacy Rating

54. **The project's efficacy is rated Substantial based on achievement of the outcomes described above.** The project achieved important milestones required to improve the system of in-service teacher training as well as to strengthen the management of human resources in STP. Despite delays in implementation, particularly related to distance learning teacher training program, the project had made important progress toward its PDO by the time of the restructuring. The original project design included a short face-to-face in-service training program for primary teachers. The AF implied delivering a much more complex distance learning program using technology, developing training programs for preschool teachers and teacher trainers in addition to the programs for primary teachers only, and almost doubled the number of teachers and trainers to be trained compared to the initially planned 400 primary teachers.

55. **Nearly all PDO-level and IRI targets were met or exceeded.** The PDO was achieved: students have benefited from more instructional time with better qualified teachers; teachers benefited from the in-service training, the development of teacher standards and a harmonized system for teacher training, and more frequent pedagogical support and supervision; and the new EMIS and learning assessment system has laid the foundation to improving resource allocation and monitoring throughout the system.

C. EFFICIENCY

Assessment of Efficiency and Rating

Rating: **Modest**

56. This analysis provides an overview of the assessment undertaken at appraisal using the most recent information – including actual costs and benefits incurred at project closing – and analyzes gains observed over the life cycle of the project. More information about the efficiency of the project investments and the detailed cost-benefit analysis (CBA) is provided in Annex 4.

57. **Cost-benefit analysis (CBA).** Given that a CBA was not conducted at appraisal, this analysis took into consideration the steps and assumptions commonly used, from other similar projects whose main development objective was also to improve education quality through teacher training and capacity building. In order to quantify economic costs and benefits, it focused on the quantifiable parts of the project's total investments, which in this case corresponds to the benefits expected from improving the quality of preschool and primary school teachers. Teacher training programs were also the major subcomponent of the project, corresponding to 60 percent of the actual disbursements.

58. **The CBA estimates demonstrated that the project was economically viable.** The Net Present Value (NPV) of the combined estimates for the costs and benefits of providing training to preschool and primary teachers was evaluated to be US\$2.112 million. The Internal Rate of Return (IRR) associated with this NPV was 12 percent, and the overall cost-benefit ratio estimated that for every US\$1 invested there was a return of US\$2.1. Costs included all teacher training



related expenses, such as the development of training materials, background studies, purchase of equipment and teacher trainers' time. Benefits derive from the increased quality of preschool and primary teachers, which are expected to translate into students' higher expected earnings in adult life. While data to quantify all benefits was not available – for instance those related to improved health outcomes – the NPV of the quantifiable benefits was greater than the NPV of the costs. The IRR of 12 percent is higher than the official discount rate of 9 percent, providing strong evidence of the economic efficiency of project's investments.

59. **Cost-effectiveness analysis.** The project was modestly cost-effective. Overall, the costs for most activities under the project were kept under budget. After the MTR, the planned budget for each activity was revised taking into account actual expenditures to date and to account for relatively significant losses due to exchange rates between SDR and the US\$ (nearly US\$454,000, almost 10 percent of the project total). From 2016-2019, annual budgets were prepared and expenditures against each planned activity were carefully monitored. However, the costs related to project management represented more than twice the value initially allocated. At the time of the AF, these costs were estimated to be US\$360,000 in total. At the time of the MTR, total expenditures had already significantly surpassed the original estimate (almost US\$500,000 had been already spent) and by the end of the project, actual disbursements related to this subcomponent reached US\$750,095 (15 percent of total overall project expenditures and 108 percent more than what was included in the project design). Given that many of AFAPs operating costs after the MTR were shared across other World Bank projects also managed by AFAP, the expenditures for FM and AFAP services were significantly less during the period of the two-year extension. However, taking into consideration these shared costs in addition to actual expenditures under this project, overall operating costs for AFAP appear to be high in comparison to other previous Bank-financed operations in STP and others of a similar size and design.

60. **In terms of unit costs, even though the average spending per beneficiary was equivalent to other similar training options in STP, the distance learning program could have been less expensive.** The actual cost per teacher trained was US\$114 for those who received the face-to-face training at ISEC, and US\$2,354 for those who participated in the distance learning program. Based on previous data available, training costs in STP have overall decreased. The RESEN 2018 provided estimated for 2016, where the annual cost per student receiving training at ISEC was estimated in US\$673. For those students completing tertiary education abroad, annual costs corresponded to US\$3,407 in average. The distance learning costs per primary school teacher and teacher trainers were significantly high, corresponding to 70 percent the annual cost of sending a tertiary student abroad.¹⁷

61. **Costs to establish and purchase the equipment for the nine distance learning training centers were not insignificant and the cost per hour of training provided by the international firm was higher than the cost per hour of the face-to-face training.** The cost per hour of training provided by the Paula Frassinetti Institute was roughly US\$5.48 per hour/per student, while the cost of the face-to-face training delivered by ISEC was closer to US\$1.52.¹⁸ However, it is important to highlight that most of the trainers delivering the training at ISEC lacked any higher degrees in education and the courses delivered were not accompanied by a rigorous end-of-course evaluation to determine learning gains as a result of the training. While it is expected that higher quality trainings will cost more, the small market potential makes investing in the island less attractive and oftentimes costs are more expensive than in other countries. In addition, the procurement methodology used to identify the international institution to deliver the training was designed to be competitive. However, the Paula Frassinetti Institute was the only institution on the short-list that responded to the request for proposals by the deadline. Although irregular, AFAP was able to demonstrate that all procurement rules

¹⁷ The 150 hours of face-to-face training delivered by ISEC benefited a total of 558 preschool and primary school teachers totaling approximately 98,700 of hours of training overall. The 375 hours of distance learning training for 513 primary school teachers and the 150 hours of distance learning training for 123 teacher trainers and supervisors resulted in approximately 210,825 hours of training overall.

¹⁸ According to project disbursements, the total cost of the services provided by the Paula Frassinetti Institute was US\$1,155,011.



were adhered to and ultimately, they were allowed to proceed although the process was no longer competitive with only one proposal.¹⁹ The financial proposal came in higher than expected with significantly higher costs per trainer than for similar programs in neighboring countries (i.e., Angola). As a result, the number of training hours had to be reduced from 450 to only 375 to fit within the resources available.

62. **Efficiency rating.** Given the NPV of the quantifiable benefits was greater than the costs' NPV, the project demonstrated strong economic efficiency. In addition, during the period of project implementation, the education system's internal efficiency improved, even if these positive outcomes cannot necessarily be solely attributed to the project. The project started disbursing in 2014, and since then, overall improvements have been observed. At the primary level, completion rates increased by 10 percentage points, from 2014 to 2017. Meanwhile, repetition and dropout rates steadily decreased. During that same period, gross enrollment rates (GER) in preschool and secondary have increased from 58 percent to 80 percent in preschool, and from 80 to 86 percent in secondary education. However, unit costs related to the distance learning program were high even when considering the higher quality of the training when compared to the face-to-face option. Moreover, project management costs were twice as high the value allocated by the time of the AF. In addition to these issues, delays in the project implementation schedule which are discussed further in the ICR resulted in the overall efficiency under the project to be rated as **Modest**.

D. JUSTIFICATION OF OVERALL OUTCOME RATING

63. **The project objectives were relevant at appraisal and remain relevant to date, addressing some of the key issues and challenges faced by the education sector in STP.** These challenges include: (i) high share of unqualified teachers; (ii) ineffective teacher management and supervision at the school-level; (iii) lack of data on student learning outcomes to use to improve teaching and guide policy; and (iv) limited availability of timely and reliable EMIS data to guide decision-making. Moreover, the objectives of the project were strongly aligned with the priorities identified in the ESP (2012-2022) and also consistent with the CPS (2014-2018) for STP and are aligned with the updated ESP (2019-2023) whose priorities are to continue to improve learning outcomes at all education levels and to improve the efficiency and equality of the system.

64. **In terms of efficacy, the project is rated Substantial, as the targets of nearly all PDO-level and IRIs were achieved or exceeded.** On the first outcome – improving the system of in-service teacher training – by the end of the project: (i) an assessment of teacher competencies was successfully completed and used to inform the design of in-service teacher training activities; (ii) a teacher qualifications framework, training plans and certification processes for preschool and primary school teachers were developed; (iii) the number of preschool, primary teachers and trainers/supervisors who received training was surpassed; and (iv) a learning assessment system was established and learning assessments were carried out for grades 2, 4 and 6. On the second outcome – strengthening the management of human resources in the education sector: (i) a new EMIS was established, with initial data from all schools collected and school directors and administrators trained to use the new platform; (ii) a revamped inspection system and related tools were developed, pedagogical supervisors to support teachers in the classroom were hired and based in the district offices, and all primary schools were benefiting from at least 4 supervision visit annually; (iii) the number of daily working hours for teachers increased from 3.5 to 4.5 hours; and (iv) the number of direct beneficiaries was exceeded.

65. **In terms of efficiency, the project rating is Modest.** Even though the project benefits' NPV was greater than the costs' NPV and the IRR of 12 percent was higher than the official discount rate, actual project management costs were

¹⁹ Due to the implementation delays for this activity in particular, it was imperative that the selection process for the institute to deliver the training advance as quickly as possible.



more than twice as high the planned value during the AF, as well as costs for the delivery of the distance learning program were higher than average. Additionally, the efficiency rating was affected by other issues related to project delays and implementation issues which are discussed in the next section.

66. The overall outcome rating is **Moderately Satisfactory** based on **High** relevance of the project objectives, **Substantial** efficacy, and **Modest** efficiency, as discussed above.

E. OTHER OUTCOMES AND IMPACTS

Institutional Strengthening

67. **The project directly supported institutional strengthening and capacity building of the different institutions involved with project implementation.** This was done either through specific project activities – such as training of school directors and administrators in the use of the new EMIS – or by providing overall training to staff such as training ISEC staff on effective teaching methods. Capacity building activities reached staff within nearly every department of the Ministry of Education. Targeted efforts to strengthen the Ministry of Education’s institutional capacity to deliver quality teacher training programs and effectively manage teachers and monitor school performance included: (i) establishing a new department capable of administering regular learning assessments and overseeing teacher certification – the Department of Assessment and Accreditation within DPEI; (ii) strengthening the Department of Information and Communications Technology (EDUTIC) within DPEI, a relatively new department responsible for developing the new EMIS online platform and using technology to improve overall system management; (iii) reforming the inspection system and reestablishing the role of the General Inspectorate to monitor school performance; (iv) encouraging decentralization efforts and supporting the training of 54 Pedagogical Supervisors assigned to the district offices in order to provide regular support and mentoring for teachers in their classrooms; and (v) supporting large-scale reforms and training programs to improve the quality of training provided by ISEC. Activities related to institutional strengthening are summarized below.

68. **The Directorate of Assessment and Accreditation was a new department created within the Ministry of Education to oversee student learning assessment and teacher certification.** With the support of an externally hired consultant, the Ministry developed the national assessment testing instruments in late 2015 and conducted the first national learning assessment for grades 2, 4 and 6 in May 2016. Additional TA was provided on data entry, cleaning, analysis and reporting. In 2019, the second AALEB was implemented, which further strengthening the capacity of the new Directorate. The Ministry has adopted an assessment strategy to implement its national assessment program every three years to monitor trends, focus on improving education quality, and use this data for decision-making.

69. **Through the existing General Inspectorate of Education and decentralization efforts, the system for monitoring and supervising school performance was reformed.** An international consultant was hired to analyze the old system for monitoring and supervision and a revised model was proposed. New inspection tools were developed, school inspectors were trained, and more than 300 inspection visits were performed using these new tools. Part of the new system also focused on providing greater support and supervision of teachers in the classroom. Fifty-four Pedagogical Supervisors were hired at the district level with the responsibility of regularly visiting schools and providing mentoring to teachers in their classrooms. The revamped school inspection system and program to provide additional pedagogical support to teachers had a significant impact on strengthening system monitoring and the management of resources. Decentralization efforts vastly improved supervision practices at the local level and many schools received more than four supervision visits per year.



70. **EDUTIC received support from a Brazilian based firm to develop the new EMIS platform.** After the establishment of the EMIS platform and the initial data entry into the system, school directors and other school-based staff were trained on how to collect and enter data into the online platform. Significant efforts by EDUTIC were also made to address connectivity issues at the schools, increase the capacity of school and sector staff to enter data, create IDs and input the background data on approximately 70,000 students which was required to get the system up and running.

71. **ISEC benefitted from a number of institutional reforms supported by the Project.** Given that the evaluation of teacher competencies found almost no difference between teachers that had graduated from ISEC and those who had never attended any formal training, the project supported an in-depth study to determine key actions that could strengthen the quality of training offered by ISEC. As a result, a new President was selected to lead the institution and several new administrative staff and full-time teacher trainers were appointed as well. The President and administrative staff participated in several capacity-building workshops, participated in the training for teacher trainers distance learning program, and learned how to supervise and oversee online learning programs and platforms through the support provided the Paula Frassinetti Institute. In addition to these trainings, two new classrooms were equipped with video conferencing equipment and a vehicle was purchased to facilitate ISEC's ability to provide training centers outside of the capital.

