Public Disclosure Authorized

Public Disclosure Authorized

THE WORLD BANK
IBRD • IDA | WORLD BANK GROUP

FOR OFFICIAL USE ONLY

Report No: PAD3320

INTERNATIONAL DEVELOPMENT ASSOCIATION

PROJECT APPRAISAL DOCUMENT

ON A

PROPOSED CREDIT

IN THE AMOUNT OF SDR 107.9 MILLION
(US$150 MILLION EQUIVALENT)

AND A

PROPOSED GRANT

IN THE AMOUNT OF US$23.9 MILLION
FROM THE GLOBAL PARTNERSHIP FOR EDUCATION

TO THE

REPUBLIC OF GHANA

FOR THE

GHANA ACCOUNTABILITY FOR LEARNING OUTCOMES PROJECT

October 2, 2019

Education Global Practice
Africa Region

This document has a restricted distribution and may be used by recipients only in the performance of their official duties. Its contents may not otherwise be disclosed without World Bank authorization.

CURRENCY EQUIVALENTS

(Exchange Rate Effective June 30, 2019)

Currency Unit =	Ghanaian Cedi (GHS)
GHS 5.135 =	US$1
US$1 =	SDR 0.71931579

FISCAL YEAR
January 1 - December 31

Regional Vice President:	Hafez M. H. Ghanem
Country Director:	Pierre Frank Laporte
Global Director, Education:	Jaime Saavedra Chanduvi
Practice Manager:	Halil Dundar
Task Team Leaders:	Deborah Newitter Mikesell, Dina N. Abu-Ghaida, Eunice Yaa Brimfah Ackwerh

ABBREVIATIONS AND ACRONYMS

ABFA	Annual Budget Funding Amount
ADEOP	Annual District Education Operational Plan
ASER	Annual State of Education Report
AWP&B	Annual Work Plan and Budget
BECE	Basic Education Certification Examination
BELDS	Better Early Learning and Development at Scale
CAGD	Controller and Accountant General's Department
CBE	Complementary Basic Education
CENDLOS	Center for National Distance Learning and Open Schooling
CoE	College of Education
CPD	Continuous Professional Development
CPESDP	Coordinated Programme of Economic and Social Development Policy
CPF	Country Partnership Framework
CS	Circuit Supervisor
CSO	Civil Society Organization
DEO	District Education Office
DFID	U.K. Department for International Development
DLI	Disbursement-linked Indicator
DLR	Disbursement-linked Result
DP	Development Partner
DTST	District Teacher Support Team
ECOWAS	Economic Community of West African States
EEP	Eligible Expenditure Program
EFA-FTI	Education for All-Fast Track Initiative
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
EMIS	Education Management Information System
ESA	Education Sector Analysis
ESCP	Environmental and Social Commitment Plan
ESF	Environmental and Social Framework
ESIA	Environmental and Social Impact Assessment
ESMF	Environmental and Social Management Framework
ESMP	Environmental and Social Management Plan
ESMTDP	Education Sector Medium Term Development Plan
ESP	Education Sector Plan
ESRS	Environmental and Social Review Summary
ESS	Environment and Social Standard
FCUBE	Free Compulsory Universal Basic Education
FM	Financial Management
FY	Fiscal Year
GAS	Ghana Audit Service
GALOP	Ghana Accountability for Learning Outcomes Project
GBV	Gender-based Violence
GDP	Gross Domestic Product

GER	Gross Enrolment Rate
GES	Ghana Education Service
GETFund	Ghana Education Trust Fund
GHS	Ghanaian Cedi
GIFMIS	Ghana Integrated Financial Management Information System
GIMPA	Ghana Institute of Management and Public Administration
GLSS7	Seventh-round of the Ghana Living Standards Survey
GoG	Government of Ghana
GPE	Global Partnership for Education
GPEG	Ghana Partnership for Education Grant
GPI	Gender Parity Index
GRM	Grievance Redress Mechanism
HCI	Human Capital Index
HCP	Human Capital Project
HRMIS	Human Resource Management Information System
ICT	Information and Communications Technology
IFR	Interim Financial Report
IGF	Internally Generated Funds
INSET	In-service Training
IPPD	Integrated Personnel and Payroll Database
IRR	Internal Rate of Return
ISSER	Institute of Statistical, Social and Economic Research
IVA	Independent Verification Agency
JHS	Junior High School
JICA	Japan International Cooperation Agency
KG	Kindergarten
LEG	Local Education Group
LMIC	Lower Middle-Income Country
M&E	Monitoring and Evaluation
MCA	Maximum Country Allocation
MoE	Ministry of Education
MoF	Ministry of Finance
mSRC	Mobile School Report Card
NaCCA	National Council for Curriculum and Assessment
NEA	National Education Assessment
NEAU	National Education Assessment Unit
NER	Net Enrolment Rate
NESAR	National Education Sector Annual Review
NIB	National Inspectorate Board
NPF	New Procurement Framework
NTC	National Teaching Council
OFSTED	Office for Standards in Education
PAD	Project Appraisal Document
PASEC	Programme for the Analysis of Education Systems
PBME	Planning, Budgeting, Monitoring and Evaluation
PCR	Pupil-classroom Ratio

PDO	Project Development Objective
PFM	Public Financial Management
PFMA	Public Financial Management Act
PIM	Project Implementation Manual
PIRLS	Progress in International Reading Literacy Study
PISA	Programme for International Student Assessment
POC	Project Oversight Committee
PPP	Public-private Partnership
PPSD	Project Procurement Strategy for Development
PTR	Pupil-teacher Ratio
PTT	Project Technical Team
PTTR	Pupil-trained Teacher Ratio
RBF	Results-based Financing
RoE	Return on Education
RPF	Resettlement Policy Framework
SBM	School-based Management
SBV	School-based Violence
SCD	Systematic Country Diagnostic
SDR	Special Drawing Rights
SEIP	Secondary Education Improvement Project
SEP	Stakeholder Engagement Plan
SHS	Senior High School
SMC	School Management Committee
SORT	Systematic Operations Risk-Rating Tool
SPAM	School Performance Appraisal Meeting
SPED	Special Education Department
SPIP	School Performance Improvement Plan
SRC	School Report Card
SRIMP	Statistics Research, Information Management and Public Relations
STARS	Strengthening Teacher Accountability to Reach All Students
STEP	Systematic Tracking of Exchanges in Procurement
T-TEL	Transforming Teacher Education and Learning
TA	Technical Assistance
TCAI	Teacher Community Assistant Initiative
TIMSS	Trends in Mathematics and Science Study
TLM	Teaching and Learning Material
ToT	Trainers of Trainers
TVES	Technical, Vocational Education Service
TVET	Technical, Vocational Education and Training
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
WAEC	West African Examination Council
WASSCE	West African Senior School Certificate Examination

TABLE OF CONTENTS

DATASHEET 2

I. STRATEGIC CONTEXT 9

A. Country Context 9

B. Sectoral and Institutional Context 10

C. Relevance to Higher Level Objectives 20

II. PROJECT DESCRIPTION 21

A. Project Development Objective 21

B. Project Components 22

D. Project Beneficiaries 33

E. Results Chain 33

F. Rationale for World Bank Involvement and Role of Partners 35

G. Lessons Learned and Reflected in the Project Design 36

III. IMPLEMENTATION ARRANGEMENTS 39

A. Institutional and Implementation Arrangements 39

B. Results Monitoring and Evaluation Arrangements 40

C. Sustainability 41

IV. PROJECT APPRAISAL SUMMARY 42

A. Technical, Economic and Financial Analysis 42

B. Fiduciary 43

C. Legal Operational Policies 44

D. Environmental and Social 45

V. GRIEVANCE REDRESS SERVICES 48

VI. KEY RISKS 48

ANNEX 1: Implementation Arrangements and Support Plan 59

ANNEX 2: Disbursement Linked Indicators – Description, Verification Protocols and Disbursement Protocols 78

ANNEX 3: Stretch Indicators and DLIs for GPE Variable Part Financing 91

ANNEX 4: Results Chains for GALOP DLIs 96

ANNEX 5: Projects in Basic Edu. Sector supported by Dev. Partners and CSOs 102

ANNEX 6: Economic and Financial Analysis 104

ANNEX 7: MoE Reforms under the Purview of the Reform Secretariat 118

ANNEX 8: Map of Ghana 119

DATASHEET

BASIC INFORMATION

Country(ies)	Project Name	
Ghana	Ghana Accountability for Learning Outcomes Project	
Project ID	**Financing Instrument**	**Environmental and Social Risk Classification**
P165557	Investment Project Financing	Moderate

Financing & Implementation Modalities

[ ] Multiphase Programmatic Approach (MPA)	[ ] Contingent Emergency Response Component (CERC)
[ ] Series of Projects (SOP)	[ ] Fragile State(s)
[✓] Disbursement-linked Indicators (DLIs)	[ ] Small State(s)
[ ] Financial Intermediaries (FI)	[ ] Fragile within a non-fragile Country
[ ] Project-Based Guarantee	[ ] Conflict
[ ] Deferred Drawdown	[ ] Responding to Natural or Man-made Disaster
[ ] Alternate Procurement Arrangements (APA)	

Expected Approval Date	Expected Closing Date
24-Oct-2019	31-Dec-2024

Bank/IFC Collaboration

No

Proposed Development Objective(s)

To improve the quality of education in low performing basic education schools and strengthen education sector equity and accountability in Ghana.

Components

Component Name	Cost (US$, millions)
Strengthen teaching and learning through support and resources for teachers	50.00

Strengthen school support, management and resourcing	63.00
Strengthen accountability systems for learning	47.00
Technical Assistance, institutional strengthening, monitoring, and research	13.90

Organizations

Borrower:	Ministry of Finance
Implementing Agency:	Ministry of Education

PROJECT FINANCING DATA (US$, Millions)

SUMMARY

Total Project Cost	173.90
Total Financing	173.90
of which IBRD/IDA	150.00
Financing Gap	0.00

DETAILS

World Bank Group Financing

International Development Association (IDA)	150.00
IDA Credit	150.00

Non-World Bank Group Financing

Trust Funds	23.90
Education for All - Fast Track Initiative	23.90

IDA Resources (in US$, Millions)

	Credit Amount	Grant Amount	Guarantee Amount	Total Amount
Ghana	150.00	0.00	0.00	150.00
National PBA	150.00	0.00	0.00	150.00

Total	**150.00**	**0.00**	**0.00**	**150.00**

Expected Disbursements (in US$, Millions)

WB Fiscal Year	2020	2021	2022	2023	2024	2025
Annual	13.35	21.91	29.97	34.01	33.24	17.52
Cumulative	13.35	35.26	65.23	99.24	132.48	150.00

INSTITUTIONAL DATA

Practice Area (Lead)

Education

Contributing Practice Areas

Climate Change and Disaster Screening

This operation has been screened for short and long-term climate change and disaster risks

Gender Tag

Does the project plan to undertake any of the following?	
a. Analysis to identify Project-relevant gaps between males and females, especially in light of country gaps identified through SCD and CPF	Yes
b. Specific action(s) to address the gender gaps identified in (a) and/or to improve women or men's empowerment	Yes
c. Include Indicators in results framework to monitor outcomes from actions identified in (b)	Yes

SYSTEMATIC OPERATIONS RISK-RATING TOOL (SORT)

Risk Category	Rating
1. Political and Governance	Substantial
2. Macroeconomic	Moderate
3. Sector Strategies and Policies	Moderate
4. Technical Design of Project or Program	Substantial

5. Institutional Capacity for Implementation and Sustainability	Substantial
6. Fiduciary	Moderate
7. Environment and Social	Moderate
8. Stakeholders	Moderate
9. Other	
10. Overall	Substantial

COMPLIANCE

Policy

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

[ ] Yes [✓] No

Does the project require any waivers of Bank policies?