Poverty Reduction and Shared Prosperity

72. **The project activities indirectly supported poverty reduction and shared prosperity.** Teachers selected for the training activities were those who had not yet participated in any formal teacher training program and were considered unqualified. Many of these teachers lived outside of the capital and had been unable to participate in regular teacher training courses at ISEC due to long distances and associated costs. Hence, the development of a distance learning program was fundamental to also give teachers located in more geographically disadvantaged areas access to training opportunities. Those teachers located furthest from the capital significantly benefited from the decentralized training centers and transportation subsidies. Establishment of the new EMIS and the student learning assessment system is also providing data required to enable the Ministry of Education to better allocate resources throughout the system and identify gaps in students' performance and to better target interventions.

Other Unintended Outcomes and Impacts

73. **The project had a strong impact in terms of the increased use of technology to improve the quality of the education system in STP.** The World Bank financed Central African Backbone Project's (P117652) objective was to increase the geographical reach and usage of regional broadband network services and reduce their prices in the territory of STP, and whose resources were used to guarantee five years of internet connection to all secondary schools. This project closed right as the Quality Education for All Project became effective. With the resources available with the AF, the Ministry of Education was able to take advantage of this greater access to the internet and connect all primary schools with a reliable energy source (66 in total) to the internet as well. Under the project, technology was used both: (i) to develop the online platform and to collect school level data for the new EMIS; and (ii) to design and deliver the distance learning program. Training on the use of ICT was incorporated into both the in-service teacher training program and training for school directors and administrative staff. A significant portion of schools in STP are now connected to the internet and the nine distance learning training centers across the entire country support online learning programs. This



connectivity and online platforms developed provide a strong foundation for incorporating the use of the technology to further improve education quality in the future.

III. KEY FACTORS THAT AFFECTED IMPLEMENTATION AND OUTCOME

A. KEY FACTORS DURING PREPARATION

74. **The selection of the Bank by the Local Education Group (LEG) to be the SE for the project was due to its strong presence and tradition of dialogue in the social sectors in STP.** The Bank had just financed a Social Sector Support Project (P075979) in education and health (2004-2012) and had been the SE of the first GPE-funded project (2008-2011). Furthermore, through a grant awarded by GPE, it also had been leading dialogue and providing technical support to prepare the 2012 RESEN and the ESP (2012-2021).

75. **The project drew from lessons learned from the prior GPE-funded project.** The previous project aimed to improve the delivery of basic education services with a focus on greater equitable access, better quality and improved local governance of services. It supported progress towards UPE through: construction of preschool and primary education classrooms; provision of pre-service and in-service teacher training; provision of textbooks to primary school students; and provision of training to technical staff in the sector. The Government requested a second GPE-funded project, with the World Bank continuing as the SE. The Bank worked closely with the Government, LEG and other stakeholders during project preparation. Based on lessons learned during the previous project, it was jointly agreed that the project design should be relatively simple given capacity constraints and should continue to draw upon an outside fiduciary agency for project management. Technical implementation was expected to be supported by the different directorates within the Ministry of Education, which were responsible for the execution and monitoring of project's activities; fiduciary responsibilities were expected to be handled by AFAP, a fiduciary agency to support project implementation based on its previous experience with Bank's operations and procedures, and satisfactory ratings.

76. **The project design was informed by the results of the 2012 RESEN.** One of the conclusions from the report was that there was a window of opportunity to invest in education quality given the demographic transition taking place in STP and consequent decreased pressure over the education system. It recognized that, despite achievements in terms of access to education, the system suffered from low quality given its low internal efficiency with poor education outcomes. Finally, though teacher allocation was based on the number of students, the total number of effective teaching hours was quite low, with around 58 percent of primary education teachers spending less than 14 hours per week in the classroom.

77. **The CPS (2014-2018) recognized that the World Bank had been actively supporting STP to deliver better education services, where quality was a major concern.** One of the pillars of the CPS was "Reducing Vulnerability and Strengthening Human Capacity". This recognized that delivering quality social services and providing an appropriately skilled labor force has been a challenge for STP – and low education quality needed to be addressed.

78. **The PDOs were highly relevant, given the need to improve the quality of the teaching force and the system capacity to monitor learning outcomes and manage teaching resources.** The project intended to improve the system of in-service teacher training and to strengthen the management of human resources in the education sector in STP. The PDO was focused and the activities to support the theory of change were appropriate.



79. **Research showing that better trained teachers are the main factor by which student learning outcomes can be improved was used to guide the project's design.** Teachers under the project would benefit from: the new competency framework, improved teacher training and opportunities to benefit from training that will be required to eventually become certified, and increased mentoring and pedagogical support. The system would benefit from the new EMIS and national learning assessments that would allow better resources management and improvements in terms of equity in the availability of resources throughout the system.

B. KEY FACTORS DURING IMPLEMENTATION

80. **Over the life of the Project, progress was rated mostly as Moderately Satisfactory in the implementation status and results reports (ISRs).** While progress was initially rated as Satisfactory, with initial implementation delays and the short three-year timeframe to implement all activities, the project quickly started to become off-track putting at risk achievement of the PDOs. Following the 2017 project restructuring, the project rating for achievement of the PDO was upgraded to Satisfactory. However, additional procurement delays in hiring the firms to develop the teacher certification processes and distance learning training program led to a Moderately Unsatisfactory rating at the end of 2017. Despite significant implementation challenges, many efforts were made by both the Government and the Bank to resolve these, which yielded an average rating of Moderately Satisfactory throughout project implementation.

Factors subject to Government and/or implementing entities control

81. **With the AF and a change in Ministers of Education, the design of the teacher training program was modified.** In order to take advantage of newly available internet connectivity in the country and permit the teacher training program to reach teachers furthest from the capital and in disadvantaged areas, the new Minister of Education when the Project became effective wanted to use the scale-up of the in-service teacher training program to include developing and implementing this training as a distance learning program. While the in-service training program was originally intended to be more general continuous professional development, the new Minister wanted to directly target all of the unqualified teachers in the system and link this training to the requirements for teacher certification. Developing a common understanding of the planned in-service training program among the Ministry, ISEC, and Teachers Union took time which led to implementation delays in the early stages. Finally, in order to implement the planned distance learning program, a study of the IT requirements at the various training centers and facilities was undertaken. As some of the training centers be used in the training needed to be rehabilitated, the start of the distance training was delayed.

82. **The project relied on strong coordination between the Ministry of Education, ISEC and AFAP.** Delays in project implementation, in part, resulted from failures in coordination among these institutions. First, changes in leadership within the Ministry shortly after Board approval and changes at ISEC led to gaps in project coordination and implementation. A Project Steering Committee (PSC) was established under the project which included the Project Coordinator at AFAP, the Director of DPEI, and President of ISEC, and the Heads of Department for the new assessment unit and EDUTIC. However, up until the MTR, many of both the technical and financial decisions were being led by AFAP creating tension with the Ministry of Education; the PSC was not meeting regularly and overall weak coordination was resulting in procurement delays. To resolve these issues, the Director of DPEI was promoted to be a second Project Coordinator from within the Ministry of Education. This change had a positive impact on overall coordination and strengthened ownership of activities within the Ministry of Education; the PSC began to meet regularly to guide implementation. However, all Ministry of Education staff, including the Project Coordinator were performing additional functions and had additional responsibilities and there was no one assigned full-time to specifically support and focus on



project implementation and coordination. This was also true at ISEC and at AFAP after the MTR as they began implementing other Bank-financed projects as well.

83. **The Bank supported the Ministry of Education to enact a number of reforms required at ISEC to improve quality and the capacity to oversee the in-service teacher training program supported by the Project.** The evaluation of teacher competencies demonstrated that there was nearly no difference between teachers that had graduated from ISEC and those who had never attended any formal training. As the request of the Minister, the Bank provided financing for an additional study to determine key factors contributing to these poor results at ISEC and demonstrated strong support for the Government's follow-up actions including appointing a new President and administrative staff. The active involvement of ISEC's new President on the PSC and ownership in overseeing the face-to-face training sessions and the development of the in-service training program was critical for the project's success.

84. **The growth in AFAP's portfolio was accompanied by delays in procurement.** Although AFAP was adequately staffed and had ample experience with Bank operations and procedures during the initial stages of implementation, after the MTR it began to administer several other Bank-financed projects as well and there began to be significant delays in procurement. Due to delays in technical inputs and poor coordination with the Ministry of Education and ISEC, there were significant delays in recruiting the TA for two key activities - the teacher certification process and the distance learning in-service teacher training program. In an effort to accelerate implementation and overcome initial delays, the Bank team had directly recruited support to help develop the teacher standards and qualifications framework. However, even after the two-year extension was granted and these two documents were finalized, due to delays in procurement, there were significant risks that these two key activities would not be able to be implemented in full with the time remaining. The Project greatly benefitted from the Bank's recruitment of a locally-based Procurement Specialist who arrived just in time to provide significant support and help the project overcome procurement bottlenecks.

Factors subject to World Bank control

85. **Team members provided adequate supervision and were proactive in overcoming bottlenecks and challenges with the project design.** Immediately before Board approval, there was a change in Task Team Leaders and another change in Task Team Leaders a year after effectiveness. These changes in Bank leadership led to some of the initial delays in implementation. There were also some design issues related to the speed in which the AF had to be prepared (two months in total). For instance, although it was agreed to scale-up the teacher training program, no specific considerations had been made to deliver this training as a distance learning program including the fiscal space that would be required at ISEC and in the districts. There was also no agreement on the scope and number of training hours for this expanded program. The project had not included works which were required to (i) construct the new two classrooms at ISEC to install the video conferencing equipment; and (ii) rehabilitate and complete minor repairs at the training centers identified in the districts to host the training. The Bank team spent significant time trying to help the Ministry secure other funds to finance these works. For the training hours, the Minister of Education wanted the project to finance all of the hours required for teacher certification (close to 1500 hours) which was not possible within the timeframe available nor fair to the teachers given their existing workloads. A significant amount of dialogue with the Minister of Education and Teachers Union was required to reach a joint agreement on the number of training hours to be included.

86. **The Bank team provided significant implementation support to help resolve tensions between AFAP and the Ministry of Education.** In the project's design, the differing roles of the Ministry of Education and AFAP in implementation had not been made entirely clear. Under previous projects, AFAP had been implementing projects on behalf of the Ministries. Due to a lack of technical inputs from the Ministry of Education, a number of more technical decisions were being made by AFAP in the project's initial stages. The Minister of Education strongly felt that all technical leadership (and



fiduciary oversight if possible) should be provided directly by the Ministry of Education. While fiduciary oversight was not a possibility due to a lack of internal controls, the Bank appointed a second Project Coordinator from within the Ministry and clarified AFAP's role as just fiduciary management at the time of the MTR. Significant support and capacity building was provided by the Task Team Leader (TTL) to this new Project Coordinator and other members of the PSC to help them understand the Bank's rules and procedures, develop annual workplans, prepare progress reports, monitor project indicators, etc.

87. Growth in STP's portfolio of Bank financed projects was accompanied with a decision to recruit the first ever locally-based Bank staff member in STP. Due to the country's size and its previous small IDA allocation, AFAP had overseen the procurement of very few large contracts. In 2018, a Senior Procurement Specialist was recruited to provide additional support for the Bank's portfolio in both Angola and STP. This recruitment came at a critical time for the project – the project's ability to overcome procurement delays and its Moderately Unsatisfactory rating for implementation progress on Component 1 activities in particular was a direct result of the proactivity of the new Senior Procurement Specialist. Having at least one locally based staff significantly improved the Bank's ability to provide adequate oversight and ensure actions related to procurement, and especially for the distance learning program, were done according to agreed action plans.

88. The team quickly responded to delays in the payment of transportation subsidies to teachers participating in the distance learning program. When there were reports that teachers' subsidies were not being paid, the Bank held a meeting with AFAP where the team was informed that all pending payments (subsidies) had been processed. However, during visits to the teacher training centers during the supervision mission, the team determined that teachers had not received the latest payments and concluded that a system ensuring more transparency and accountability was needed. To this end, a grievance redress mechanism (GRM) where teachers would be able to file grievances/complaints was established. Further, a review to determine the cause of delays in payment of transportation subsidies was carried out and an action plan to resolve pending payments and ensure timely delivery of payments during the final two months of the training was developed.

Factors outside the control of the Government and/or implementing entities control

89. Power outages and unreliable internet connection impacted the delivery of the distance learning program and EMIS. By the time of the distance learning program finally was ready to start, the country was facing frequent power outages. As the program used an online learning platform and relied heavily on a strong internet connection, the international institution providing the training adapted their approach by delivering more face-to-face sessions in the first few months to compensate for these challenges. Further, some flexibility was introduced in terms of deadlines for students' tasks and projects. As for the EMIS, an external assessment of the new system was carried out in 2018 and identified that the lack of a reliable internet connection at several schools was negatively impacting the functionality and use of the new system. Part of the issue was due to the inability of the Ministry of Education to block usage of the Wifi – this was resolved by the World Bank and Ministry of Education negotiating with the internet service provider to give EDUTIC control of the routers so they could create regular new passwords and prevent community members in the proximity of the school from using all of the credit. Additionally, direct internet connections into the computers for the EMIS were provided. In large part, these two efforts resolved the internet connectivity issues. However, an offline version of the EMIS should also be created so when internet connections are unreliable, schools can still access and enter data (which can then be uploaded once online).



IV. BANK PERFORMANCE, COMPLIANCE ISSUES, AND RISK TO DEVELOPMENT OUTCOME

A. QUALITY OF MONITORING AND EVALUATION (M&E)

M&E Design

90. **Drawing from lessons from the previous GPE-financed project, the M&E design was relatively simple, with DPEI within the Ministry of Education being responsible for collecting and consolidating the necessary monitoring data.** The technical directorates within the Ministry of Education as well as ISEC were given full responsibility to implement their activities, whose evaluation of implementation achievements and constraints was carried out semi-annually and informed the preparation of the plan for the following year.

91. **The project's Results Framework (RF) included five PDO-level indicators and nine related 9 IRIs.** The PDO-level indicators regarding the number of additionally qualified teachers, establishing a learning assessment system, and adopting a competency-based training framework for teachers were all meaningful as each of these capture significant improvements required to establish a strong in-service teacher training system and improve education quality. There was not a learning indicator, as the goal was to first establish the learning assessment system, but the data collected provides a strong evidence base on where additional resources and teacher training activities need to be targeted. The nationally adopted teacher standards and qualifications framework created a common framework for all teacher training activities and introduced a more outcome-based approach to training. Rather than simply participating in trainings, teachers are required to be evaluated and demonstrate what they learned or can do as a result. This new approach was used for the distance learning training supported by the project. The evaluations conducted provide clear evidence that the 499 teachers that passed the courses are in fact better qualified to teach.

92. **As discussed earlier, the PDO-level indicator “number of daily working hours for teachers had increased from 3.5 hours to 4.5 hours and regular school-level supervision and mentoring programs” may not have been the best indicator to measure improvements in the management of human resources in the sector as this was related simply to a change in policy.** A better PDO indicator attributable to the significant improvements in the management of human resources may be the IRI that measured the percentage of primary schools that benefit from four annual school-level supervision visits and a mentoring program offered to teachers. The data collected during these visits were used to provide the necessary background information to improve the mentoring program for teachers. Additionally, as is now common practice but was not at the time of project design, the total number of direct project beneficiaries would probably be best as an IRI rather than an outcome indicator. However, this indicator does effectively acknowledge the breadth of reach of the project which benefited nearly 66 percent of all staff across the entire Ministry of Education.

93. **The DPEI was responsible for compiling and publishing system and institutional data used to inform education policy and investments.** In this project, this unit was responsible for ensuring planning and coordination of implementation of project activities among all relevant structures within the Ministry and AFAP. Its role included the development of systems, tools and practices for an effective assessment of students' achievements in close collaboration with the relevant structures within the Ministry. Based on data received from schools, it was responsible for providing the consolidated monitoring data, including status reports on project implementation by component, with a detailed summary description of project activities.

94. **In 2017, with the restructuring, some of the target indicators were slightly changed, for greater impact and alignment with project's activities.** First, the number of primary teachers to be trained was reduced from 667 (the target



established in the AF) to 515. This resulted from close monitoring of teachers' capacity needs, where those who were already enrolled in training at ISEC or who would retire in three years or less were excluded from the targeted group. By reducing the number of primary teachers who would receive training, the project could increase the number of those preschool teachers who would benefit from the project, which resulted in the final target being surpassed, where 312 instead of 175 preschool teachers received training. Second, given the capacity built at the Ministry of Education to conduct learning assessments and the first AALEB conducted in 2016 for grades 2, 4 and 6, the replacement of the indicator to conduct an EGRA for grade 3 by another round of AALEB improved the alignment with the activities developed during the project implementation, with the strengthened capacity within the Ministry, and represented an expansion in terms of the indicator target.

M&E Implementation

95. **Reporting of data for the RF was systematically done throughout the life of the project.** Progress reports were submitted every six months, except in the last year of implementation, when due to the elections and recent changes in the Government, progress reports were not submitted. Regarding the use of the new EMIS, two additional issues compromised its successful implementation: frequent changes of school directors – who received the training to input the school data into the new system – and unreliable internet connections and inability to access the system at the school level. In order to tackle these issues, additional school staff received training on the new system, and to address complaints regarding the quality of the internet services provided to schools, the project negotiated a new contract with revised terms with the local internet provider that allowed greater control in internet access at the schools while reducing costs and ensuring greater sustainability.

M&E Utilization

96. **Data was made available regularly for the RF and was used to inform the analysis of this Implementation Completion and Results Report (ICR).** Even before the new EMIS allowed more timely and reliable data collection, the DPEI already collected system and institutional data from the education sector in STP. Moreover, the project M&E design was sufficiently simple to permit DPEI to ensure coordination with other relevant structures at the Ministry, ISEC and AFAP. On the whole, project indicators were tracked and the various expected outputs and outcomes for the project were systematically monitored. The one indicator where tracking could have been improved was the total number of direct project beneficiaries. This indicator incorporated results from different activities and systematic tracking of both gender of beneficiaries in one database with a list of participants in all different capacity building activities would have improved the Ministry of Education's ability to track this indicator more consistently.

97. **The Government's updated ESP (2019-2023) prioritizes addressing the low learning outcomes at all education levels and to improve the efficiency and equality of the education system.** The updates to the ESP were based on the findings from the 2018 RESEN and from AALEB I and II. While the RESEN demonstrated clear improvements in access, particularly in preschool, secondary and tertiary education, it also showed that there is a need to continue initiatives to even further reduce repetition rates, improve learning outcomes, and strengthen teacher recruitment and deployment practices.

98. **In its role as SE for GPE financing in STP, the Bank led efforts to ensure adequate donor coordination, conduct additional education sector analysis, and monitor implementation of the Government's ESP.** The M&E system and capacity to use data in STP is particularly weak. To help improve the Ministry of Education's capacity to conduct M&E, the Bank helped to organize two Joint Sector Reviews of the implementation of the ESP which included all key education



stakeholders in the country. These events required the Ministry to collect and provide data on the key indicators identified to monitor progress of the ESP. While the new EMIS helped to provide some of the required information (i.e., data on enrollment, retention, dropout, etc.) it became evident that in the update of the ESP, the choice of indicators should be more selective, and more outcome based so the information collected would be more meaningful.

Justification of Overall Rating of Quality of M&E

99. The overall rating for M&E is Substantial. The M&E system established under the project was generally strong and provided timely data on all of the project-supported activities. With the set of data collection instruments developed as part of the new EMIS, the Ministry of Education has a strong system in place that allows them to systematically measure progress against both project related-indicators and those outlined in the ESP. There are numerous examples as well of where data collected was used to inform key decisions (i.e., teacher evaluations were used to determine design of teacher training plans, student assessment results were used to identify factors leading to poor learning outcomes and priorities for the new ESP, etc.).

B. ENVIRONMENTAL, SOCIAL, AND FIDUCIARY COMPLIANCE

Safeguards

100. **The project was rated as an environmental and social category 'C' project, and no safeguards policy was triggered.** The project did not undertake any construction activity nor used land or areas that could potentially trigger any resettlement of the targeted population. Moreover, though no social safeguards policy was triggered, the project ensured that factors related to both gender and vulnerable groups were taken into account during consultations and project implementation.

101. **Delays in the payment of transportation subsidies to teachers participating in the distance learning, as described above resulted in the establishment of a GRM.** Teachers participating in the distance learning were entitled to receive a transportation subsidy based on attendance to the training. One of the issues during implementation was related to teachers not receiving these subsidies. During supervision visits to the teacher training centers, it became clear that teachers had not received the latest payments and a system ensuring more transparency and accountability was needed. In response, a GRM where teachers would be able to file grievances/complaints was established.

Financial management (FM)

102. **AFAP, responsible for the management of all fiduciary aspects under the project, was adequately staffed and had previous experience with Bank operations and procedures prior to implementation.** Its performance supporting previous Bank financed projects had been rated satisfactory. For the Quality Education for All Project, AFAP revised its procedures manual prior to effectiveness and recruited independent auditors. In the beginning of project implementation, AFAP consisted of five staff members; by the end of the project, they were responsible for providing fiduciary support for another four projects and the number of staff had grown to 16 overall. In 2020, it is expected they will expand further to 20 employees.



103. **Throughout project implementation, external auditors were in place, audits were completed on time and Interim Financial Reports (IFRs) were submitted regularly and in accordance with Bank procedures.** Annual audit reports were of an unqualified opinion and revealed no areas requiring further attention. One area that required additional attention was submitting annual workplans and budgets. Up until the MTR, this had not been done and project expenditures were only being tracked by very broad categories (i.e., goods, services, etc.) and not by activity. Improvements were made to financial controls by enforcing the preparation and approval of annual work programs and a project budget broken down by different components and project activities. Efforts to ensure greater transparency on the use of funds were also implemented including the review and approval of all financial reports by the PSC. This improved both the capacity of the Ministry of Education and ISEC to prepare and execute budgets and track expenditures and AFAP's ability to track both actual expenditures and commitments. In the final year of implementation, there was a potential budget overrun of more than US\$350,000 due to not adequately tracking project commitments. However, this was resolved and the project closed without any issues. In general, the FM staff had relevant and adequate experience to carry out their fiduciary responsibilities.

104. Based on the performance described above, the FM under the Project is rated Satisfactory.

Procurement

105. **During project implementation, the procurement function was impacted by a lack of technical inputs and coordination among different stakeholders (Ministry of Education, ISEC and AFAP).** While procurement processes were compliant and contract management fair, the record keeping system and use of STEP (introduced at the project's MTR) required improvements. The majority of the contracts under the project were post-review since the amounts were below the Bank's thresholds. In order to help overcome initial delays in implementation, better monitor project performance, and increase transparency, it was agreed to adopt the use of the Bank's new procurement tracking tool – Systematic Tracking of Exchanges in Procurement (STEP) at the time of the MTR. In the last procurement review of the project for FY19, a noncompliance of procurement rules and procedures was detected, leading to a recommendation for a formal letter of reprimand to the Minister of Finance highlighting this noncompliance and recommending that AFAP be reminded of Bank procedures. It was found that a contract for some of the equipment for the distance learning program had not been awarded to the lowest bidder without the adequate explanation. This letter recommended, in addition to strict compliance to the Bank's procurement guidelines/regulations and bidding documents and the application of penalties to bidders that refuse to sign contracts when awarded contracts following a procurement process, that all correspondence with bidders is secured in writing and recorded in formal record-keeping systems. The challenges faced by the procurement function demonstrated lapses and weak coordination between the Government and AFAP.

106. Procurement under the Project is rated Moderately Satisfactory.

C. BANK PERFORMANCE

Quality at Entry

107. **As described earlier, the project preparation team ensured that the project design was closely aligned with the ESP (2012-2021), the PDO was well-defined and the key indicators measured progress towards achievement of the PDO.** The design of the project was based on the RESEN 2012, which identified issues related to lower internal efficiency, such as high repetition and dropouts, and teachers' low time on task. The original project design was relatively simple



and fit within a limited budget envelope of US\$2 million (\$1.1 million from GPE and US\$0.9 million from IDA). It was expected that the entire project would be able to be implemented in a three-year timeframe. While the AF was not introduced at entry per se, it was added to the project before implementation of any project supported activities had even started. The Bank's investments in the STP's education sector up until this point has been fairly limited in amounts around US\$1 million to US\$2 million. The Bank management and Government jointly decided to allocate US\$3.5 million of IDA funds to the education project to scale-up its financing and expand the number and scope of activities supported in the sector. However, in order to take advantage of these funds, the AF needed to be prepared and approved by the end of FY15 which was less than two months away. This timeframe did not allow sufficient time to fully prepare the design of several scaled-up activities nor did the AF include an extension of the original closing date. While the PDOs remained the same, several of the new activities were not fully articulated in the project document and there were some inconsistencies. At this same time, immediately after effectiveness there was a change in Ministers and TTLs. This short timeframe to prepare the AF and limited description in the project documents led to some confusion and the initial implementation delays.

108. Some of the diagnostic studies that helped shape the project's main activities were only able to be completed during implementation. These included the assessment of teachers' competencies, an analysis of the inspection system, a feasibility study regarding the IT requirements for the distance learning, and an in-depth study of ISEC in terms of its staffing, budget, training programs, etc. If additional time had been available during preparation, the project would have benefited from these systems diagnostic at entry. Without a clear definition of some activities from the onset, implementation was particularly challenging, in relation to the distance learning and teacher certification processes, in particular. In many cases, these project activities were designed more during implementation than preparation.

Quality of Supervision

109. While there were 11 ISRs prepared, additional supervision visits were conducted as well as follow up meetings. The Bank worked proactively and closely with the Government, ISEC, and AFAP in their efforts to implement the project. External consultants and firms were hired to provide adequate TA, perform background analysis, and evaluate gaps in institutional capacity. During missions the Bank held regular meetings with members of the PSC, other members of the different directorates implementing project activities, and AFAP. Follow up meetings were held as needed and allowed the team to quickly solve issues during implementation. In order to resolve issues related to the design and implementation of the scaled-up and new activities with the AF, an in-depth analysis of the project was conducted as part of the MTR and a project restructuring was prepared to ensure the Project would be able to meet its PDOs. Documentation of this support including the timely submission and filing of Aide-Memoires was weak during project preparation and the first stages of implementation. However, this gradually improved over time.