[ ] Yes [✓] No

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

E & S Standards	Relevance
Assessment and Management of Environmental and Social Risks and Impacts	Relevant
Stakeholder Engagement and Information Disclosure	Relevant
Labor and Working Conditions	Relevant
Resource Efficiency and Pollution Prevention and Management	Relevant
Community Health and Safety	Relevant
Land Acquisition, Restrictions on Land Use and Involuntary Resettlement	Relevant
Biodiversity Conservation and Sustainable Management of Living Natural Resources	Not Currently Relevant
Indigenous Peoples/Sub-Saharan African Historically Underserved Traditional Local Communities	Not Currently Relevant
Cultural Heritage	Relevant
Financial Intermediaries	Not Currently Relevant

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

Legal Covenants

Sections and Description

As per the Financing Agreement, Schedule 2, Section I. A 1 (a), the Recipient shall ensure that throughout implementation of the Project, the MOE has resources and personnel required to enable the MOE to perform its functions under the Project, such personnel to include a Project Coordinator supported by a Project Technical Team (PTT). As per the Financing Agreement, Schedule 2, Section 1. A 3 (a), the Recipient shall not later than three (3) months from the Effectiveness Date establish and thereafter maintain the PTT.

Sections and Description

As per the Financing Agreement, Schedule 2, Section I. D 1, the Recipient shall (a) assign and recruit Independent Verification Agents with qualification and skills satisfactory to the Association; and (b) ensure that prior to each payment under the Project, the IVA: (a) carries out in accordance with the Verification Protocol, an assessment to determine the extent to which the Disbursement Linked Indicators (DLI) in respect of which payment is requested have been achieved; and (b) furnish said assessment to the Association for review.

Sections and Description
As per the Financing Agreement, Schedule 2, Section I. C 1, the Recipient shall ensure the Project is carried out in accordance with the Environmental and Social Standards, in a manner acceptable to the Association. 2. Without limitation upon paragraph 1 above, the Recipient shall ensure that the Project is implemented in accordance with the Environmental and Social Commitment Plan (ESCP) in a manner acceptable to the Association. To this end, the recipient shall ensure that: (a) the measures and actions specified in the ESCP are implemented with due diligence and efficiency, and as further specified in the ESCP; (b) sufficient funds are available to cover the costs of implementing the ESCP; (c) policies, procedures and qualified staff are maintained to enable it to implement the ESCP, as further specified in the ESCP; and (d) the ESCP or any provision thereof, is not amended, revised or waived, except as the Association shall otherwise agree in writing and the Recipient has, thereafter, disclosed the revised ESCP.

Sections and Description
As per the Financing Agreement, Schedule 2, Section I. A. 2 (a) the Recipient shall: (i) no later than three (3) months from the Effectiveness Date establish a Project Oversight Committee (POC) responsible for overseeing Project implementation, and (ii) ensure that it has a mandate, terms of reference and resources satisfactory to the Association.

Sections and Description
As per the Financing Agreement, Schedule 2 Section I. B. 2 (a), the Recipient shall prepare and furnish to the Association not later than November 30 of each Fiscal Year during the implementation of the Project, a work plan and budget containing all activities proposed to be included in the Project under Part 4 during the following Fiscal Year, and a proposed financing plan for expenditures required for such activities, setting forth the proposed amounts and sources of financing.

Sections and Description
As per the Financing Agreement, Schedule 2, Section I. A. 2 (a), the Recipient shall: (i) no later than three (3) months from the Effectiveness Date establish a Project Oversight Committee (“POC”) responsible for overseeing Project implementation; and
(ii) ensure that it has a mandate, terms of reference and resources satisfactory to the Association.

Conditions

Type	Description
Effectiveness	As per the Financing Agreement, Article IV 4.01, the Recipient shall prepare and adopt a Project Implementation Manual in form and substance satisfactory to the Association by effectiveness.
Type	Description
Disbursement	As per the Financing Agreement, Schedule 2, Section III. B.1. (b) no withdrawal shall be made for payments under Category (1) for Eligible Expenditures Program unless and until the Recipient has furnished evidence satisfactory to the Association that (i) an IVA with

	qualifications and experience and under terms of reference satisfactory to the Association has been assigned or recruited.

I. STRATEGIC CONTEXT

A. Country Context

1. **The Republic of Ghana is a lower middle-income country (LMIC) located in West Africa** that covers approximately 240,000 km^2 and is bordered by Burkina Faso, Togo, Cote d'Ivoire and the Atlantic Ocean. Ghana was divided into ten administrative regions until December 27, 2018 when the number of regions was increased to 16 – Upper West, Upper East, North East, Northern, Savannah, Brong Ahafo, Bono East, Ahafo, Ashanti, Eastern, Oti, Volta, Greater Accra, Central, Western North and Western[1] (see annex 8). It is a multiparty parliamentary democracy with national elections held every four years. Its population is approximately 30 million, of which 40 percent are below 14 years of age, and the population growth rate is 2.2 percent. The overall literacy is almost 80 percent, with large regional variations.

2. **Ghana's gross domestic product (GDP) growth has been historically volatile and is strongly linked to oil and gas production and prices.** Between 2008 and 2012, Ghana's growth rate averaged approximately 9 percent per year, peaking in 2011 when it was the second highest in the world at 14.4 percent. However, worsening macroeconomic conditions due to weak fiscal and monetary policies and declining terms of trade (from lower oil prices and electricity rationing) slowed growth substantially to less than 4 percent between 2014 and 2016. In 2017, GDP growth recovered and reached 8.1 percent[2], and settled at 6.7 percent in 2018.[3] Inflation, which was over 13 percent in January 2017, dropped to 9.4 percent in December 2018. In terms of sector contribution to the GDP, Ghana's services sector makes up 54 percent of GDP, while industry accounts for 26 percent and agriculture for 20 percent.[4]

3. **Ghana has made substantial progress in reducing poverty over the last 25 years, but this progress stalled between 2012 and 2016; in addition, large regional disparities in levels of poverty and inequality persist.** In 1991, the poverty rate was 52.7 percent, but this was more than halved by 2012 when it reached 24.2 percent, allowing Ghana to achieve Millennium Development Goal (MDG) 1: *to eradicate extreme poverty and hunger*. However, the poverty rate has since remained relatively stagnant and in 2016 was estimated at 23.4 percent. Inequality, as measured by the country's Gini coefficient, was 0.43 in 2016, where zero expresses perfect equality. Although Ghana compares favorably with other LMICs in Sub-Saharan Africa, the picture of poverty and inequality is a regional one. In 2016, poverty rates ranged from 2 percent in Greater Accra to 71 percent in Upper West, while the Gini coefficient was 0.35 in Greater Accra and Eastern regions and 0.48 in Upper West. Poor regions also experienced increasing inequality. Between 2012 and 2016, inequality widened in the Upper East and Northern regions (the poorest two regions), while it decreased in the wealthier regions.[5]

[1] All data in the Project Appraisal Document (PAD) are based on the original ten regions as data are not yet available for the six new regions.
[2] World Bank. 2019. 4th Ghana Economic Update: Enhancing Financial Inclusion.
[3] International Monetary Fund. 2019. Ghana 7th and 8th reviews under the Extended Credit Facility arrangement and request for waivers of nonobservance of performance criteria.
[4] Ministry of Education, Education Sector Analysis (ESA) 2018.
[5] Oyatoye, Ibironke Folashade, Kwadwo Opoku, Keita Shimmei and Tomomi Tanaka. 2019. *Human Capital Development in Ghana*. Washington, DC: World Bank.

4. **According to the Human Capital Index[6] (HCI) which measures the amount of human capital that a child born today can expect to attain by age 18, Ghana's productivity for the next generation of workers is suboptimal.[7]** The health indicators are better than the Sub-Saharan African average with 95 out of 100 children born in Ghana surviving to age 5, and 19 out of 100 children stunted. Seventy-six percent of 15-year-olds can be expected to survive until age 60. However, out of the average years of schooling in Ghana (11.6), the number of quality-adjusted learning years is just 5.7 – meaning that children are in school but not learning for nearly six years. Ghana's HCI at 0.44 means that a child born in Ghana today may be 44 percent as productive when she grows up as she could be if she had complete education and full health.

5. **The Government launched the Coordinated Program of Economic and Social Development Policies (CPESDP) 2017–2024[8] in March 2018** which aims at doubling GDP by 2024. The four key goals to be pursued are: (a) building a prosperous country; (b) creating opportunities for all Ghanaians; (c) safeguarding the natural environment and ensuring resilience; and (d) maintaining a stable, united and safe country. According to the CPESDP, creating opportunities for all entails enhancing the preparedness of the population to take advantage of current and emerging opportunities, which in turn means greatly expanding access to quality education and healthcare for all socio-economic groups and communities. Government policies for education and training therefore focus on (a) improving inclusive and equitable access to education at all levels; (b) intensifying education in science, mathematics, and technology; (c) raising the quality of education at pre-tertiary levels, with emphasis on mathematics and science; (d) facilitating the implementation of the language policy; (e) strengthening the school management system; and (f) ensuring sustainable sources of financing for education. Key strategies to be implemented to achieve these objectives include (a) undertaking curriculum reforms with emphasis on competency in reading, writing, arithmetic, and creativity at the primary level; (b) developing curriculum and pupil achievement standards and designing a common national test to assess pupil achievement of foundational literacy and numeracy competency at the primary level; and (c) ensuring inclusive education for children with special needs.