110. The team quickly responded to challenges as they arose. For instance, a meeting to address project bottlenecks and this issue in particular took place during which the Bank was informed by AFAP that all pending payments had already been processed. However, while conducting supervision visits to the teacher training centers during the supervision mission, it was clear that this was not the case and no teachers had received the latest payments and a system ensuring more transparency and accountability was needed. In response, a GRM where teachers would be able to file grievances/complaints was established. A detailed review of the processes for the transport subsidies was conducted to determine the cause of delays and an action plan to resolve pending payments and timely delivery of payments during the final two remaining months of the training.

Justification of Overall Rating of Bank Performance



111. **The overall World Bank performance is rated Moderately Satisfactory.** For the quality of entry, the project preparation team ensured that the project design was closely aligned with the ESP (2012-2021) and the PDO was well-defined. The issues introduced by the AF were resolved with the restructuring. Implementation capacity and other constraints at entry were underestimated. Under Bank team provided significant implementation support to resolve all bottlenecks and ensure the project met its PDO.

D. RISK TO DEVELOPMENT OUTCOME

112. **The project contributions are expected to continue, including through their expansion and consolidation in the next education project in STP.** The main activities developed by the project are expected to continue including the competency framework for in-service teacher training as well as the certification process will continue to benefit teachers in the system even after the end of the project; the Ministry has planned to implement the student learning assessment every three years, for grades 2, 4 and 6; and the new EMIS is expected to continue to be operational. Furthermore, some activities to build further on the foundations established are included in the design of the proposed Girls Empowerment and Quality Education for All Project (P169222). Activities proposed include supporting teacher professional development and providing additional distance learning training courses, continuing to improve teacher management and accountability, strengthening the national learning assessment system, and improving school leadership and accountability.

113. **The high turnover of Ministry staff after the 2018 elections introduced risks regarding the sustainability of many activities financed by the project.** The project was implemented during a time that was relatively stable for STP. The Government leadership lasted four full-years rather than turning over every two years as was the previous situation. However, even after this period of stability, when the new government was elected and the government changed parties in 2018, nearly every school director, supervisor, inspector, and Director with the central Ministry of Education was replaced. At the time of the ICR, there were very few staff involved in implementation still in place. This highly politicized system places significant risks in sustainability of system established and efforts to build capacity within the Ministry of Education.

114. **Thankfully, many of the potential risks in sustainability were considered during implementation.** For example, instead of only training school directors in the use of the new EMIS, there were 3-4 different staff at every school trained in its use. Hence, despite all of the changes, there are still trained staff available in nearly every school that are able to input data into the system. By implementing AALEB twice, establishing an official unit responsible for learning assessments, and adopting an overall assessment strategy, there are still plans in place to continue to implement national assessment on a regular basis. The heavy reliance on technology to manage the EMIS and deliver the distance learning program also poses a risk in terms of additional recurrent costs needed to pay for internet connectivity and capacity required to maintain all of the equipment. Contracts with the internet providers and server space managed in the cloud were done to continue at least a year beyond the life of the project to prevent potential gaps in service. However, given extremely limited fiscal resources, additional recurrent costs introduced by project financed activities need to be carefully considered moving forward. Lastly, one of the most significant challenges is the need for the Government to guarantee the fiscal resources to support the sector activities, particularly as this relates to training activities and teacher career progression. Nearly all unqualified teachers still have several hours of additional training that will be required in order to become fully certified. Under the project, the training provided had no impact on increasing teacher salaries. However, in the future, once additional training is completed and teachers become certified, this will likely result in additional costs for teacher salaries. Given budgetary constraints, the cost implications of these



initiatives to improve education quality will need to be carefully analyzed to ensure that there are adequate resources available.

115. **Improving the country's human capital is high on the Government's list of priorities.** STP recently officially joined the Bank's Human Capital Project and is developing a multisectoral plan to guide all investments in this area. This commitment is accompanied by a significant increase in resources for education. The Government's own investments in education have been steadily increasing and the project co-financed by IDA and GPE under preparation includes more than US\$17 million of available funds. This follow-on operation and additional resources in the education sector will be able to mitigate many of the potential risks to sustainability. Nearly all of the investments started under the Quality Education for All Project are included in the upcoming operation. For example, the distance learning program will continue to be used to provide quality training for teachers; the EMIS will be reinforced with even greater investments in capacity building to analyze and use the data for planning and managing the sector; and the Department of Assessment and Accreditation will be used to continue implementing regular national assessments and international ones as well. Hence, not only will these programs continue but they will be scale-up further for even greater impact.

116. **The risk to development outcome is considered Moderate.**

V. LESSONS AND RECOMMENDATIONS

General

117. **There is a need to limit the percentage of the budget spent on operating costs and maximize benefits from using AFAP as the fiduciary agency.**²⁰ AFAP staff have the requisite knowledge and experience required to implement Bank-financed projects. As is the case in most Ministries in STP, the Ministry of Education does not have the necessary financial management systems required to directly manage project funds and needs to rely on an outside agency. The project's operating costs were significantly high prior to the MTR. However, there were significant efficiency gains by sharing operating costs with other Bank-financed projects after the MTR. Given the size of the country, the Bank has now recommended that AFAP serve as the fiduciary agency for all Bank-financed projects. In order to reduce tensions with implementing Ministries, such as those encountered under the Quality Education for All Project, AFAP's role has been clearly defined to only overseeing fiduciary aspects where all technical leadership is the responsibility of the Ministry. In order to better manage operating costs, AFAP is now required to prepare one overall budget which is jointly approved by all TTLs and AFAP's performance is evaluated annually. Efforts to introduce improved financial controls and cost efficiency should be continued in the future.

118. **Having dedicated personnel within the Ministry is key for smooth implementation and coordination among the different agencies involved in the project.** For the majority of implementation, there was no one dedicated to work full-time on the project and a lack of coordination between different agencies was a significant barrier. In an effort to improve coordination, a Project Coordinator from within the Ministry of Education was appointed after the MTR but this staff had a number of other responsibilities. In the future, it is important that implementation arrangements are carefully examined to ensure there are staff fully dedicated to providing technical support to the project and strong coordination with AFAP. Given capacity constraints within the Ministry of Education to support implementation, external support should be recruited, at least during the early stages when preparing Terms of

²⁰ In STP, AFAP is responsible for overseeing the financial management and procurement functions for all Bank-financed projects.



Reference and defining project activities. Based on the experience under this project, nearly all projects now include a full-time Project Coordinator (either based within the respective Ministry or AFAP) to facilitate strong coordination and smooth implementation.

119. **More realistic timelines for preparation would prevent implementation delays and facilitate easier implementation.** Through the AF, the project benefitted from significant additional resources although the rapid preparation of the planned scale-up and inclusion of new activities lacked sufficient details and planning. For instance, delivering the teacher training via distance learning centers and an online platform required several additional steps. For the centers, small rehabilitations were needed but no works were included in the design and the project was unable to finance these. The training programs now included not only primary school teachers but preschool teachers and teacher trainers as well which would require developing additional curriculums and training plans given their different backgrounds and needs. All bottlenecks were overcome during implementation but having a more time to agree on the design of the scaled-up and new activities would have prevented many of the implementation delays.

Education

120. **Efforts to encourage strong donor coordination and align activities with the ESP should be continued.** In order to benefit from GPE-financing, countries are required to prepare an ESP endorsed by the government and key education stakeholders and the ESP must be based on evidence and a recent in-depth analysis of the sector. Together with the ESP, the country is required to develop a robust M&E system to monitor key indicators and conduct yearly joint sector reviews with all key stakeholders to monitor implementation of the ESP. The 2012 and 2018 RESEN and ESPs have been instrumental in informing the design and providing a strong evidence base to support Bank-financing in STP. The design of the Quality Education for All Project benefitted greatly from the extensive discussions required to prepare the ESP (2012-2021). The upcoming operation is also significantly benefiting from significant efforts to prepare the updated ESP (2019-2023). Aligning all investments with an endorsed ESP has led to greater donor harmonization and enhanced government ownership of project-supported activities. In STP, targeted efforts to further improve the quality of the joint sector reviews and the M&E system should play a key role in the future.

121. **Technology can be a powerful tool to improve education quality but risks related to limited capacity in IT and weak infrastructure need to be accounted for in project designs.** The project included a number of initiatives that introduced the use of technology to make improvements in the education sector. The costs associated with purchasing the equipment to set up these programs and recurrent costs are not insignificant. In order to implement these programs, there needs to be many more staff within the Ministry of Education with IT backgrounds to support the maintenance and implementation of these activities. People with IT backgrounds are in high demand and it was not easy to always recruit and maintain these staff within Ministry. To ensure the programs are sustainable, the Ministry of Education's ability to recruit and maintain IT staff will be essential. While STP's IT infrastructure has improved, power outages and issues with internet connectivity negatively impacted some project activities. Activity designs need to account for these limitations. For instance, the distance learning training program under the project was adjusted to include more face-to-face sessions and lessons were recorded so when internet connectivity was an issue, students could still download and watch the video. For the EMIS, the current platform is available online only. The current system would benefit from an offline version as well so data can still be entered and then uploaded when the internet connection is available. Schools that relied on solar powered energy and those with generators were able to problem solve more easily. Further investments in these two areas should be considered in the future.

122. **Investments in improving the quality of the teaching force and supporting teacher professional development should be reinforced and scale-up further.** A teacher certification process was developed under the project, but this



still needs to be formally adopted and accompanied by a strong implementation plan for the related reforms to teacher recruitment, training, and compensation. For those teachers who participated in the distance learning program, this training was only 375 hours of the close to 1500 hours that will be required for certification. A continuation of the distance learning program is needed to ensure they are able to complete the rest of the required training. The criteria used to select teachers to participate in the distance learning program was based on those without previous formal pedagogical training. However, the competency needs assessment found that many of the already “qualified” teachers also had very low content knowledge in basic Portuguese and Mathematics and require additional training. Efforts to improve teacher quality should be expanded even further, beyond just the requirements for certification, and additional programs to support the continuous professional development of all primary school teachers should be developed.

123. A truly competitive process should be followed when selecting providers for additional distance learning courses in the future. The costs for the distance learning training were higher than expected. Given that there was only one technical and financial proposal for this assignment, the process ending up not being “competitive”. While costs may in fact be higher for STP given its location and small economy, this should be more fully tested in the international market. With limited resources, cost savings would allow for more hours of training and already “qualified” in-service teachers (who according to the evaluation of teacher competencies also show significant deficiencies) to also potentially participate.

124. A new unit capable of implementing sample-based learning assessments was successfully established, although strong efforts should be made to continue to build their expertise and expand the current program. The tools and capacity to implement the national assessment in grades 2, 4 and 6 are now in place. The focus moving forward should be on increasing the capacity to analyze and effectively use the data to support improvements in education quality. Also, the country still has not completed any international student assessment which is needed to be able to be benchmarked against other countries and part of the Human Capital Index. The country’s student assessment activities should be expanded to include at least one international assessment in early grades.

125. There is a need to support reforms and initiatives to introduce more merit-based selection within the education system in STP. Many of the positions across the entire education system are politically appointed including Ministry leaders, department heads, school directors, school supervisors, etc. This poses significant risks to sustainability when there is a turnover in government. After the elections in 2018, and during the final six months of implementation, nearly every person in these positions changed which compromised investments made in capacity-building and institutional strengthening. It is critical that the system become less politicized or investments are likely to be unsustainable and prevent the system from advancing and being able to achieve the Government’s goal of produce better learning outcomes. Introducing merit-based selection policies would help to better mitigate these risks. Fortunately for key activities supported by the project, many of the technical staff remained in place and were able to ensure continuity of key programs such as the EMIS, student assessment, and the revamped inspection system.



ANNEX 1. RESULTS FRAMEWORK AND KEY OUTPUTS

A. RESULTS INDICATORS

A.1 PDO Indicators

Objective/Outcome: To improve the system of in-service teacher training

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Number of additional qualified primary teachers resulting from project interventions.	Number	0.00 20-May-2014	400.00 30-Jun-2017	515.00 28-Jun-2019	528.00 28-Jun-2019

Comments (achievements against targets):

Exceeded. The final number of teachers to be trained was 515. This change was made at the time of the Mid-Term Review (May 2016) due to attrition, to exclude teachers that were already enrolled in other courses at ISEC, or those who would retire in three years or less.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Competency based training	Text	No	Yes	Yes	Yes



framework developed		20-Dec-2013	30-Jun-2017	28-Jun-2019	28-Jun-2019
<p>Comments (achievements against targets): Achieved. The training framework also aligns with the regulatory/legal frameworks that are part of the teacher certification.</p>					

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Student learning assessment system established	Text	No 20-Dec-2013	Yes 30-Jun-2017	Yes 28-Jun-2019	Yes 28-Jun-2019
<p>Comments (achievements against targets): Achieved. New assessment unit created within the Ministry of Education (the Department of Assessment and Accreditation) and assessment exercises have been carried out. A plan is in place to repeat the assessment every 3 years.</p>					

Objective/Outcome: To strengthen the management of human resources

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Daily working hours by teachers	Hours	3.50 20-Dec-2013	4.50 30-Jun-2017	4.50 28-Jun-2019	4.50 28-Jun-2019



Comments (achievements against targets):

Achieved. Change in policy in the number of shifts per school to increase the overall number of daily teaching hours.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Direct project beneficiaries	Number	0.00	2000.00	2500.00	2579.00
		20-May-2014	30-Jun-2017	28-Jun-2019	28-Jun-2019
Female beneficiaries	Percentage	0.00	50.00	50.00	50.00
			09-Mar-2018		

Comments (achievements against targets):

Exceeded. These included: 123 trainers/supervisors; 312 pre-service and in-service preschool teachers; 528 in-service primary school teachers; 528 administrative staff and school directors; 110 inspectors, instructional leaders and supervisors; 20 ISEC administration staff and teacher trainers; 708 additional in-service primary school teachers; and more than 250 department leaders and technical staff within the central Ministry.