B. Sectoral and Institutional Context

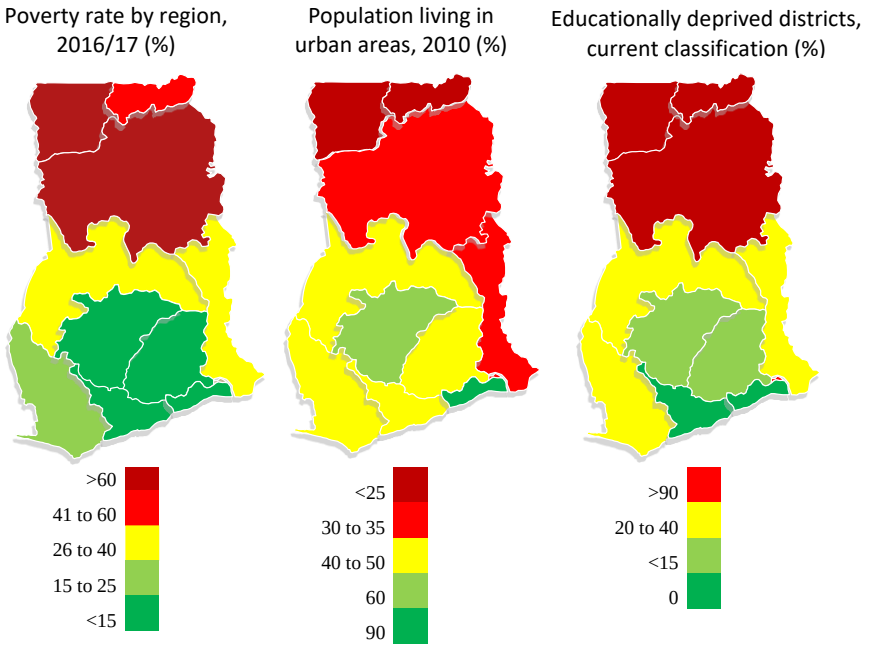
6. **The Ministry of Education (MoE) is responsible for Ghana's education system and education policy.** The Ghana Education Service (GES) is the implementing agency under the MoE mandated to implement interventions in pre-tertiary education. Ghana's pre-tertiary education system can be described as a 2-6-3-3 system: basic education includes two years of kindergarten (KG), six years of primary and three years of lower secondary or junior high school (JHS). Secondary education consists of three years of second cycle education which includes senior high school (SHS) or technical, vocational education and training (TVET). SHS includes business, agriculture, visual arts, technical, general arts and general science programs. TVET is provided by technical institutes and other training centers as well as

[6] World Bank. 2018. http://www.worldbank.org/en/publication/human-capital
[7] Five indicators inform the index including survival to age five, adult survival rate, proportion of children who are not stunted, a child's expected years of schooling, and harmonized test scores as a measure of learning quality.
[8] Accessed on May 3, 2019 at https://s3-us-west-2.amazonaws.com/new-ndpc-static1/CACHES/PUBLICATIONS/2018/04/11/Coordinate+Programme-Final+(November+11,+2017)+cover.pdf

through informal apprenticeships. The Free Compulsory Universal Basic Education (FCUBE) program was introduced in 1995 and the free SHS program[9] was rolled out in 2017/18. Entry into SHS and TVET is contingent upon passing the Basic Education Certificate Examination (BECE) in grade 9 (JHS3). In grade 12 (SHS3), students take the West African Senior Secondary Certificate Examination (WASSCE). The WASSCE is also taken in The Gambia, Liberia, Nigeria and Sierra Leone and qualifies students for tertiary education, including universities, polytechnics[10], teacher colleges of education (CoEs), and agriculture and nursing training institutes. The GES implements policy through its decentralized Regional and District Education Directorates. The day-to-day operations of basic, senior secondary, and technical/vocational institutes are overseen by District Education Directors, Regional Education Directors and a Director for Technical Vocational Education, respectively. Annex 6 provides an overview of outcomes on key indicators for Ghana's pre-tertiary education sector based on the latest available data.

7. **Disaggregating data by region shows a strong correlation between poverty rates, rural-urban divides and educationally deprived districts.** Figure 1 depicts regional patterns of inequality in Ghana by comparing the poverty rate by region in 2016/17 with the percentage of the population living in urban areas in 2010 and the classification of educationally deprived districts.[11] Figure 1 shows that these factors are strongly correlated.

Figure 1. Regional Patterns of Inequality in Ghana



Source: Ghana Education Sector Analysis (ESA), 2018; and constructed by the authors using regional poverty rates depicted in the Systematic Country Diagnostic (SCD) 2018.

[9] Free SHS Program also covers technical vocational students in second cycle institutions.
[10] In August 2016, Parliament passed a bill converting eight out of 10 polytechnics that had met the conversion criteria into technical universities.
[11] As classified for the GPEG in 2012 that selected beneficiary districts based on poverty and key education indicators.

8. **Education is a highly prioritized sector, with some international targets for public spending in education being exceeded.** Public education expenditure accounted for 6 to 8 percent of Ghana's GDP and 21 to 28 percent of government expenditure annually between 2011 and 2015, exceeding the recommended benchmarks (6 percent of GDP and 20 percent of government expenditure) of the Global Partnership for Education (GPE) and higher than any of the other 13 Economic Community of West African States (ECOWAS) countries.[12] Total government expenditure as a percentage of GDP declined from 27-30 percent of GDP during 2011-15 to 18 percent in 2017, contributing to the decline of public education expenditure as a percentage of GDP to 5.4 percent in 2016 and 5.2 percent in 2017. Nevertheless, education expenditure as a percentage of total government expenditure was at 28.9 percent in 2017 — representing an 11 percentage point increase over the previous year — indicating the Government's prioritization of the sector. In terms of sources of contribution, in 2017, the contribution of the Government of Ghana (GoG) to total education expenditure was the largest making up 74 percent; however, 95.4 percent of these funds were expended on wages and salaries, leaving only 4.6 percent for non-salary expenditures including teaching and learning materials (TLMs). Once other sources of education financing[13] are added, wages and salaries make up 72 percent of overall education expenditure, with goods and services accounting for 23 percent and capital expenditure for 5 percent. This indicates that almost all non-salary expenditures are from education financing sources outside of government financing. The allocation by sub-sector between 2015 and 2017 shows increasing expenditure at all levels of pre-tertiary education, with the largest proportion of education expenditure allocated to the SHS sub-sector in 2017 due to the roll out of the free SHS program.

9. **Ghana has a high proportion of trained teachers, with systems in place to attract and retain qualified teachers.** The GoG has prioritized the training of teachers through the provision of tuition free teacher training and teacher trainee allowances, and by directly employing all those graduating from the CoEs[14]. Over 77 percent of the teaching workforce in public schools is trained, with a higher proportion of trained teachers deployed to JHSs and SHSs where students take high-stakes examinations (BECE and WASSCE, respectively). A labor market analysis undertaken by the Ghana Statistical Service (GSS) showed that a larger share of primary and secondary school teachers had tertiary education compared to other white-collar professions; and they receive incentives such as study leave with or without pay, health care and subsidized loans, invigilation and supervision allowances. Almost every teacher belongs to one of three teacher unions, including the Ghana National Association of Teachers, the National Association of Graduate Teachers or the Coalition of Concerned Teachers. Although the GES has a policy whereby teachers who accept a posting or are transferred to areas designated as difficult are eligible to receive a salary top-up of up to 20 percent of gross monthly income, this policy has never been fully implemented. Instead, a policy is being implemented whereby teachers that accept a post in a difficult area may request a reposting to a district of their choice after three years and/or to obtain study leave with pay.

[12] Note that Internally Generated Funds (IGF) are included in these estimates; if these are removed, then, in 2015, education expenditure as a percentage of GDP was 5.3 percent and as a percentage of total government expenditure was 19 percent.
[13] Other sources of funds include IGF, donor financing, Ghana Education Trust Fund (GETFund) and Annual Budget Funding Amount (ABFA).
[14] National Teaching Council. 2019. Report on Country Analysis Mapping on the Teacher Situation in Ghana.

10. **Ghana has made significant progress in terms of increasing access to education.** Gross enrolment rates (GERs) at the KG and primary levels are over 100 percent and gender parity has been achieved[15] at all levels of pre-tertiary education. The free SHS program has greatly improved access to secondary education as indicated by the JHS3 to SHS1 transition rates, which increased to 78 percent in 2017, 10 percentage points above the previous four years during which transition rates had stagnated. Despite this increase in access, pupil-classroom ratios (PCR) and pupil-teacher ratios (PTR) have remained unchanged, indicating some efficiency of existing resources in the short term to accommodate the increased enrolment.[16]

Key Challenges in Basic Education

11. Despite the substantial progress in access to basic education, Ghana's basic education subsector faces continued challenges in terms of access, and the quality of education provided as reflected in the low learning outcomes. Regional and gender disparities in learning outcomes also persist.

12. **Although enrolment rates are high in Ghana, roughly 450,000 children are estimated to be out of school today**.[17] The Complementary Basic Education (CBE) Program, funded by the U.K. Department for International Development (DFID) and U.S. Agency for International Development (USAID), operated from 2012 to 2018 with the aim of ensuring that 200,000 out-of-school children had access to education using nongovernmental organizations (NGOs) as implementing partners. The CBE Program (a) reached children who had never been to school or who had dropped out; (b) required community engagement for the selection of local facilitators who use the local language for instruction; (c) taught children mostly in the afternoon to enable them to fit in household and farming chores; (d) equipped children with literacy, numeracy, and life skills over a period of nine months; and (e) finally supported children's transition into the closest public school to continue with their education, where most children are placed at the primary level, mainly Primary 2 (P2) to Primary 4 (P4). In fact, the CBE program reached almost 250,000 children and trained more than 9,600 community facilitators across 50 districts and five regions of Ghana by the time it ended, producing significant improvements in local language literacy and numeracy. In addition, after one year in public school, those who completed the CBE Program achieved similar outcomes to those already in these schools. Given these positive results, and because Ghana continues to have out-of-school children, the Government has committed to allocating funding from the basic education budget to support continuation of the CBE Program in the country under the restructured Alternative Education Division (formerly the Non-Formal Education Division).

13. **Low learning outcomes.** Although a child who starts school at age five can expect to complete 11.6 years of schooling by her 18th birthday, factoring in what children learn, expected years of schooling is only 5.7 years. This is due to the low quality of basic education as measured through standardized assessments. Results of the Early Grade Reading Assessment (EGRA) did not change between 2013 and

[15] The United Nations Educational, Scientific, and Cultural Organization (UNESCO) considers gender parity to have been attained when the Gender Parity Index (GPI) is between 0.97 and 1.03.
[16] The MoE introduced a double track enrollment system in 2018 to accommodate the increase in enrollment of over 150,000 additional students entering SHS1. The system enables two tracks of students to enroll in SHS1 in September and November each year. The "green" and "gold" tracks alternate in the use of classroom and other facilities.
[17] Sabates, Ricardo. 2018. Moving Beyond Aid in Education: The Case of the Complementary Basic Education Programme in Ghana. *Research on Improving Systems of Education (RISE) (blog),* October 5. *https://www.riseprogramme.org/blog/beyond_aid* accessed April 25, 2019.

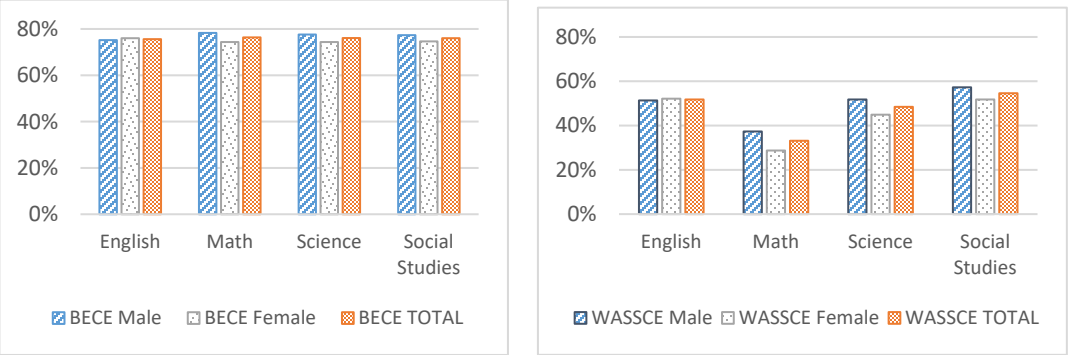
2015 and indicated that just 2 percent of P2 pupils were able to read at an appropriate grade level with 50 percent unable to recognize a single word. In 2018, despite a decrease in zero scorers, the pool of zero scorers for higher order reading sub-tasks was still high with 85 percent for reading comprehension, 57 percent for oral reading fluency, and 64 percent for non-word reading. The 2015 Early Grade Mathematics Assessment (EGMA) found that higher order mathematical concepts were a challenge with 75 percent of P2 pupils unable to answer a single conceptual knowledge subtask (i.e., word problem) correctly. The 2016 National Education Assessment (NEA) confirmed these findings with 30 percent and 50 percent of P4 pupils below the minimum proficiency for English and mathematics, respectively; at the P6 level, these figures were approximately 30 percent for both subjects. Between 2016 and 2018, NEA test scores remained essentially the same. At the secondary level, learning outcomes are also low - only 33 percent of students passed the WASSCE for mathematics in 2017.

14. **There are significant regional and income disparities in learning outcomes and in higher grades gender disparities.** Figure 2 below provides the 2017 examination pass rates by gender and region for the BECE in four core subjects. This figure shows that those regions that have the lowest performance are generally Upper East, Upper West and the Northern regions where poverty is highest. There are also important disparities in learning outcomes in terms of rural/urban areas. On average, pupils in rural areas score substantially lower on the NEA and EGRA than those in urban areas: the percentage of pupils scoring non-zero scores in the EGRA in English was just 19.6 percent in rural areas compared to 39.5 percent in urban areas, while the proportion of pupils providing correct answers in P4 mathematics was nearly 10 percentage points lower among those students in rural areas compared to those in urban areas.

15. Analysis of results from the 2018 NEA, found no significant differences in performance by gender in the lower primary grades. However, national averages mask wealth quintile differences — data from the Ghana Multiple Indicator Cluster Survey (MICS) 6 show that while there is no difference in reading and numeracy scores between boys and girls in the top quintile, girls in the bottom quintile significantly underperform in numeracy.[18] On average, girls tend to outperform boys in English in both P4 and P6, and boys tend to outperform girls in mathematics in P6. While the differences were statistically different, they were not practically different: the differences ranged from one to two percentage points. The difference between P4 mathematics scores for boys and girls was the smallest (not even one percentage point) and was not statistically significant. Differences in performance are more evident at higher grades. National pass rates for BECE and WASSCE show that males perform better than females on all subjects, except for English, where females outperform males. Further, 23 percent of students qualified for tertiary education in 2016, with 26 percent of males qualifying compared to 20 percent of females.

[18] World Bank. 2019. *Human Capital Development in Ghana*.

Figure 2. 2017 BECE and WASSCE Pass Rates by Gender for the Four Core Subjects



Source: Calculated using 2017/18 Education Management Information System (EMIS) data

16. **Gaps remain in mainstreaming gender and disability inclusive education, despite efforts to introduce child protection and disability inclusiveness programs.** While the policy on caning has been repealed by the GES, making corporal punishment an offense, there is some resistance by practitioners in schools and the public. Boys are more likely to experience corporal punishment than girls (according to MICS 2017/18, which indicates that the probability of suffering psychological aggression, physical, and violent discipline in the home environment is higher for boys than for girls). The Safe Schools Initiative being rolled out by the Government with support from the United Nations Children's Fund (UNICEF), focuses on responding to school-based violence (SBV) and creating awareness regarding MoE and GES policy directives among stakeholders. It includes training for teachers and students and provides a resource pack including teacher manuals, peer to peer manuals and factsheets for engaging and supporting children. However, this initiative has been rolled out only to targeted schools in 20 districts. Further, a pilot project by Discovery Alliance funded under DFID's Girls Education Challenge Programme, found evidence of gender stereotyping in classrooms. While the link between these behaviors and learning outcomes has not been studied as part of the pilot, it provides a strong case for monitoring teacher behavior towards girls, especially given the learning outcome gaps between boys and girls in mathematics and science in higher grades. While the Guidance and Counselling Unit in the GES conducts disability screening and psychosocial support for vulnerable students, these efforts are inadequately funded at the district level without clear integration in the functional roles of education officers at the district.

17. Several key factors contribute to low learning outcomes including: (a) overly ambitious curriculum coupled with shortage of appropriate textbooks and learning materials; (b) inadequate teacher content knowledge with lack of ongoing training and coaching support; (c) ineffective and inequitable teacher management; (d) inequity and inefficiency in the use of non-salary budget; (e) regional inequities in per-student spending; and (f) inadequate governance and accountability.

a) **Learning outcomes are affected by an ambitious curriculum and a shortage of appropriate textbooks and learning materials (TLMs)**. The MoE undertook a curriculum reform in 2018, which will be rolled out in the 2019/20 academic year. Textbook-pupil ratios of only 0.2 workbooks per child provided at the KG level, 1.4 at primary level, and 1.5 at JHS in 2016/17 are far below established norms of one workbook per child in KG and three workbooks per child in primary and JHS.

b) **Inadequate teacher knowledge with lack of ongoing training and coaching support.** The ESA (2018) identifies challenges with teacher capacity and management as the leading factor in low learning outcomes in basic education. Outdated curriculum and assessment methods for teacher education have not encouraged the development of effective teaching skills. Skills such as classroom management and differentiated teaching strategies geared to the level of the learner are not emphasized. The content-overloaded curriculum lacks attention to important skills such as critical thinking, creativity, collaboration, communication, and digital literacy. Basic education teachers are not trained in gender-responsive pedagogy or in addressing the varying needs of learners at different levels, especially students with special needs. Although the proportion of trained teachers has increased over the last decade, there is a significant deficit at the KG level (only 65 percent in 2016/17) and in the northern sector of Ghana. In addition, inadequate content knowledge[19], and lack of support, coaching, mentoring and continuous professional development (CPD) weaken teacher effectiveness.

c) **Ineffective and inequitable teacher management.** Teacher absenteeism, low time-on-task, and attrition have been widely recognized as a problem. Average teacher absenteeism was 14 percent in 2014/15 as measured in 75 deprived districts (GPEG districts) and varied considerably by region (higher in northern sectors). Teacher absenteeism is only one of the reasons for limited instruction and is often linked to school location, lack of school and social amenities, lack of opportunities for other income generation activities, and illness. Extended school closings, sports and culture events; and poor classroom instructional time use all contribute to lower time-on-task in the classroom. Recent analysis for the targeted instruction pilot in Ghana — the Teacher Community Assistant Initiative (TCAI 2010 - 2013) — found that, on average, teachers in the program were absent 30 percent of the time, and even when they were present in the school, time-on-task was low. Only 15 percent of teachers trained in the remedial method were found correctly implementing the program during unannounced spot-checks.[20] While lecturing may be counted as interactive learning time, real engagement in learning may be lacking.[21] The USAID teacher rationalization study[22] showed that the Northern and Greater Accra regions have between 15 and 18 percent of the teacher workforce moving from one school to another each year, creating challenges in maintaining targeted staffing levels. Teacher attrition increased to 4 percent in 2016 from 2 percent in 2009 and is likely linked to the introduction of a new teacher vacancy policy whereby positions need to be advertised as available. Many of the posts in remote rural areas continue to remain difficult to fill.

i. **Ghana's teacher deployment is inequitable with significant variance of PTRs and mismatched local languages of instruction.** There are large regional disparities in PTRs and weak correlation at the district level between the number of students and teachers, especially

[19] The new curriculum has reduced the number of subjects from 9 to 4 or 5 — kindergarten and primary teachers are expected to teach all subjects in each class.
[20] Duflo, Annie, Jessica Kiessel, and Adrienne Lucas (2018). *Alternative Models of Increasing Student Achievement: Evidence from a Nationwide Randomized Experiment.*
[21] A seminal (though dated) 2006 study found that the percentage of time that students were engaged in learning according to curriculum objectives was approximately 39 percent in Ghana (Abadzi, Helen. 2007. Absenteeism and Beyond: Instructional Time Loss and Consequences. Policy Research Working Paper*; No. 4376,* World Bank, Washington, DC).
[22] USAID. 2018. *Teacher Rationalization, Retention, and Language Study: National Situation Analysis*.

at the KG and SHS levels. PTRs vary substantially across the country, with districts mostly in the north of Ghana having a shortage of teachers, while districts in the south of Ghana have a surplus of teachers.[23] In addition, teacher turnover is high and variable, with a national average of 12 and 18 percent for KG and primary, respectively. Data indicate that on average, 20 percent of teachers are placed in schools where they are not proficient or are only partially proficient in the language of instruction and 18 percent of pupils do not speak the language of instruction that is used or taught in their schools. Given that teachers are centrally allocated and not deployed based on the language they speak, using the local language as the language of instruction in early grades will continue to prove challenging.