A.2 Intermediate Results Indicators

Component: Component 1. Improving the System of In-Service Teacher Training in Primary Education

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
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Assessment of critical competency needs of teachers finalized	Yes/No	N 20-May-2014	Y 30-Jun-2017	Y 28-Jun-2019	Y 28-Jun-2019
<p>Comments (achievements against targets): Achieved. This assessment served as the base for the content to be included in the teacher training program.</p>					
Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Training plans for in-service teacher training developed	Yes/No	N 20-May-2014	Y 30-Jun-2017	Y 28-Jun-2019	Y 28-Jun-2019
<p>Comments (achievements against targets): Achieved. This training program targeted those teachers without any teacher qualifications.</p>					
Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Certification process for pre-primary and primary school teachers developed and approved	Yes/No	N 20-May-2014	Y 30-Jun-2017	Y 28-Jun-2019	N 28-Jun-2019



Comments (achievements against targets):

Partially achieved. The target was revised during the AF to include information for both preschool and primary teachers. Partially achieved as regulatory/legal frameworks were developed but were not approved due to a complete change in government.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Training of pre-school teachers	Number	0.00	0.00	175.00	312.00
		20-May-2014	30-Jun-2017	28-Jun-2019	28-Jun-2019

Comments (achievements against targets):

Exceeded. New indicator added with the AF, with target of 100 preschool teachers to be trained. After the restructuring, target was increased to 175. The training reached 26 preschool teachers who traveled to Brazil to receive training on the new preschool program, another 100 trained on the new preschool curriculum at ISEC, and 186 who participated on face-to-face sessions on Portuguese and Mathematics. The project also purchased various teaching materials to accompany the new program and printed manuals for the new curriculum.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Training of trainers	Number	0.00	0.00	100.00	123.00
		20-May-2014	30-Jun-2017	28-Jun-2019	28-Jun-2019



Comments (achievements against targets):

Exceeded. New indicator added with the AF. The trainers trained included ISEC staff, supervisors, instructional leaders and inspectors.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
At least two student learning assessments conducted for grades 2, 4 and 6	Yes/No	N 20-May-2014	Y 30-Jun-2017	Y 28-Jun-2019	Y 28-Jun-2019

Comments (achievements against targets):

Achieved. The original target was "at least one student assessment conducted for the target grade (4th grade)". With the AF, the target was scaled up to include grade 6. Then, after the restructuring, the target was scaled up again to include grades 2, 4 and 6 and another round of assessments was added.

Component: Component 2: Strengthening Management of Human Resources in the Education Sector

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Percentage of primary education schools that benefit from 4 annual school-level supervision and mentoring program offered to teachers in every primary	Percentage	0.00 20-May-2014	100.00 30-Jun-2017	100.00 28-Jun-2019	100.00 28-Jun-2019



school (cumulative)

Comments (achievements against targets):

Achieved. This includes visits made by supervisors, inspectors, and instructional leaders. The old inspection system was analyzed, a revised model was proposed, new tools were developed, aligned with the new system, inspectors were trained, and over 300 inspection took place using these new tools. Additionally, 7 inspectors participated in a Masters program in school inspection and quality assurance mechanisms in a semi-presence course in STP and at-a-distance.

Indicator Name	Unit of Measure	Baseline	Original Target	Formally Revised Target	Actual Achieved at Completion
Education management information system in place and functional	Yes/No	N 20-May-2014	Y 30-Jun-2017	Y 28-Jun-2019	Y 28-Jun-2019

Comments (achievements against targets):

Achieved. The new EMIS has been established and initial data from all schools have been collected and entered into the system. School directors have been trained, and all schools with electricity have been resourced with a computer and an internet connection.



B. KEY OUTPUTS BY COMPONENT

Objective/Outcome 1	
Outcome Indicators	<ol style="list-style-type: none"> 1. Number of qualified primary teachers resulting from project interventions 2. Competency-based training framework developed 3. Student learning assessment system established
Intermediate Results Indicators	<ol style="list-style-type: none"> 1. Assessment of critical competency needs of teachers finalized 2. Training plans for in-service teacher training developed 3. Certification process for preschool and primary school teachers developed and approved 4. Training of pre-school teachers 5. Training of trainers 6. At least two student learning assessments conducted for grades 2, 4 and 6
Key Outputs by Component (linked to the achievement of the Objective/Outcome 1)	<ol style="list-style-type: none"> 1. 528 unqualified primary school teachers participated in the project's training activities 2. Competency-based training frameworks and related teachers' qualification framework for pre-school and primary teachers developed 3. Two learning assessments were conducted for grades 2, 4 and 6 4. Assessment and baseline of teacher competencies successfully completed and used to inform the design of in-service teacher training activities 5. Training plans developed and agreed upon, including the distance learning program 6. Certification processes for preschool and primary school teachers developed and agreed upon, including the establishment of a unit responsible within the Ministry of Education and a test developed to measure teacher competencies according to the officially adopted teacher qualifications framework 7. 312 pre-school teachers were trained in both the new pre-school curriculum (126) and in Portuguese and Mathematics (186)



	8. 123 trainers/supervisors trained on teacher supervision and effective teaching pedagogies
Objective/Outcome 2	
Outcome Indicators	<ol style="list-style-type: none">1. Daily working hours by teachers2. Direct project beneficiaries
Intermediate Results Indicators	<ol style="list-style-type: none">1. Percentage of primary education schools that benefit from 4 annual school-level supervision and mentoring program offered to teachers in every primary school2. Education management information system in place and functional
Key Outputs by Component (linked to the achievement of the Objective/Outcome 2)	<ol style="list-style-type: none">1. Number of daily working hours for teachers increases from 3.5 to 4.5 hours2. 2,579 direct beneficiaries participated in a number of different training activities3. 50 percent of direct beneficiaries were female4. New inspection tools developed and pedagogical supervisors providing mentoring to teachers, and all primary schools benefiting from at least 4 annual supervision visits5. New EMIS established, initial data from all schools collected and entered into the system, school directors trained to use the new platform



C. DETAILED RESULTS FRAMEWORK AND MAIN CH

	Original (IDA Grant Dec 2013, GPE Grant May 2014)			Additional Financing (IDA Grant June 2014)			Restructuring (May 2017)			Project Closing (June 2019)	Notes
	Unit of Measure	Baseline	End Target	Results as of AF (June 2014)	Indicator Change	Revised Targets	Results as of Restruc- turing (May 2017)	Indicator Change	Revised End Targets (June 2019)	Final Result	
PDO-level indicators											
Number of additional qualified teachers	Number	0	400	0	Revised Target	667	372	Revised Target	515	528	Exceeded. The final number of teachers to be trained was 515. This change was made at the time of the Mid-Term Review (May 2016) due to attrition, to exclude teachers that were already enrolled in other courses at ISEC, or those who would retire in three years or less.
Competency based training framework developed	Text	No	Yes	No	No change	Yes	Yes	No change	Yes	Yes	Achieved. The training framework also aligns with the regulatory/legal frameworks that are part of the teacher certification.
Student learning assessment system established	Text	No	Yes	No	No change	Yes	Yes	No change	Yes	Yes	Achieved. New assessment unit created within the Ministry of Education (the Department of Assessment and Accreditation) and assessment exercises have been carried out. A plan is in place to repeat the assessment every 3 years.
Daily working hours of teachers	Hours	3.5	4.5	3.5	No change	4.5	4.5	No change	4.5	4.5	Achieved. Change in policy in the number of shifts per school to increase the overall number of daily teaching hours.



Direct project beneficiaries (female beneficiaries)	Number (Percentage)	0	2,000	0	Revised Target	2,500 (50% female)	1,888 (50% female)	No change	2,500 (50% female)	2,579 (50% female)	Exceeded. These included: 123 trainers/supervisors; 312 pre-service and in-service preschool teachers; 528 in-service primary school teachers; 528 administrative staff and school directors; 110 inspectors, instructional leaders and supervisors; 20 ISEC administration staff and teacher trainers; 708 additional in-service primary school teachers; and more than 250 department leaders and technical staff within the central Ministry. Unable to determine the exact percentage of female beneficiaries, since gender not always provided, but based on data available at or over 50 percent.
Intermediate Results Indicators											
Assessment of critical competency needs of teachers finalized	Yes/No	No	Yes	No	No change	Yes	Yes	No change	Yes	Yes	Achieved. This assessment served as the base for the content to be included in the teacher training program.
Training plans for in-service teacher training developed	Yes/No	No	Yes	No	No change	Yes	Yes	No change	Yes	Yes	Achieved. This training program targeted those teachers without any teacher qualifications.
Training of pre-school teachers	Number	0			New indicator	100	212	175	175	312	Exceeded. These trainings reached 126 trained on the new preschool curriculum at ISEC, and 186 who participated on face-to-face sessions on Portuguese and Mathematics. The project also purchased various teaching materials to accompany the new program and printed manuals for the new curriculum.
Training of trainers	Number	0			New indicator	100	0	No change	100	123	Exceeded. The trainers trained included ISEC staff, supervisors, instructional leaders and inspectors.
Certification process for preschool and primary school teachers developed and approved	Yes/No	No	Yes (primary only)	No	Revised Target	Yes (preschool and primary)	No	No change	Yes	No	Partially achieved. The target was revised during the AF to include information for both preschool and primary teachers. Partially achieved as regulatory/legal frameworks were developed but were not approved due to a complete change in Government.



At least 2 learning assessments conducted for grades 2, 4, and 6	Yes/No	No	Yes (one assessment, grade 4 only)	No	Revised Target	Yes (one assessment for grades 4 and 6)	Yes (one assessment for grades 2, 4 and 6)	Revised Target	Yes (two assessments for grades 2, 4 and 6)	Yes	Achieved. The original target was scaled up with the AF to include both grades 4 and 6. Then, after the restructuring, the target was scaled up again to include grades 2, 4 and 6 and another round of assessments was added. The final reports are available, and results have been broadly disseminated and discussed in-depth with all key stakeholders and are informing the national debate on the need to ensure and pay greater attention to education quality.
At least one EGRA conducted for grade 3	Yes/No	No	Yes	No	No change	Yes	No	Deleted			Deleted. This activity was cancelled with the restructuring and was replaced by an additional round of the national learning assessment in grades 2, 4, 6.
Percentage of primary schools that benefit from 4 annual school-level supervision visits and mentoring program	Percentage	0	100	0	No change	100	100	No change	100	100	Achieved. This includes visits made by supervisors, inspectors, and instructional leaders. The old inspection system was analyzed, a revised model was proposed, new tools were developed, aligned with the new system, inspectors were trained, and over 300 inspection took place using these new tools. Additionally, 7 inspectors participated in a Masters' program in school inspection and quality assurance mechanisms in a semi-presence course in STP and at-a-distance.
EMIS in place and functional	Yes/No	No	Yes	No	No change	Yes	Yes	No change	Yes	Yes	Achieved. The new EMIS has been established and initial data from all schools have been collected and entered into the system. School directors have been trained, and all schools with electricity have been resourced with a computer and an internet connection.