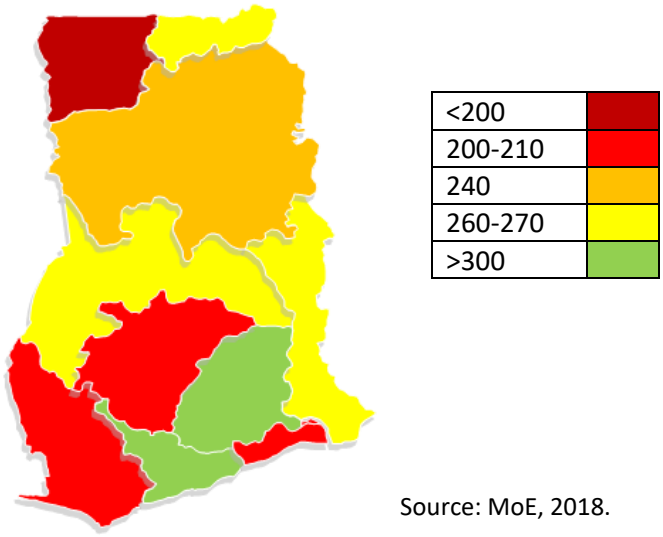
d) **Inequity and inefficiency in the use of non-salary budget.** Ghana has been disbursing the capitation grant in all public basic schools, providing budget for non-salary expenditures since 2005. There have been substantial delays in the disbursement of the capitation grant in recent years, which has subsequent implications for resourcing of schools. A 2015 report by the National Development Planning Commission,[24] supported by UNICEF, found that capitation funds arrived more than a year late preventing timely execution of planned activities. In addition, approximately half of the basic schools did not receive all three installments within the academic year, and those that did were more likely to be concentrated in urban areas, thereby contributing to widening inequities. Before the doubling of the capitation grant in 2017/18, the previous amount (GHS4.5 equivalent to US$0.83 per student) was found to be too low and only covered 40 percent of school expenditures, with 75 percent of schools charging levies that often exceeded the amount of the grant. More recently, the timeliness of the capitation grants disbursement has improved, so that they are no longer in arrears for more than a term.

e) **In addition to delayed and irregular capitation grants, there are regional inequities in per-student spending**. Capitation grants are provided to all public schools with a per-student amount of GHS10 equivalent to US$1.86 without any differentiation regarding school context or need. Per-student spending varies widely by region as evidenced in figure 3, with the least amount spent on the Upper West, Greater Accra, Western, and Ashanti regions and the most spent on Eastern and Central regions. It is not quite clear why this is the case and further analysis will be needed to understand the underlying issues. The indication however is that per-student spending is strongly correlated with regional distributions of poverty.

[23] USAID. 2018. *Teacher Rationalization, Retention, and Language Study: National Situation Analysis*. In this study, the PTR target is 30:1 and definitions of surplus and shortage are based on this. An acute shortage is defined as a school with a PTR of higher than 45:1, whereas a mild shortage is between 36:1 and 45:1. An acute surplus is when the PTR is below 15:1, whereas a mild surplus is between 24:1 and 15:1.

[24] National Development Planning Commission, 2015. *Citizens' Assessment Survey*.

Figure 3. Total Per Student Spending on Public Primary Education 2015



Source: MoE, 2018.

f) **Inadequate management and accountability**, resulting from (i) limited capacity and resources for planning monitoring and evaluation (M&E); (ii) lack of harmonization of inspection tools; (iii) underutilized EMIS; and (iv) an insufficient assessment and examination system.

i. **The management and accountability structures seek to ensure vertical alignment and decentralized implementation of education services. In practice, however, there is a lack of resources for many of these structures and limited coordination among relevant entities.** According to Government policy, the MoE (central level) develops the Education Sector Plan (ESP) and the Education Sector Medium Term Development Plan (ESMTDP), and reports on progress toward achieving objectives laid out in these plans in an annual conference. Three semi-autonomous boards —the National Council for Curriculum and Assessment (NaCCA), the National Teaching Council (NTC) and the National Inspectorate Board (NIB) —are also tasked with specific system accountability responsibilities such as curriculum roll-out, teacher licensing and school supervision, respectively. At the regional and district levels, education operational plans are created to align with the ESMTDP. Circuit Supervisors at the district level have the responsibility of monitoring schools and ensuring that the School Performance Improvement Plan (SPIP) developed by each school is well-prepared with activities which when implemented effectively would achieve the agreed results. Circuit Supervisors are also responsible for processing school level data in a School Report Card (SRC) which is distributed to schools to strengthen school management. At the school-level, schools prepare the SPIP with community involvement in the form of School Management Committees (SMCs) and hold School Performance Appraisal Meetings (SPAMs) with community-level stakeholders to: discuss challenges at the schools; communicate school results/performance; and collect information to report back to districts for their support and action.

a) However, financial and human resources are often lacking at all levels and capacity is limited. Plans are rarely prepared, and when they are, community groups and stakeholders are often not involved and usually do not have the power of enforcement.

There is a lack of clarity on the role of the circuit supervisor in providing instructional leadership and coaching to support teachers and schools to improve learning outcomes. Limited funding is available to support systematic inspection, school supervision and lesson observation—for example, funding support for circuit supervisors and for SPIPs is inconsistent. However, when supported by development partners (DPs) (i.e., UNICEF and Japan International Cooperation Agency [JICA]), districts can build capacity and fulfill their mandate.

ii. **There is a lack of harmonization of inspection tools to ensure system-wide accountability, resulting in a large degree of fragmentation.** Circuit supervisor reports are not standardized or collated to inform the management of schools. The lesson observations are not routinely captured in a format that can be verified or supervised. Districts often use different inspection tools depending on the type of DP support provided. Although the NIB is expected to conduct annual inspections, the tools have not yet been developed in alignment with how supervision/monitoring is being carried out at the regional and district levels. There is limited use of technology to support school monitoring, inspections and data reporting. Information is stored across different databases, departments and paper files preventing their availability and utilization. Furthermore, the NIB is not yet capacitated to harmonize the inspection process or conduct regular annual inspections.

iii. **Ghana has an underutilized EMIS with poor data utilization, sharing, and feedback mechanisms.** Ghana has an EMIS which conducts an annual school census to gather pre-tertiary education data. It covers both public and private schools, collecting data on key indicators including student enrollment, number of repeaters, number of teachers, adequacy and availability of infrastructure and learning materials. However, it lacks data on system performance at the school level such as learning outcomes, student attendance, teacher absenteeism or time-on-task. Because independent measures for teacher absenteeism or time-on-task are not regularly monitored, there is minimal teacher accountability. Where data are collected, there are challenges in expedient data analysis, reporting, sharing data with schools/districts and data utilization.

iv. **Ghana has numerous learning assessments, but these are fragmented and poorly coordinated with no overarching guiding strategy on national assessments.** Students were assessed through the EGRA and the EGMA at the P2 level in 2013 and 2015. The EGRA was administered in 11 local languages as well as in English. The NEA is conducted biennially for P4 and P6, with the last assessment undertaken in 2016. These assessments are all done on a sample basis that is regionally and nationally representative, but not representative at the district or school level. In 2003, 2007, and 2011, Ghana participated in the Trends in Mathematics and Science Study (TIMSS) international assessment. Additionally, these are all donor -supported and have not been integrated into government budgets. At the end of the primary cycle (P9), students sit for the BECE—however, this does not provide information on core numeracy and literacy competencies. With the BECE conducted at the end of the basic cycle, there is no opportunity for this assessment to inform improvements to curriculum and teaching at lower grades. These assessments are high stakes and do not sufficiently provide stakeholders with performance information in a systematic and sustainable manner.

C. Relevance to Higher Level Objectives

18. **The project is well-aligned with the World Bank Group Country Partnership Framework (CPF**). The CPF for FY19 – FY24 is under preparation and supports improved access to key basic services, particularly in underserved areas, as well as better skills training and education for increased employability and earnings. While the CPF is expected to be finalized in early 2020, initial drafts include building human capital as one of the key pillars to strengthen skills and to create jobs. The proposed Ghana Accountability for Learning Outcomes Project (GALOP) builds on the findings of the SCD 2017/18 (Report #132010-GH) which identifies education as a critical pathway to increasing labor productivity and to building human capital. The GALOP's focus on underserved districts and on improving the quality of education for better human capital outcomes, supports the World Bank's twin goals and strategy for Africa. The project directs resources to poor districts concentrating on the bottom 40 percent.

19. **The project is well aligned with the GPE focus areas - quality, equity and efficiency of education outcomes.** GALOP includes a US$9.4 million Maximum Country Allocation (MCA) and a US$15 million multiplier fund grant allocation from the GPE. In line with the GPE focus areas, GALOP will support investments to improve the quality of basic education while aiming to bring about changes in equity and efficiency of the system. Progress towards these objectives would be complemented by planned and ongoing programs of DPs and Government budget as identified in the ESP and ESMTDP.[25] The Local Education Group (LEG) has been involved in supporting the design and scope of GALOP while ensuring alignment and potential integration with ongoing and future bilateral and multilateral assistance.

20. **Ghana finalized a new ESP in 2019 that covers 2018 to 2030 and is based on findings from the 2018 ESA. The ESP was endorsed by Parliament and the LEG in January 2019.** A new ESMTDP covering 2018 to 2021 has also been developed and a Reform Secretariat has been established in the MoE to supervise implementation of the reform agenda.[26] These policy documents acknowledge the key challenges and present the following key output/outcome areas: (a) increased trained teachers; (b) increased net enrolment rate (NER) at KG and right age entry at P1; (c) increased efficiency of school grants; (d) reduced teacher and student absenteeism; (e) new curriculum and TLMs in place; (f) strengthened and expanded EGRA, EGMA, NEA and BECE assessments; (g) effective decentralization; and (h) strengthened community engagement in school affairs. The reform agenda would include: (a) decentralization of basic education management to the district level; (b) strengthened accountability structures and enhanced monitoring systems; (c) introduction of a new school supervision and inspection system; (d) operationalization of a teacher licensing and registration system; and (e) opportunities for public-private partnerships (PPPs) for education.[27] The proposed GALOP will support the implementation of the Government's ESP focusing on basic education through strategic targeted instruction for teachers in early grades in line with the new curriculum; school support for learning materials and training; and improved school management, supervision, and assessment systems.

[25] Annex 5 provides details on planned and ongoing programs supported by USAID, DFID, UNICEF, and JICA.
[26] The Reform Secretariat is receiving support from DFID).
[27] A full list of reforms under the purview of the Reform Secretariat is included in annex 7.

II. PROJECT DESCRIPTION

A. Project Development Objective

PDO Statement

21. The Project Development Objective (PDO) is to improve the quality of education in low performing basic education schools and strengthen education sector equity and accountability in Ghana.

PDO-Level Indicators

22. **The PDO would be measured through the following key outcome indicators:**

1. Increased percentage of targeted schools with teaching practices meeting inspection standards[28]
2. Students benefiting from direct interventions to enhance learning (of which female)
3. Increased percentage of targeted KG and primary schools with pupil trained teacher ratio below 50:1
4. Increased number of schools using accountability dashboard data during cluster level meetings

23. **PDO-level indicators measure improvements in the quality of education in low performing basic education schools (PDO-level indicators 1 and 2), strengthened education sector equity (PDO-level indicator 3) and strengthened education sector accountability (PDO-level indicator 4).** Improved quality of education is defined as coherent systematic improvements including teaching practices in the classroom supported by relevant TLMs, school-level resourcing and decentralized management to improve learning. This improvement in quality will be measured by PDO-level indicator 1 which serves as a proxy for improved learning. PDO indicator 2 provides a measure of the number of students that benefit from improvements in the quality of education. PDO indicator 3 measures improvements in the equitable distribution of trained teachers in targeted KG and primary schools. Under the ESP, the target pupil-trained teacher ratio (PTTR) for Ghana by 2030 is 35 pupils for every trained teacher (35:1). While the PTTR in targeted KG and primary schools is roughly 39:1 and 37:1, respectively, which is not far from the ESP target, these figures mask important inequities among and within regions and districts. Approximately, 25 percent of targeted schools have PTTR above 50:1. Focusing on schools above this threshold allows for deployment of trained teachers to the schools where they are most needed, bringing their PTTR closer to the average of targeted schools. PDO indicator 4 measures strengthened sector accountability through the dissemination and utilization of key accountability data at the cluster level.[29]

[28] As measured by a harmonized lesson observation tool used in a representative sample of targeted schools observing mathematics and English lessons, with teaching practices standards defined by the guidelines in the Ghana National Inspections Handbook where 1= Unsatisfactory; 2= Satisfactory; 3= Good; 4= Outstanding. Schools meet teaching practices inspection standards if they score an average rating of 3 or higher.

[29] Each district is divided into a cluster comprising of averagely 12 basic education schools, and each cluster is assigned a circuit supervisor. Cluster level meetings will be organized by the circuit supervisor at least once a year, bringing together headteachers and members of the SMC to discuss accountability data and foster the exchange of knowledge and best practices.

B. Project Components

24. **The project will support interventions at the system and school levels.** While system-level interventions would be national in scope, learning interventions would be implemented in selected basic schools that have the greatest challenges in terms of learning outcomes and resources. Preliminary analysis from 2017/18 EMIS data showed that the average BECE raw score in targeted schools was 250 compared to a national average raw score of 297 and an average of 325 in non-targeted schools. Average class size and percentage of trained teachers in targeted schools was 39 and 37, respectively, compared to 32 and 63 in non-targeted schools. The project will target KG (KG1 and KG2) and primary (P1 to P6) grades. The learning interventions are expected to reach approximately 10,000 poorly performing public basic education schools, which represents approximately one-half of basic education schools. Given the considerable investments that Ghana already makes in pre-primary education, GALOP will also progressively support an enhanced focus on strengthening KG to promote primary school readiness. Ghana is a participating country in the global GPE - UNICEF partnership on Better Early Learning and Development at Scale (BELDS); and, as part of this, will be developing the costed operational plan for KG based on the distinctive needs of the sub-sector in 2019. The operational plan will provide a road map on how best GALOP can support KG implementation in the targeted schools. The project's focus on early years is equity-enhancing because of the long-term benefits in terms of readiness to learn and improved future learning outcomes that will impact a larger number of students in lower grades than at higher grades (GER at KG is 112 compared to 53 at SHS).

25. **The proposed project includes four components:** (a) Strengthen teaching and learning through support and resources for teachers; (b) Strengthen school support, management and resourcing; (c) Strengthen accountability systems for learning; and (d) Institutional strengthening, TA monitoring and research. Components 1— 3 use a Results-based Financing (RBF) modality.[30] Under Component 4, IDA/GPE funds would be disbursed based on regularly updated implementation, procurement and training plans, reviewed by the World Bank.

Component 1: Strengthen teaching and learning through support and resources for teachers (Estimated project financing: US$50.0 million equivalent, of which GPE grant is US$5.0 million)

26. This component includes three sub-components: (a) teacher capacity building and innovative delivery of in-service training (INSET); (b) school-based support and instructional leadership; and (c) provision of TLMs.

27. **Sub-component 1.1: Teacher capacity building and innovative delivery of in-service training.** This sub-component aims to improve teaching practices by providing: (a) INSET and capacity building support for teachers on the ***new curriculum*** which was rolled out in September 2019 for KG (KG1 and KG2) and primary (P1 to P6) grades;[31] (b) innovative delivery of INSET on ***targeted instruction and***

[30] See Annex 2 for a summary of Disbursement Linked Indicator/Result areas.

[31] Note that the pre-service training is provided by the ongoing Transforming Teacher Education and Learning (T-TEL) program funded by DFID. UNICEF is supporting the curation of training resource materials to support specialized training of KG teachers as part of the curriculum rollout. The curriculum rollout will be aligned with the Inclusive Education Policy Implementation Plan that ensures that training of all teachers and education personnel highlights inclusion and inclusive practices.

structured pedagogy[32], which would rely on high quality instruction, both face-to-face and digital education, as well as innovative digital methods to support uptake (e.g., GES mobile app with video lessons and teaching tips, distance coaching, WhatsApp reminders); and (c) specialized INSET for KG teachers in ***play-based and active learning pedagogy***.[33]

28. Additional modules focused on inclusive participation (to ensure all students are engaged in the learning process as well as address any issues of classroom violence, exploitation or school related gender-based violence [SRGBV]) will be included. Teacher capacity building and training will also focus on promoting inclusion, i.e., teaching pupils with disabilities by scaling up tools developed by UNICEF. KG teacher training will also involve disability screening and inclusive pedagogy to ensure timely identification and adequate response to special education needs of students. The teacher training will be aligned with the new curriculum standards and focus areas (inclusion, digital literacy, safe schools,[34] child protection, etc.)

29. INSET will be supported at the district level by the development of an annual professional learning calendar on which teachers can enrol for training, and by the introduction of professional learning communities that are informed by Circuit Supervisor (CS) review of teacher instructional practices. At the school level, teacher INSET will be allocated dedicated time in the time-table. All targeted schools will conduct periodic self-assessments to decide potential areas for school-based CPD. They will be supported by the District Teacher Support Teams (DTSTs) and a cluster-based peer network for these trainings. Additional coaching and support would be provided to teachers for implementing the new assessment system to be introduced, the results of which would be used to inform instruction and learning. A training log will be maintained for each teacher that would feed into a digitized database for point-based CPD. Delivery of INSET will be guided by the National INSET Framework to ensure coordination, district support and monitoring. This sub-component will be led by the Deputy Director-General in charge of Access and Quality at the GES through the School Leadership and Accountability Division.

30. **Sub-component 1.2: School-based support and instructional leadership.** This sub-component would aim to improve decentralized systems of school support, coaching and monitoring**.** The project would support the training of support teams (curriculum leads, circuit supervisors, DTSTs, and school heads) to provide school-based support and instructional leadership. The aforementioned will be trained to guide teachers in the teaching of the new curriculum and the use of assessment to inform instruction. Circuit supervisors will be trained to take on the role of an instructional coach rather than an inspector.

[32] Targeted instruction refers to teaching students at their level of knowledge, and not their grade level. The Teacher Community Assistant Initiative (TCAI) on targeted instruction found that this model increased student learning, but there was limited uptake by teachers. The Strengthening Teacher Accountability to Reach all Students (STARS) project being piloted in Ghana is the new iteration of TCAI and builds on it to improve teacher uptake of targeted instruction through support to school leadership. Structured pedagogy involves utilization of evidence-based content and scripted lesson plans to improve learning – schools are provided with new materials and teaching aids, and teachers are trained on the new content and given instructional support from school leadership. These methods have been piloted in Ghana through the USAID Partnership for Learning Project.

[33] This training will build on lessons learned from a low-cost, play-based learning program that engaged both parents and teachers on early childhood development implemented by Lively Minds with support from UNICEF.

[34] UNICEF has supported the development of resources for training on safe schools, which focus on inclusion, elimination of corporal punishment, promoting positive discipline in the classroom, and prevention and redressal of bullying and sexual harassment. GALOP will support the integration of these resources in pedagogical training.

School management and instructional leadership would be provided through the completion of specific courses (e.g., online management course).[35] Many of the current training modules and systems developed under the USAID-supported Partnership for Education (Learning) and UNICEF supported STARS[36] will be extended to GALOP target schools. These materials will be reviewed to cover grades KG1 through P6 and ensure gender sensitivity in school support and instructional leadership. Capacity building initiatives will be tailored to the level of education to account for the distinctive needs of KG and primary. This sub-component will be implemented by the GES led by the Deputy Director-General responsible for Access and Quality.

31. **Sub-component 1.3: Provision of teaching and learning materials (TLMs).** This sub-component aims to ensure the provision of teacher guides for the new curriculum, and pupil books (e-readers[37] and workbooks) for targeted instruction. While some of these materials have already been developed for KG to P2 levels under a different project[38] and for remedial instruction in literacy and mathematics under STARS for P4 to P6, the development of materials that align with the new curriculum for other levels is currently underway. Appropriate TLMs will be provided for early childhood education (KG1 and KG2) and for students with disabilities and for teachers who have been trained in their use to support greater disability inclusion in schools. This sub-component will be implemented by the GES in collaboration with NaCCA.

32. For this component, release of IDA and GPE funds would be linked to achievement of the following disbursement-linked indicator (DLI):

- DLI 1: Improved teaching practices in targeted schools

Component 2: Strengthen school support, management and resourcing (Estimated project financing: US$63.0 million equivalent, of which GPE grant is US$5.0 million)

33. This component includes the following sub-components (a) learning grants to support activities focused on learning; (b) strengthening district education management capacity; and (c) strengthening SMCs for enhanced citizen engagement.

34. **Sub-component 2.1: Learning grants to support activities focused on learning.** All targeted schools will receive a learning grant to implement activities focused on improving learning. Building on existing allocation systems (annual capitation grant), the learning grant will comprise a base grant of approximately GHS 3,000[39] (approximately US$600) per school and a per-student allocation of GHS 5 (approximately US$1). Schools will be given and trained on guidelines on school self-assessments, learning grant utilization (including core activities for learning and a negative list) and templates for learning-oriented proposals and performance contracts. The guidelines will include a differentiated section on

[35] These could be in the form of partnerships with the University of Education Winneba, University of Ghana and CoEs, with the possibility of linking with international institutions such as Lancaster University Ghana or University College of London Institute of Education, amongst others.
[36] Details on these projects are available in annex 5.
[37] World Reader has piloted the use of e-readers in 90 primary schools and communities in Ghana with over 45,000 books digitized. Material developed under the USAID Partnership for Education (Learning Project) and the STARS project will be adapted and uploaded to e-readers.
[38] USAID Partnership for Education (Learning Project).
[39] For a unified school; GHS1,500 for primary stand-alone schools; GHS1,000 for KG stand-alone schools.

materials for KG teaching and learning to promote school readiness. Each school will conduct a self-assessment that will inform the development of a three-year SPIP proposal, based on which they will sign a performance agreement with the District Education Office (DEO). The performance agreement will help ensure that certain school standards are in place (reporting on EMIS, school based CPDs, and reconciliation of existing capitation grants) before the first learning grant can be disbursed. Schools may also benefit from TA from SMCs, circuit supervisors, civil society organizations (CSOs) and DEOs operating in the school catchment area. The learning grant will be disbursed annually conditional on grant utilization of at least 80 percent before subsequent disbursements, and the SPIP will be reviewed annually.