ANNEX 2. BANK LENDING AND IMPLEMENTATION SUPPORT/SUPERVISION

A. TASK TEAM MEMBERS

Name	Role
Preparation	
Geraldo João Martins	Task Team Leader(s)
Atou Seck	Task Team Leader(s)
Elvis Teodoro Bernado Langa	Financial Management Specialist
Amos Martinho Malate	Procurement Analyst
Cheikh A. T. Sagna	Social Specialist
José Janeiro	Financing Officer
Wolfgang M. T. Chadab	Financing Officer
Daniela Anna B. D. Junqueira	Legal Counsel
Laura S. McDonald	Team Member
Natalie Tchoumba Bitnga	Program Assistant
Adriana M. da Cunha Costa	Program Assistant
Celia A Dos Santos Faias	Program Assistant
Federico Ricardo Manuel Mejer	Consultant
Patrick Fillion	Consultant
Sonia Guilherme	Consultant
Supervision/ICR	
Atou Seck	Task Team Leader(s) (until October 2015)
Emily Elaine Gardner	Task Team Leader(s) (as of October 2015)
Laurent Mehdi Brito	Procurement Specialist
Antonio Chamuco	Procurement Specialist
Joao Tinga	Financial Management Specialist
Cyrille Valence Ngouana Kengne	Environmental Specialist



Benjamin Burckhart	Social Specialist
José Janeiro	Financing Officer
Marie Roger Augustin	Legal Analyst
Laura S. McDonald	Team Member
Bernardo da Cruz Vasconcellos	Team Member
Natasha de Andrade Falcao	Team Member
Leandro Costa	Team Member
Camilla Gandini	Team Member
Elif Yonca Yukseker	Program Assistant
Benjamim Mutti	Program Assistant
Ana Jurema	Consultant

B. STAFF TIME AND COST

Stage of Project Cycle	Staff Time and Cost	
	No. of staff weeks	US\$ (including travel and consultant costs)
Preparation		
FY14	.175	194,714.97
FY15	.211	2,595.79
Total	0.39	197,310.76
Supervision/ICR		
FY15	4.140	49,625.51
FY16	18.475	144,792.53
FY17	10.225	136,095.18
FY18	12.330	161,320.84
FY19	23.082	402,057.01
FY20	7.425	38,955.53
Total	75.68	932,846.60



1. **The STP Quality Education for All Project was co-financed by IDA and the Global Partnership for Education (GPE).** In STP, the World Bank has served as the grant agent for all GPE financing since 2008. In order to prepare the project, the World Bank team received a project preparation grant (TF014454) from GPE in the amount of US\$200,000. This grant covered most costs spent during preparation. During implementation, grant agents for GPE financing also benefit from a GPE supervision grant. This project supervision grant (TF018063) from GPE was awarded in FY15 in the amount of US\$250,000. Although the overall project was extended until FY19, this grant closed in FY17 when the GPE grant (TF16391) under the project closed. During the final two years of implementation, for supervision, the team relied primarily on the World Bank project supervision funds. The table above shows much larger expenditures for FY18 and FY19. The World Bank team received another grant from GPE in FY18. However, this grant was to lead dialogue and help the Government conduct an in-depth analysis of the current status of the education sector to then be used to update its Education Sector Plan and develop a new 3-year action plan. This is required prior to applying for the next round of GPE. A total of US\$486,600 for this education sector analysis and education sector plan grant (TF0A5546) was received. This work was still ongoing when the project closed. A new TF number was created with the remaining balance and the grant was correctly linked to the new education operation under preparation (P169222).

2. **Table 1 below provides a breakdown of the project preparation and supervision expenditures by funding source.** The activities under TF0A5546 are separate from project supervision. The FY18 and FY19 amounts for project supervision were much less than what is showing in the system generated on staff weeks and costs. While the totals for preparation are reflected correctly, the supervision costs should be US\$410,285 (not US\$922,731).

Table 1. Project Preparation and Supervision Costs by funding source (in USD)

	WPA Total	WPA Costs	GPE Grant Costs	Total Costs	Revised	Activity
FY14	50,000	2,899	191,816	194,715*	194,715	Preparation
FY15	0	2,621	46,900	49,521	49,521	Supervision
FY16	53,000	28,048	116,744	144,792	144,792	Supervision
FY17	80,000	54,010	82,085	136,095	136,095	Supervision
FY18	69,000	42,085	119,236	161,321	42,085	Supervision
FY19	100,000	37,792	320,688	358,480*	37,792	Supervision

* The amounts shown here are the totals shown in the operations table. Those with asterisks are slightly different than those automatically generated in the staff weeks and costs above.

Table 2. Summary of GPE Bank-Executed Trust Funds from 2013 until 2019 (in USD)

	Total	Disbursed	Undisbursed	Status (as of June 30, 2019)
TF014454 – Project Development Grant	200,000	191,816	8,184	Closed
TF018063 – Supervision Grant	250,000	248,429	1,571	Closed
TF0A5546/TF0A9988 – Education Sector Analysis and Education Sector Plan	486,600	372,416	114,184	Ongoing

ANNEX 3. PROJECT COST BY COMPONENT

1. **There are three tables below which provide details on project costs.** The first table breaks down all costs by component and subcomponent by overall financing amounts, revised estimates after the MTR, and actuals at project closing. Table 2 provides additional details on all three sources of financing for the project: (i) an original IDA grant (H9030); (ii) a Global Partnership for Education grant (TF16391); and (ii) an additional financing IDA grant (H9770). This table provides an overview of financing including disbursements by source and exchange rate gains/losses for the IDA. Then finally, Table 3 provides a breakdown of all estimated and actual cost by activity. As discussed under the section on Financial Management, at the time of the MTR, the project established an estimated budget for all project activities to ensure better financial controls and tracking of project expenditures according to activity. Table 3 provides a breakdown of all estimated figures project documents, at the MTR, and actuals according to the Government's final report.

Table 1. Project Costs by Component (in USD)

Components	Amount at Approval (US\$)	Additional Financing (US\$)	Overall Total (US\$)	Revised after MTR (US\$)	Actual at Project Closing (US\$)	Percentage of Total Planned vs. Actuals
Component 1- Improving the System of In-service Teacher Training	1,100,000	3,100,000	4,200,000	3,533,860	3,387,800	80.7
Subcomponent 1.1 - Setting up Teacher Training System	700,000	2,800,000	3,500,000	3,028,860	2,981,481	85.2
Subcomponent 1.2 - Developing a Student Assessment System	400,000	300,000	700,000	505,000	406,319	58.0
Component 2 - Strengthening the Management of Human Resources	900,000	400,000	1,300,000	1,512,500	1,592,753	122.5
Subcomponent 2.1 - Developing a Management Information System	640,000	300,000	940,000	860,000	842,658	89.6
Subcomponent 2.2 - Project Management	260,000	100,000	360,000	652,500	750,095	208.4
Total	2,000,000	3,500,000	5,500,000	5,046,360	4,980,553*	90.6

*Client connections shows actual costs to be US\$4,896,723 while final report from Government shows US\$4,980,553.



Table 2. Financing and Disbursement Amounts by Source (in USD)*

Loan No.	Date of Signature	Closing Date	Original	Disbursed	Undisbursed/ Cancelled	Revised Actual Total	Exchange Rate Gains/Losses (SDR vs. USD)	Percentage Disbursed of Actual Total
IDA-H9030 (Orig. Grant)	6-Feb-2014	30-Jun-2017	900,000	725,448	100,056	825,504	- 74,496	87.8%
TF-16391 (GPE Grant)	6-Feb-2014	30-Jun-2017	1,100,000	1,080,363	19,637	1,100,000	0.00	98.2%
IDA-H9770 (AF Grant)	23-Sep-2014	28-Jun-2019	3,500,000	3,090,912	18,486	3,109,398	- 390,602	99.4%
Total			5,500,000	4,896,723	138,179	5,034,902	-465,098	97.3%

* All figures in this table are sourced from the World Bank's Client Connection financial reports, December 2019.



Table 3. Project Costs – Estimates versus Actuals by Activity

	Original Estimates*	Estimates at MTR**	Actual Costs***
	5,500,000	5,046,360	4,980,553
COMPONENT 1 - IMPROVING THE SYSTEM OF IN-SERVICE TEACHER TRAINING	4,200,000	3,533,860	3,387,799
Subcomponent 1.1 - Setting up the Teacher Training System	3,500,000	3,028,860	2,981,481
Teacher Qualifications Framework/Certification	n/a	180,000	241,329
Evaluations of Teacher Competencies and Teacher Training School	n/a	119,465	124,414
Face-to-Face Teacher Training (preschool and primary school teachers)	n/a	150,000	94,650
Distance Learning Teacher Training Program (primary school teachers and teacher trainers)	n/a	1,675,000	1,496,927
Equipment and materials for teacher training school and training centers	n/a	550,000	698,011
New preschool curriculum - development, training and materials	n/a	354,395	326,150
Subcomponent 1.2 - Developing a Student Assessment System	700,000	505,000	406,318
AALEB I - grades 2,4,6	n/a	225,000	211,139
AALEB II - grades 2,4,6 and Impact Evaluation	n/a	210,000	162,414
Assessment Plan/Additional Training	n/a	70,000	32,765
COMPONENT 2 - STRENGTHENING THE MANAGEMENT OF HUMAN RESOURCES	1,300,000	1,512,500	1,592,753
Subcomponent 2.1 -Developing a Management Information System	940,000	860,000	842,658
SIGE (software/equipment, manuals/training)	n/a	485,000	461,914
Internet Connection (schools and training centers)	n/a	275,000	292,888
Inspection System	n/a	100,000	87,856
Subcomponent 2.2 - Project Management	360,000	652,500	750,095
PIU Staff	n/a	260,000	252,451
External Audits	n/a	67,500	40,725
Training for PIU and Ministry of Education Staff and Education Fund	n/a	100,000	178,920
Operating Costs	n/a	225,000	277,999

* These estimates include all 3 sources of financing – the original IDA and GPE grant and the IDA AF. In the project design documents, the amounts are in general only broken down by component and subcomponent but not by activity.

** At the time of the MTR, the project had lost US\$453,640 due to exchange rate losses between the USD and XDR. Hence, the revised total of US\$5,046,360 was used when establishing the budget from May 2016 until June 2019, accounting for the planned two-year extension.

*** All project expenditures after the MTR were tracked against approved annual workplans and budgets for each activity. The figures on total expenditures provided by the government and the amount in Client Connections are slightly different. The actual costs provided in the table are those from the Government's final report.



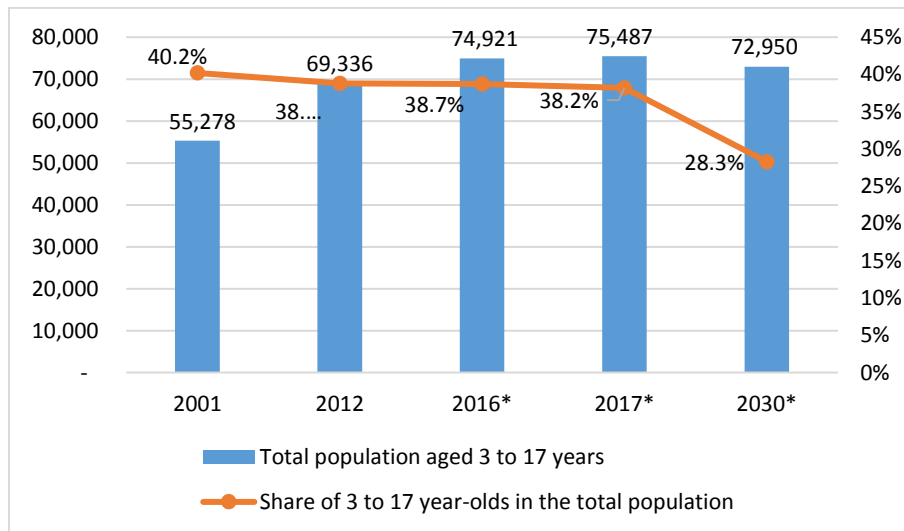
ANNEX 4. EFFICIENCY ANALYSIS

1. **The Quality Education for All project aimed at improving the system of in-service teacher training and strengthening management of human resources in the education sector in STP.** The project was expected to have an important economic impact for instance, in terms of the private returns resulting from better education quality and more efficient use of scarce resources as consequence of more reliable and timely education data. Thus, this economic and financial analysis offers an evaluation of project interventions by providing: (i) an overview of the education sector context related to the project activities by the time of appraisal; (ii) the economic justification for investing in teacher quality as well in preschool education and learning assessments; (iii) a cost-benefit analysis related to the teacher training subcomponent of the project; (iv) an analysis of the cost-effectiveness, including budget allocation and unit costs; and (v) a discussion about the fiscal impact and financial sustainability of the project.

Education sector context

2. **The country was experiencing a demographic transition, with a decrease in fertility, mortality and birth rates.** Demographic trends showed that the number of school-age children was expected to stabilize or even decrease, as presented in Figure 1. This decrease in pressure on the education system provided an opportunity to turn greater attention and invest further in education quality. Additionally, the country had already achieved universal primary education (UPE) and the enrollment rate in lower secondary school was 83 percent. These conditions represented an opportunity to focus efforts and limited resources on improving the quality of primary education in the country.

Figure 1. School-aged population projection



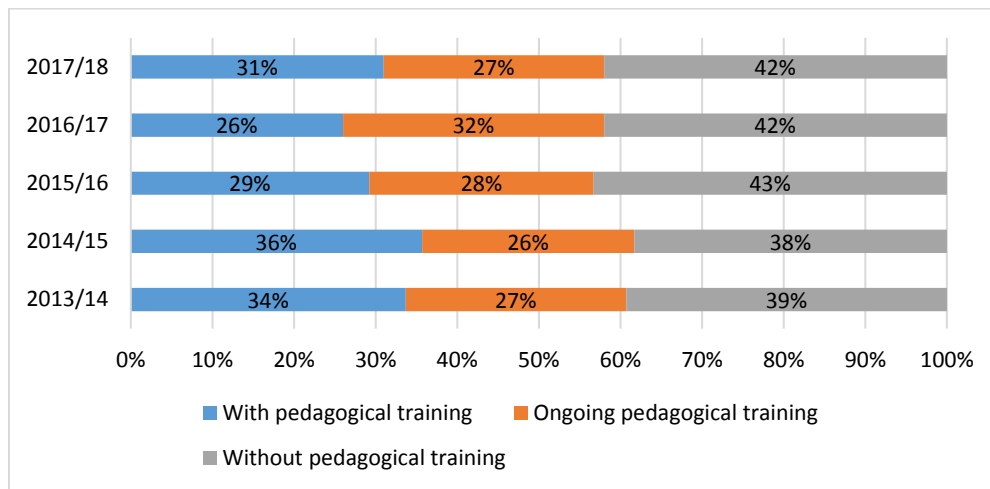
Source: RESEN 2018 (page 10, Figure 1.2).