35. The learning grant will complement the capitation grant (provided by Government)[40]. The learning grant aims to ensure that the school has adequate funding to achieve the minimum learning outcomes. Capitation grants have in the past been irregularly disbursed and are insufficient, although improving in recent years. The project will incentivize timely and adequate capitation grant disbursement using a DLI approach, to avoid substitution and ensure coherence of grant allocations. To embed the school learning grants within existing systems, schools will use the same planning mechanism as they would for capitation grants – the SPIPs. The learning grants will be disbursed directly into the schools' bank accounts. This will improve the efficiency in the flow of funds to schools and provide lessons for the disbursement of the capitation grants.

36. Financial accountability in the expenditure of the learning grants will be achieved through a layered monitoring approach –the SMC and parent teacher associations (PTA) will be involved in the design of the SPIP; the CS will review the SPIP to ensure that activities are linked to those in the guidelines and are not duplicated; the District Director will review the final SPIP before signing with the school a performance contract to deliver it. These steps will be pre-requisites to the disbursement of funds. Annually, CSs will review utilization of learning grants before updating the utilization rate in the accountability dashboard to trigger the flow of subsequent tranches of the learning grant. Finally, regular internal audits of the capitation grant will also cover the utilization of the learning grants.

37. **Sub-component 2.2: Strengthening district education management capacity.** DEOs will be strengthened to support incremental costs associated with GALOP activities through existing systems such as the Annual District Education Operational Plans (ADEOPs). Districts will support schools with training on learning grant utilization; development of three-year learning-oriented SPIPs; and consolidation, supervision, and monitoring of learning grant utilization. Districts will be required to support CSs in their role as instructional coaches and for the facilitation and monitoring of teacher INSET. Additionally, districts will fund cluster-level meetings for heads of schools and SMC members at least once a year, organized by the CS to discuss data collected on the accountability dashboard (including national, regional and district level comparisons) and to encourage sharing of best practices, knowledge, and innovation between schools within a cluster. Organized peer learning between school heads will ensure that all the data collected on the accountability dashboard are used well and will also provide a forum to support teachers who are new to reporting real-time data on the dashboard. Finally, encouraging SMC members to attend these cluster level meetings will increase citizen engagement and allow communities to hold their head teachers accountable for school performance.

[40] The current annual capitation grant is GHS 10 per pupil; this is divided into a base grant which all schools are provided in the first term regardless of enrolment, and grants based on enrolment that are provided in the second and third terms (GPEG project 2012-2016).

38. **Sub-component 2.3: Strengthening SMCs for enhanced citizen engagement.** The proposed activities would include training for SMCs to support the use of learning grants for learning activities and further leverage community contributions. This would involve the reconstitution of SMCs to include voluntary community involvement and elected leadership positions. It would also introduce differentiated roles in addition to the SMC chairperson, including vice-chairperson, M&E specialist, treasurer, and so on.[41] District education officers will conduct SMC training in monitoring implementation of SPIPs using a training manual developed under a JICA-funded project.[42] The training would (a) operationalize SMCs to ensure participatory and decentralized school-based management (SBM); and (b) strengthen capacity for accountable and transparent financial management (FM) of learning and capitation grants and resource mobilization. Additional training modules would also be included to extend outreach on gender-related issues including SBV training sensitization.

39. For this component, release of IDA and GPE funds would be linked to achievement of the following DLI:

- DLI 2: Strengthened school support for learning in targeted schools

Component 3: Strengthen accountability systems for learning (Estimated project financing: US$47.0 million equivalent, of which GPE grant is US$8.0 million)

40. Component 3 includes the following sub-components: (a) development and implementation of an accountability for learning framework; (b) development and implementation of a national assessment strategy; and (c) policy reforms for improved teacher management.

41. **Sub-component 3.1: Development and implementation of an accountability for learning framework.** The accountability for learning framework would provide an overview of accountability systems, including levels of monitoring and reporting, roles and responsibilities of key stakeholders, key accountability indicators, purposes of assessments, targeted support measures for low-performing schools, processes for compliance with the teacher code of conduct, and policy frameworks that guide system responsiveness. It will also ensure a harmonized system of inspection for all levels of the education system. Under this sub-component, the following activities would be supported: (a) harmonization of all inspection tools aligned to meet the needs of schools, districts, regions, and national levels, including digitization for improved data collection; (b) digitization of annual school census tool with electronic-based collection to improve timely collection and analysis of data, including school mapping and student tracking; (c) creation of an *accountability dashboard* through the review and scale-up of the mobile school report card (mSRC) to include linkages with EMIS, Human Resource Management Information Systems (HRMIS), school mapping, inspection, assessment, student tracking and other databases; (d) continuous and robust communication to stakeholders; and (e) regular monitoring and reporting on results from inspection findings and dashboard updates.

42. The accountability for learning framework would be responsive to all levels of education. It would be tailored to the distinctive needs of KG and primary education. At the basic school level, it would involve

[41] Reconstitution of the SMCs will encourage increased participation of women in school governance, as well as representation of students with disabilities and/or parents of students with disabilities where possible.
[42] JICA is supporting the pilot for the School for All activity to empower and train SMCs to support learning activities. Further detail is provided in annex 5.

lesson observations every term conducted by the head teacher for each classroom teacher. The circuit supervisor would conduct termly lesson observations of selected classes as well as an overall school inspection. The lesson observation tool will measure gender stereotyping and perceptions in teacher behavior, which will allow for analysis of the impact of these perceptions on girls' learning outcomes. The accountability for learning framework would inform the frequency of monitoring and data collection at each level, consolidation of information for decision-making and protocols for data usage and sharing.

43. The sub-component will build on existing dashboards such as the mSRC and the USAID Partnership for Learning Project dashboard. The accountability dashboard will also be accessible to decision makers at the school, district, regional, and national levels, as well as to parents and students, to increase efficiency of the system through data-driven decision making and to foster citizen engagement and community-led accountability. The project would support the procurement of digital solutions (for example, tablet or mobile applications) for data collection and usage for all circuits and public basic schools. It would further explore the possibility of student tracking through the introduction of unique student identification numbers supplemented by biometric technology, starting with P4 students to align national assessment data with EMIS and mSRC databases. This sub-component would be implemented by the GES in collaboration with NIB, NaCCA, and NTC.

44. **Sub-component 3.2: Development and implementation of a national assessment strategy.** This sub-component would support the development and rollout of a national learning assessment strategy. Ghana has numerous sample-based national learning assessments – the EGRA and EGMA, the NEA (primary grades P4 and P6), the BECE (end of P9) – and has also committed to participating in an international student assessment. The Government may consider future participation in the Programme for the Analysis of Education Systems (PASEC) which targets P2, P4 and end of primary, or TIMSS in 2023 and Progress in International Reading Literacy Study (PIRLS) in 2021 to assess reading at grade 4. Under the project, the MoE is also planning to introduce a regularly implemented national, low-cost assessment that will be administered to every pupil in primary grades P2, P4, P6, and P8 to be used to provide feedback and better instruction support. The proposed project will initially support scale-up of the P4 assessment in public schools to ensure baseline data and performance indicators are available to measure results. Teacher content knowledge will also be assessed through the marking of sample P4 assessment answer scripts. This will provide information for the design of targeted CPD programs. The scale up of the P4 assessment will be complemented with training on item response theory and test item bank development, development of operational guidelines for national assessments, and links between assessment databases and EMIS, which will provide important implementation lessons for the scale-up of national assessment at other grades. Provisions for a simplified school readiness assessment will also be incorporated in the national assessment strategy. The strategy will also have provisions to ensure students with special education needs are assessed along with their peers.[43] The purposes, levels, timeframes, and funding for the various assessments would be carefully determined, costed and formalized within the national assessment strategy. Capacity building for NaCCA, National Assessment Unit, GES and MoE would aim to strengthen sustainability of undertaking such assessments. This sub-component would be led by NaCCA.

45. **Sub-component 3.3: Policy reforms for efficient education sector human resource management, administrative and leadership practices.** The project would support the development, approval, and

[43] This will be done by ensuring that reasonable accommodations such as extra time, dictation of answers, braille, use of sign language to deliver answers, and so on are made available as part of assessment rules.

endorsement of policy reforms related to (a) teacher recruitment, deployment, transfer and incentives; (b) merit-based selection of head teachers; (c) introduction of an administrative fast track for the promotion of teachers serving in rural schools; (d) staffing and roles of the GES and DEOs; (e) a dedicated school leadership program and accompanying qualifications for head teachers; and (f) review of the instructional calendar to include dedicated time for higher-quality CPD.

46. For this component, release of IDA and GPE funds would be linked to achievement of the following DLIs:

- DLI 3: Improved accountability for learning in public basic schools
- DLI 4: Improved proficiency in P4 mathematics and English in targeted schools
- DLI 5: Improved equity in the distribution of KG and primary trained teachers in targeted schools

Component 4: Technical assistance, institutional strengthening, monitoring, and research (Estimated project financing: US$13.9 million equivalent, of which GPE grant is US$6.4 million)

47. This component would provide overall support to the other three components and would include two sub-components: (a) TA for capacity building and institutional strengthening; and (b) M&E, project management, and operational costs. This component would finance TA, strategic research and data analysis, targeted capacity building of implementing agencies, training, procurement of goods, and incremental operating costs.

48. **Sub-component 4.1: Technical assistance for capacity building and institutional strengthening.** This sub-component would fund institutional strengthening and consultancy services to support the effective implementation of Components 1, 2 and 3. This would include TA for quality assurance in: (a) the development and digitization of INSET modules and school leadership and management training; (b) harmonization and digitization of school inspection and lesson observation tools; (c) development of inspection data analysis strategy and operationalization of inspection framework and policy; (d) integrated accountability dashboard and digitized EMIS and mobile School Report Card; (e) consolidation of various data systems (EMIS, Integrated Personnel and Payroll Database (IPPD), Western African Examinations Council (WAEC), and Inspection); (f) development of the assessment framework and operationalization plan for the biennial national assessment; and (g) development of the points-based CPD framework. TA will also be provided to support the development of a communications strategy, which would deliver key messages to teachers, parents and students.[44] In addition, training for gender and disability inclusiveness in the implementation of the Components 1 - 3 will be funded under this sub-component, including analysis of learning assessment data to provide better feedback to teachers on inclusive education and revisions to teachers handbook/code of conduct to address gender-based violence (GBV) issues. Strengthening of fiduciary systems will be supported by procurement, financial and safeguards training and audits under this sub-component. This sub-component would also support the procurement of goods and non-consultancy services to support project implementation.

[44] Glennerster, Rachel and Anna Rudge. 2019. *Best Buys in Education.* Working paper, UK: DFID.
Glennerster and Rudge (2019) find that giving information on education benefits (in terms of income), costs, sources of funding available, and school quality to parents and children, through texts, videos, meetings or reminders, was one of the most cost-effective interventions for improving learning outcomes.