Notes: * Projection using 3 to 5 years old children until 2017, and 4 to 5 years old afterwards.



3. **Although the country had not conducted any national assessments of student learning outcomes, the quality of education was believed to be low.** The Demographic Health Survey (DHS) of 2009 showed that 18 percent of individuals who completed 6 years of primary education were not able to read easily. Additionally, around 60 percent of primary education teachers were unqualified without any prior pedagogical training (Figure 2, 2014/15). The supply of trained pre-primary and primary school teachers was heavily impacted when the only teacher training school in STP was closed in 1996. For more than 10 years, there were no pre-service teacher training opportunities in the country. During this time, new teachers were recruited from secondary schools and sent directly to the classroom.

Figure 2. Primary teachers' pedagogical training profile



Source: Statistical booklets, several years.

4. **The choice to focus on in-service teacher training was justified for two main reasons. First, the project acknowledged the low capacity of the teacher training institution, ISEC.** Thus, providing training to those teachers currently in the system seemed the most efficient way to solve the issue of low skills in the primary education teaching body in STP in the short run. Second, given the ongoing demographic transition taking place in STP and the expected reduction of the population of 6 to 11 years old children over the next decade, the demand for new teachers was likely decrease. Therefore, focusing on in-service rather than on pre-service teacher training was assumed more cost-effective. Moreover, related activities under the project would also benefit the system of pre-service teacher training in the long-run – such as the development of the teachers' qualifications framework.

Expected outcomes and benefits

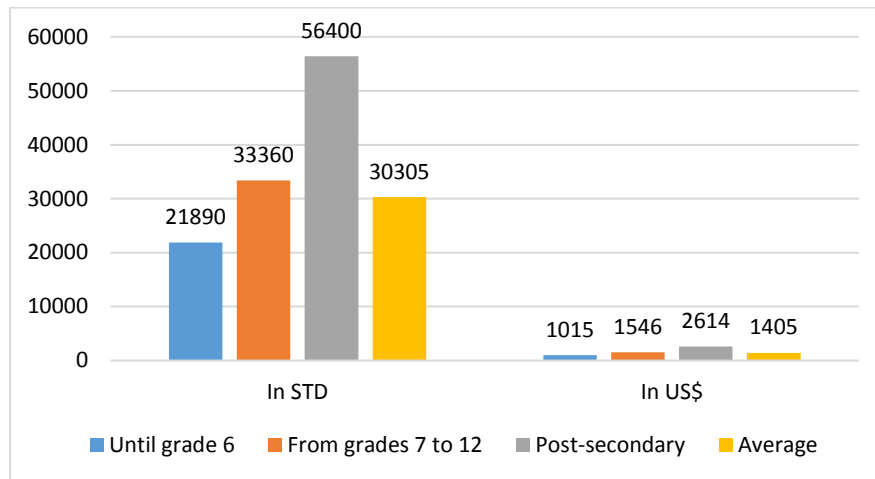
5. **Evidence shows that investments in education can increase human capital, productivity and lead to higher economic growth.** More educated and productive individuals are expected to have higher earnings throughout their lives. In Sub-Saharan Africa, returns to primary secondary and tertiary education have been estimated in 13.4, 10.8 and 21.9 percent, respectively. In its turn, one additional year of schooling in STP was estimated to yield an 8.4 percent rate of return.²¹ The earnings estimates based on the Household Budget Survey (HBS) 2017 showed that individuals who attained

²¹ Montenegro, C. E., and H. A. Patrinos. 2014. *Comparable estimates of returns to schooling around the world*. Policy Research working paper; no. WPS 7020. Washington, DC: World Bank Group.



grades 7 to 12 (secondary education) earn 52 percent more than those who attained up to grade 6. For those with post-secondary education, returns are 69 percent higher than for those with up to secondary level (Figure 3).

Figure 3. Annual median wages by education level



Source: HBS 2017.

6. **Effective teaching is one of the most important factors influencing a student’s ability to learn.** High value-added teachers can significantly improve students’ scores and provide them with the necessary support to successfully complete their studies.²² McEwan (2015) found for the case of developing countries, that interventions that are successful in impacting students’ learning include at least some teacher training effort. Teacher training was shown to improve test scores by 0.12 standard deviation, or a 0.59 additional year of education. The largest mean effect sizes included treatments with computers or instructional technology (0.15); teacher training (0.12); smaller classes, smaller learning groups within classes, or ability grouping (0.12); and contract or volunteer teachers (0.10).²³ Snilstveit *et al.* (2015) found that one of the most effective classroom interventions to boost students’ learning is structured pedagogy—a combination of teacher training, ongoing teacher support, resources for teachers, and classroom learning materials for students. Structured pedagogy interventions in low- and middle-income countries yielded 0.23 and 0.14 standard deviations in Language and Mathematics learning scores, respectively.²⁴ In its turn, Popova, Evans and Arancibia (2016) found that training programs accompanied by reading materials can improve test scores by up to 0.16 standard deviation.²⁵

²² Chetty, Raj, John N. Friedman, and Jonah E. Rockoff. 2014. *Measuring the Impacts of Teachers I: Evaluating Bias in Teacher Value-Added Estimates*. *American Economic Review*, 104(9): 2593-2632.

²³ McEwan, P. J. 2015. *Improving Learning in Primary Schools of Developing Countries: A Meta-Analysis of Randomized Experiments*. *Review of Educational Research*, 85(3), 353–394.

²⁴ Snilstveit, B., J. Stevenson, D. Phillips, M. Vojtkova, E. Gallagher, T. Schmidt, H. Jobse, M. Geelen, M. G. Pastorello, and J. Eyers. 2015. *Interventions for Improving Learning Outcomes and Access to Education in Low- and Middle-Income Countries: A Systematic Review*. *Systematic Review 24*, International Initiative for Impact Evaluation (3ie), London.

²⁵ Popova, A., Evans, D., and V. Arancibia. 2016. *Training Teachers on the Job: What Works and How to Measure it*. World Bank Policy Research Working Paper No. 7834. Washington, DC: World Bank.

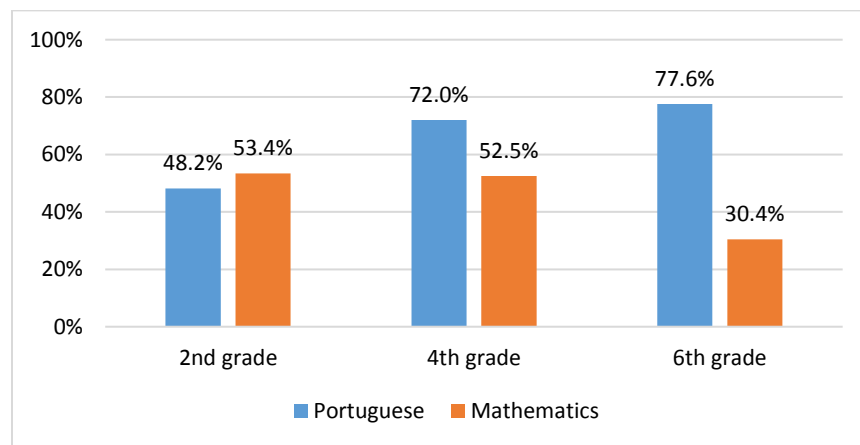


7. **Investing in early childhood development also leads to better school and labor market outcomes, given its impact on foundational cognitive and socioemotional skills.**²⁶ Attending preschool for one year was shown to increase earnings later in life, by enhancing cognitive skills during early childhood, and improving academic skills during elementary school. A randomized experiment in the early 1970s, in Chapel Hill, North Carolina, which provided full-time childcare services showed positive impacts on cognitive achievement of children, with lower repetition and dropouts, as well as improved learning outcomes later in life.²⁷

8. **Finally, learning assessments are needed to enhance educational resources' targeting, particularly to disadvantaged regions, schools and students.** Evidence from high quality learning assessments can provide the data needed to compare the cost-effectiveness of potential education interventions, target resources to poor-performing units of analysis, identify learning gaps and monitor learning trends. In STP, the latest AALEB (2019) showed low learning outcomes for all grades evaluated, particularly in Mathematics (

9. Figure 4).

Figure 4. Percentage of grades 2, 4 and 6 students who reached the expected competency level in Portuguese and Mathematics



Source: AALEB 2019.

10. **In addition to the positive impacts expected from improving the quality of preschool and primary teachers, as well from the availability of timely and reliable data for policy making, higher education is associated with other highly desired social outcomes.** Available literature provides evidence of positive externalities resulting from higher education achievement. Improvements in skills can benefit welfare beyond higher productivity and earnings, such as in health, prosocial behavior, and civic participation.²⁸ For instance, Feinstein *et al.* (2006) showed that individuals with more years of schooling are likely to be healthier and to demonstrate healthier behaviors. Education is presented as an important mechanism for enhanced health and well-being. It reduces the need for health care, helping to promote and sustain

²⁶ Berlinski, S., and N. Schady, eds. 2015. *The Early Years: Child Well-Being and the Role of Public Policy*. Development in the Americas Series. Washington, DC: Inter-American Development Bank and New York, NY: Palgrave Macmillan.

²⁷ Campbell, F. A., Pungello, E. P., Miller-Johnson, S., Burchinal, M., and C. T. Ramey. 2001. The Development of Cognitive and Academic Abilities: Growth Curves from an Early Childhood Educational Experiment. *Developmental Psychology*. 37(2), 231-242.

²⁸ Oreopoulos, P., and K. G. Salvanes. 2011. *Priceless: The Nonpecuniary Benefits of Schooling*. *Journal of Economic Perspectives*, 25(1), Winter: 159-84.



healthy lifestyles and positive choices, supporting and nurturing human development, human relationships and personal, family and community well-being.²⁹

Cost-benefit analysis

11. **Given that a cost-benefit analysis (CBA) was not conducted at appraisal, this analysis took into consideration the steps and assumptions commonly used, from other similar projects whose main development objective was also to improve education quality through teacher training and capacity building.** In order to quantify economic costs and benefits, it focused on the quantifiable parts of the project's total investments, which in this case correspond to the benefits expected from improving the quality of preschool and primary teachers. Teacher training programs were also the major subcomponent of the project, corresponding to 60 percent of the actual disbursements. For the purpose of this analysis, we consider the costs for all activities related to the improvement of the teacher training system. This includes for example, the assessment of teachers' qualifications that served as basis for the development of the teacher training program, the support to the development of the new preschool curriculum, and the purchase of all equipment for the training centers and ISEC.

12. **Benefits derive from the increase in the quality of preschool and primary teachers, which are translated into students' higher expected earnings in adult life.** It is hard to disentangle the impact of the several interventions related to the teacher training subcomponent, such as the purchase of teaching materials and equipment, curriculum development, the pedagogical support to teachers and increased supervision. Based on the evidence from the literature discussed earlier, it was assumed a 0.16 standard deviation increase in the expected annual income, equivalent to US\$92 (based on the median wage of US\$1405 in 2017). The number of students impacted by those better qualified teachers was calculated using the EMIS data for 2017, given the estimates for the average number of students per teacher. In total, 5304 preschool and 16368 primary students were assumed to benefit from the project. However, this number is a quite conservative estimated. Both current and future students will benefit from both the higher quality of the teaching workforce as well as the improved training and supervision systems developed as a result from the project's interventions. Finally, for this analysis, it was assumed that: students work for 40 years (from ages 21 to 60); the wage was constant, thus ruling out both inflation and economic growth; and the discount rate was 9 percent.

13. **The CBA estimates demonstrated that the project was economically viable.** The Net Present Value (NPV) of the combined estimates for the costs and benefits of providing training to preschool and primary teachers was evaluated to be US\$2.112 million. The Internal Rate of Return (IRR) associated with this NPV was 12 percent, and the overall cost-benefit ratio estimated that for every US\$ 1 invested there was a return of US\$2.1. While data to quantify all benefits was not available – for instance those related to improved health outcomes – the NPV of the quantifiable benefits was greater than the NPV of the costs. The IRR of 12 percent is higher than the official discount rate of 9 percent, providing strong evidence of the economic efficiency of project's investments.

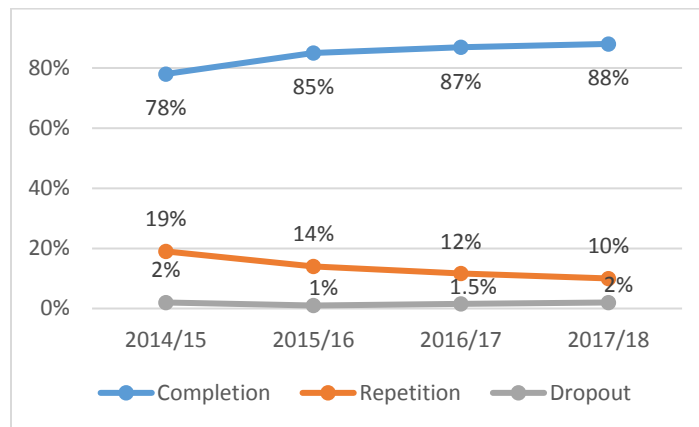
14. **A sensitivity analysis was performed and despite the smaller benefits, the project's rate of return remained higher than the official discount rate.** Assuming the impact of 0.12 standard deviation (a decrease in 25 percent), the NPV was estimated in US\$1.131 million, for an IRR of 11 percent.

²⁹ Feinstein, L., Sabates, R., Anderson, T., Sorhaindo, A., and C. Hammond. 2006. *What are the effects of education on health?* OECD Centre for Educational Research and Innovation – CERI. Available at: <http://www.oecd.org/education/innovation-education/37425753.pdf>.



15. **Finally, during the period of project implementation, the education system’s internal efficiency improved, even if these positive outcomes cannot necessarily be solely attributed to the project.** The project started disbursing in 2014, and since then, overall improvements have been observed. At the primary level, completion rates increased by 10 percentage points, from 2014 to 2017. Meanwhile, repetition and dropout rates steadily decreased. During that same period, gross enrollment rates (GER) in preschool and secondary have increased. From 58 percent to 80 percent in preschool, and from 80 to 86 percent in secondary education.

Figure 5. Completion, repetition and dropout rates in primary education



Source: Statistical booklets, several years.

Cost-effectiveness analysis

16. **By the end of the project implementation, the budget allocation was different from the original estimates.** Overall, the costs for most activities under the project were kept under budget. At the time of the MTR, the planned budget for each activity was revised taking into account actual expenditures to date and to account for relatively significant losses due to exchange rates between SDR and the US\$ (nearly US\$454,000, almost 10 percent of the project total). From the MTR onward, annual budgets were prepared and expenditures against each planned activity were carefully monitored. While the actual cost for component 1 represented 88 percent of the initial budget (after the AF), component 2 was 33.5 percent more expensive than originally estimated. The costs related to project management represented more than twice the value initially allocated. By the time of the AF, these were estimated in US\$360,000 in total. At the time of the MTR, total expenditures had already surpassed the original estimate (almost US\$500,000 have been already spent) and by the end of the project, actual disbursements related to this subcomponent reached US\$750,095 (108 percent more than what was included in the project design). Given that many of AFAPs operating costs after the MTR were shared across other World Bank projects, the expenditures for FM and AFAP services were significantly less during the period of the two-year extension. However, taking into consideration these shared costs in addition to actual expenditures under this project, overall operating costs for AFAP appear to be high in comparison to other operations of a similar size and design.

17. **In terms of unit costs, the average spending per beneficiary was equivalent to other similar training options in STP.** The actual cost per teacher trained was US\$144 for those who received the face-to-face training at ISEC, and US\$2,354 for those who participated in the distance learning program. The ISEC training benefited a total of 558

preschool and primary school teachers. The distance learning program reached 513 primary teachers and 123 school supervisors. Based on previous data available, training costs in STP have overall decreased. The RESEN 2018 provided estimated for 2016, where the annual cost per student receiving training at ISEC was estimated in US\$673. For those students completing tertiary education abroad, annual costs were US\$3,407 in average. The distance learning costs per student were significantly high, where 375 hours of training for 513 primary teachers and 150 hours of training for 123 teacher trainers and school supervisors cost the equivalent of 70 percent the annual costs of sending a tertiary student abroad.

Table 1. Annual costs per student

	2010		2016		% change
	In STD	In US\$	In STD	In US\$	
Preschool	2383602	110	5630000	261	136%
Primary	1734596	80	3066000	142	77%
EFOPE	15275706	708	14515000	673	-5%
Tertiary (in STP)	30793554	1427	4082000	189	-87%
Tertiary (abroad)	126056872	5843	73500000	3407	-42%

Source: RESEN 2012 and 2018.

Note: Values converted to US\$.

Financial impact

18. **To analyze the Project's financial impact, an estimate of the impact of project costs on the public budget allocated to education was prepared.** The total value for the resources allocated to education is presented in

19. Table 2. The costs of the project considered in this analysis consist of the total US\$4.98 million disbursed between 2014 and 2019. The maximum impact of the project on the total education expenditure (TEE) budget was 6.3 percent in 2016.

Table 2. Evolution of education expenditures

	2012	2013	2014	2015	2016	2017	2018	2019
Recurrent spending								
In billions of STD	258.6	276.2	336.0	308.0	363.8	396.2	433.6	462.1
In millions of US\$	11.99	12.80	15.57	14.28	16.86	18.37	20.10	21.42
As a share of TEE	95.6%	88.4%	93.9%	90.0%	82.9%	80.0%	78.0%	74.5%
TEE								
In billions of STD	270.5	312.5	357.8	342.4	438.7	495.0	555.4	619.9
In millions of US\$	12.54	14.49	16.59	15.87	20.33	22.95	25.74	28.73
As a share of TGE	12.2%	16.8%	17.7%	13.8%	17.4%	19.0%	19.6%	20.1%
As a share of GDP	5.6%	5.6%	5.6%	4.9%	5.8%	5.9%	5.9%	6.0%
Project Impact								
In millions of US\$			0.00	0.53	1.28	0.79	1.37	1.01



As a share of TEE			0.0%	3.4%	6.3%	3.4%	5.3%	3.5%
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Source: RESEN 2012 and 2018.

Notes: Values in 2017, 2018 and 2019 were estimated based on trends in values from previous 5 years;

TEE = Total Education Expenditure; TGE = Total Government Expenditure; GDP = Gross Domestic Product.

Efficiency rating

20. **Given the NPV of the quantifiable benefits was greater than the costs' NPV, the project demonstrated strong economic efficiency.** However, unit costs related to the distance learning activities were significantly high even when considering the higher quality of the training when compared to the face-to-face option. Moreover, project management costs were twice as high the value allocated by the time of the AF. In addition to these issues, delays in the project implementation schedule which are discussed further in other sections of the ICR resulted in the overall efficiency under the project to be rated as **Modest**.



ANNEX 5. BORROWER, CO-FINANCIER AND OTHER PARTNER/STAKEHOLDER COMMENTS

1. The Government confirmed its agreement with the findings of the ICR and had no additional comments. The Government provided their final project completion report to the Bank which has been filed in WBDocs for information and reference.

ANNEX 6. SUMMARY OF TEACHER TRAINING REPORT

1. **An evaluation of the distance learning training was conducted and showed overall high levels of satisfaction with the training received.** The distance learning training included 150 hours of training for supervisors, and 375 hours of training for primary school teachers. Beneficiaries' perceptions were collected by the international institution responsible for delivering the training. Thus, even though encouraging, results should be interpreted with caution.

Project Structure

2. **The distance learning program benefited both primary school teachers and supervisors, with a blended model that included classes delivered face-to-face and at distance.** The training of supervisors comprised 150 hours, delivered between September 2018 and January 2019. In June 2019, three additional face-to-face sessions were scheduled to supplement learning and support beneficiaries so they could finish homework. Primary school teachers received 375 hours of training, split in 8 different subjects, namely: ICTs, Mathematics, Portuguese, general pedagogical training, pedagogical practices, and teaching methods for environmental sciences, Mathematics and Portuguese. Teachers were organized in classes, with each of the 9 training centers in 7 districts (two at ISEC in the capital and two in the district of Mé-Zochi) benefiting from two classes, one in the morning and one in the afternoon.

Attendance Rates

3. **In total, 123 supervisors and 513 teachers participated in the distance learning training, and 499 teachers graduated for a performance rate above 75 percent (considering attendance and homework compliance).** The tables below present the attendance rates and number of beneficiaries who graduated in the groups of supervisors and teachers, in each of the classes. Taking into account the total number of hours of training expected (in the case of 100 percent attendance) and the actual attendance rates, the rate of effectiveness (how much training was delivered de facto) reached 85 and 73 percent among supervisors and teachers, respectively.

Table 1. Attendance rates of supervisors

Training Center	Supervisors	Attendance
ISEC 1	53	88%
ISEC 2	54	74%
RAP	16	77%
Total	123	80%

Notes: Numbers from January 2019.



Table 2. Attendance rates of teachers

Training Center	Graduate teachers	Attendance
Caué (morning)	21	82%
Caué (afternoon)	24	81%
Centro Recursos (morning)	33	82%
Centro Recursos (afternoon)	36	83%
ISEC 1 (morning)	30	68%
ISEC 1 (afternoon)	35	65%
ISEC 2 (morning)	23	67%
ISEC 2 (afternoon)	34	64%
Lembá (morning)	24	83%
Lembá (afternoon)	28	83%
Lobata (morning)	14	75%
Lobata (afternoon)	37	85%
Mé-Zochi MMM (morning)	25	65%
Mé-Zochi MMM (afternoon)	25	68%
Mé-Zochi Trindade (morning)	33	80%
Mé-Zochi Trindade (afternoon)	28	85%
RAP (morning)	19	63%
RAP (afternoon)	30	61%
Total	499	

Training Evaluation

4. Among supervisors, 57 percent of them participated in a previous training, and 71 percent of these considered the latest training better than the one before. The overall quality of the trainers was well-evaluated, and 65 percent considered this training opportunity as extremely important (with the remaining 35 percent classifying it as important). Among teachers, almost 90 percent were highly satisfied with the quality of the trainers, as well as considered interactions easy. Content was highly valued with 78 percent considering the activity as extremely important (and the remaining 22 percent classifying it as important). More details about their satisfaction with the training are presented in the figures that follow.



Figure 5. Overall satisfaction with the training

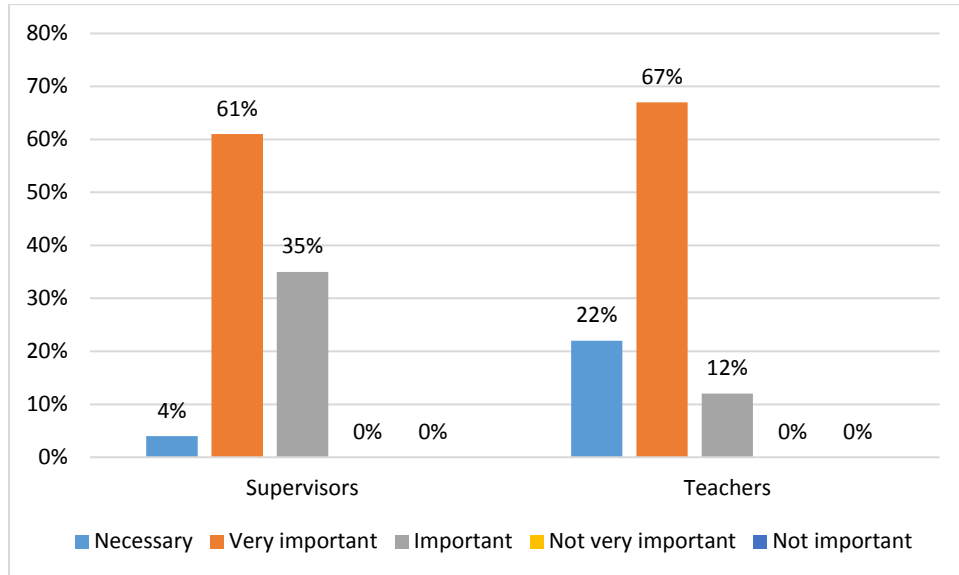
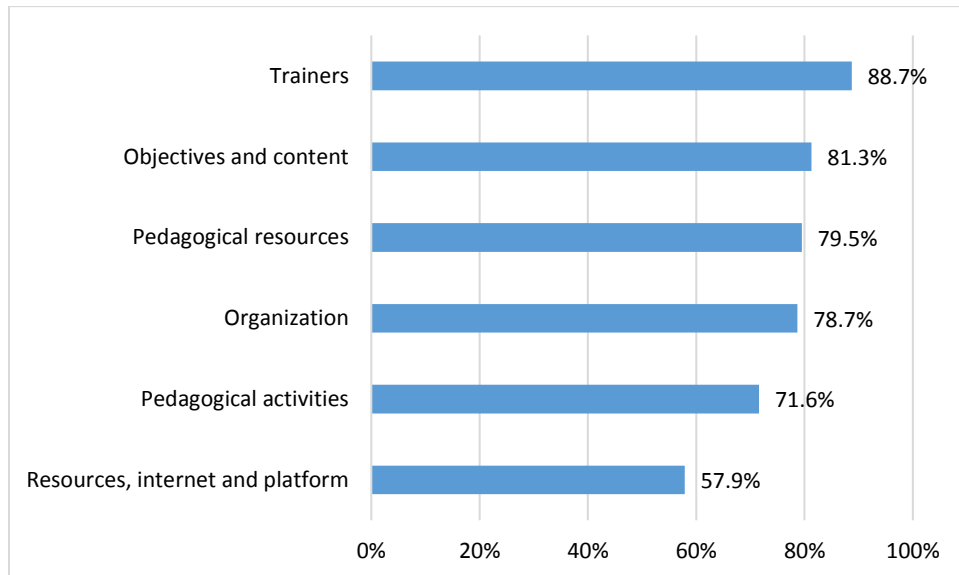


Figure 6. Teachers' overall satisfaction by training elements



Source: Paula Frassinetti – Escola Superior de Educação. 2019. Final Report – Quality Education for All.



ANNEX 7. SUPPORTING DOCUMENTS

IMF – African Department. 2018. Democratic Republic of São Tomé and Príncipe: 2018 Article IV Consultation, Fifth Review Under the Extended Credit Facility Arrangement, Request for Waivers for Nonobservance of Performance Criteria, and Financing Assurances Review. IMF Country Report No. 18/251. Washington, DC: International Monetary Fund. Available at: <file:///C:/Users/WB419051/Downloads/cr18251.pdf>.

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