49. **Sub-component 4.2: Monitoring and evaluation, management and operational costs.** This sub-component would fund all M&E activities conducted at the national, regional, district, and school levels, including semi-annual progress reporting (one of which includes the National Education Sector Annual Review [NESAR]); monthly pulse reports on progress toward meeting DLRs based on primary data collection and analysis of accountability dashboard data; annual expenditure tracking survey on learning grants; beneficiary satisfaction survey by a third party conducted at midterm so that the project can address issues/challenges that may have been raised/identified by citizens, and also at the end of the project; and baseline and annual data collection for all Results Framework indicators. It would also support the costs for independent verification of DLIs done by an independent verification agency (IVA) and NIB. Under this sub-component, high caliber TA for education analysis, including impact evaluation, would be funded to ensure that the MoE has a robust body of knowledge they can tap into as and when needed. The TA would complement staffing and activities identified under the Reform Secretariat. An M&E capacity development plan will also be developed and implemented. An annual work plan and budget (AWP&B) will identify the incremental operating costs, goods, and services required to support the key agencies responsible for project management.

Key Cross-Cutting Design Aspects

50. **Equity considerations in project design.** Given the resources available, about half of all public basic education schools would be selected to benefit under the project. The criteria for selection would be informed by the ranking of all basic schools based on performance on the BECE, resource availability at the school, and district-level poverty headcount, to ensure that resources are targeted to schools in greatest need. Lessons learned under World Bank-supported education projects (GPEG and the Secondary Education Improvement Project [SEIP], P145741), USAID, DFID, JICA, and the UNICEF-supported programs have shown the importance of an intervention's depth relative to its scale that scatters limited resources. The project's focus on early grade education is also equity enhancing because of the long-term benefits in terms of readiness to learn and improved future learning outcomes. The learning interventions under Components 1 and 2 are expected to reach approximately 10,000 poorly performing public basic schools. Indicators will be disaggregated by gender, region, and level of education where possible.

51. **Gender and disability inclusiveness.** The project will respond to gender and disability inclusion through several approaches including the following:

a) **In-service teacher training on Safe Schools Initiative, child protection and inclusive education.** The teacher training provided under GALOP's Component 1 includes sensitization on child protection, safe schools, and disability inclusiveness, intended to help address issues related to SBV, among others. The program will be monitored through a comprehensive M&E framework being developed by the GES Guidance and Counselling Unit.
b) **KG teacher training.** This will also involve disability screening, sensitization on school-based GBV and inclusive pedagogy to ensure timely identification and adequate response to special education needs of students.
c) **Funding of TA to review the teachers' handbook/code of conduct to monitor and promote child-friendly school environments under Component 4.** The communications campaign will also be used to sensitize teachers and communities on policy directives and key messages on inclusive education and GBV.

d) **Measurement of gender stereotyping and skewed gender perceptions in teacher behavior through the lesson observation tool.** GALOP will support the review and harmonization of the NIB lesson observation tool to include measurement of use of language that reinforces gender stereotypes or inequitable access to classroom resources such as textbooks or desks between girls and boys.
e) **Gender disaggregation of PDO-level indicator on number of students directly benefiting from interventions to enhance learning.** Indicators on teacher attendance, student attendance, and number of teachers trained have also been disaggregated by gender. Gender analysis can help identify the extent to which gender roles hinder equal opportunities and outcomes and allow for the design of interventions that respond to these barriers.
f) **Special education division in the GES dedicated to inclusion and the mainstreaming of children with disabilities.** The GES has completed a set of guidelines and associated teacher training, including ensuring that teachers are able to screen children for any special needs. Guidance and counseling officers at the district level will be supported to engage with schools in disability screening and psychosocial support. The GES is building on the experience gained from projects funded by DPs such as DFID, USAID, UNICEF, and ActionAid – and scaling up relevant approaches.
g) **Provisions for the assessment of students with special education needs** will be included in the development of the National Assessment Strategy.
h) **Provision of TLMs for students with special education** needs in all basic public special education schools in Ghana as well as all other schools targeted under GALOP.
i) **Reconstitution of SMCs** will encourage increased participation of women in school governance, as well as the participation of students with disabilities and/or parents of students with disabilities where possible.
j) **Improved data collection on students with special education needs for enhanced resource allocation and planning.** The accountability dashboard will cover all public basic schools in Ghana, including special schools for students with disabilities. It will include a module on enrolment, type of learning disability, and attendance of students with special education needs.

52. **Innovations in education technology and digital literacy.** GALOP will incorporate the use of education technology and digital literacy to improve system efficiency and learning through the following:

a) **Student level.** GALOP will support the procurement of e-readers in targeted schools with materials aligned to the new curriculum as well as supplementary reading books. E-lessons for numeracy and literacy have been piloted and can be scaled through GALOP.
b) **Teacher training at school and district level.** Digitized content will be developed to scale up teacher INSET in a standardized, low-cost format. An online course on school leadership and management training will be used to train heads of schools. Innovative digital methods to support uptake of targeted instruction practices will be explored through the GES mobile application with video lessons and teaching tips, distance coaching and WhatsApp reminders. INSET on digital literacy for teachers will also be supported in GALOP targeted schools.
c) **Systems level.** GALOP will support improvements in efficiency and quality of data collection and utilization for decision making through the digitization of the annual school census; creation of an accountability dashboard with administrative data, learning outcomes, and accountability indicators; automated generation of SRCs on national assessment data; and digitized student tracking.

53. **Citizen engagement.** Citizen engagement is fostered under Component 2 through the SMCs. These consist of community members who are involved in improving school management to increase accountability for resource use to improve learning. SMCs will also be encouraged to elect their executive and will be trained in resource mobilization and FM and monitoring of the use of learning and capitation grants. SMCs have a key role to play in making schools more child-friendly as well as effective. Finally, SMC members will be encouraged to attend cluster-level meetings with heads of schools to discuss data arising from the accountability dashboard to increase community involvement in monitoring school performance. Under Component 4, a beneficiary satisfaction survey will be undertaken, results of which will be disseminated through the accountability dashboard and discussed during cluster-level meetings.

Project Financing

Lending Instrument

54. The proposed project will be financed through a proposed IDA credit of US$150 million equivalent and a proposed GPE grant of US$23.9 million, using the Investment Project Financing (IPF) with Disbursement Linked Indicators (DLIs) lending instrument. Components 1, 2, and 3 will use a RBF modality, with disbursements made against selected (eligible) key budget line items of the MoE's annual budgets (also referred to as Eligible Expenditure Programs [EEPs]), up to a capped absolute amount. Disbursements will be conditional upon pre-specified results measured by DLIs. The MoE is well-versed in the RBF approach, having used this disbursement mechanism for the Ghana SEIP. An RBF approach is advantageous in providing incentives for the Government to shift the focus from inputs to outcomes. Component 4 will follow a traditional IPF approach.

Project Cost and Financing

55. The ESP costing model shows that the projected cumulative gap in revenue and costs during the project period (2019 – 2023) is approximately GHS 4,835 million or US$988 million.[45] IDA-and GPE-financed GALOP covers almost 18 percent of this funding gap. It builds on the Government's program to support improvements in quality and strengthen accountability in service delivery in basic education which is costed at approximately US$385 million. GPE grant financing would be available after the proposed project appraisal document (PAD) is subsequently approved by the GPE Board – which is expected by February 2020. Should the package not be approved by the GPE Board, the GALOP would be restructured to remove the GPE financing and the project costing would be adjusted accordingly. The strong collaboration and participation of the GPE Secretariat and the LEG throughout the project preparation process are expected to mitigate this risk.

56. Of the total IDA allocation, a little over 5 percent is allocated to Component 4. This implies that 95 percent of the IDA credit is RBF. A minimum of 30 percent of the GPE grant (or US$7.2 million) is required to be variable; this portion of the grant must focus on DLIs related to the GPE's themes of quality, equity, and efficiency. Under GALOP, about 33 percent (or US$8 million) of the GPE grant constitutes the variable part attached to indicators that represent innovative, stretch targets. See annex 3 for stretch indicator descriptions and rationale. Given that the project uses the IPF lending instrument with DLIs,

[45] MoE. 2018. ESP Financing Model.

approximately 74 percent (or US$18 million) of the GPE grant will be used to co-finance the achievement of the five DLIs to allow for smooth disbursement and implementation. Approximately 24 percent of the GPE grant (US$5.8 million) will co-finance TA and education research under Component 4.

Table 1. Project Financing (US$, millions)

Project Component	IDA (a)	GPE			Project Financing (e = a + b)
		All (b = c + d)	FP (c)	VP (d)	
Component 1: Strengthen teaching and learning through support and resources for teachers (RBF)					50.0
DLI 1: Improved teaching practices in targeted schools	45.0	5.0	5.0	-	50.0
Component 2: Strengthen school support, management and resourcing (RBF)					63.0
DLI 2: Strengthened school support for learning in targeted schools	58.0	5.0	5.0	-	63.0
Component 3: Strengthen accountability systems for learning (RBF)					47.0
DLI 3: Improved accountability for learning in public basic schools	19.0	3.0	-	3.0	22.0
DLI 4: Improved proficiency in P4 mathematics and English in targeted schools	13.0	2.0	-	2.0	15.0
DLI 5: Improved equity in the distribution of KG and primary trained teachers in targeted schools	7.0	3.0	-	3.0	10.0
Component 4: Technical assistance, institutional strengthening, monitoring, and research (IPF)					13.9
Sub-component 4.1: Technical assistance for capacity building and institutional strengthening	5.0	3.0	3.0	-	8.0
Sub-component 4.2: Monitoring and evaluation, management and operational costs	3.0	2.9	2.9	-	5.9
Total Project Financing	**150.0**	**23.9**	15.9	8.0	**173.9**

Note: FP = Fixed Part; VP = Variable Part.
** A supervision fee of US$500,000 has been deducted from the total grant envelope of US$24.4 million to cover grant agent supervision costs, representing 0.3 percent of the total project envelope

.

57. As the proposed project is almost completely results based (except for Component 4), these 'stretch' indicators for GPE are also DLRs along with other DLRs that are selected to incentivize achievement of results. Therefore, to access resources under the GPE Variable Part, the MoE will provide documentation to show that the pre-identified results were achieved (and that the said documentation was verified by an independent third-party entity where necessary). Furthermore, by design, the EEP under the Variable Part for GPE will comprise the same eligible expenditures defined for the DLIs and will include expenditures on salaries incurred by the MoE.

Table 2. Eligible Expenditures Program (for Components 1, 2, and 3)

Sub-Program Code	Natural Code	Description	Fiscal Year 2019/20 Projected Expenditures (US$)
02302001 - 02302003	2111001	Compensation of Employees (Basic Education)	565.6 million

58. The World Bank's FM guidelines will apply to the entire project. Given that the EEPs contain no procurable items, the World Bank's procurement guidelines will apply only to Component 4.

D. Project Beneficiaries

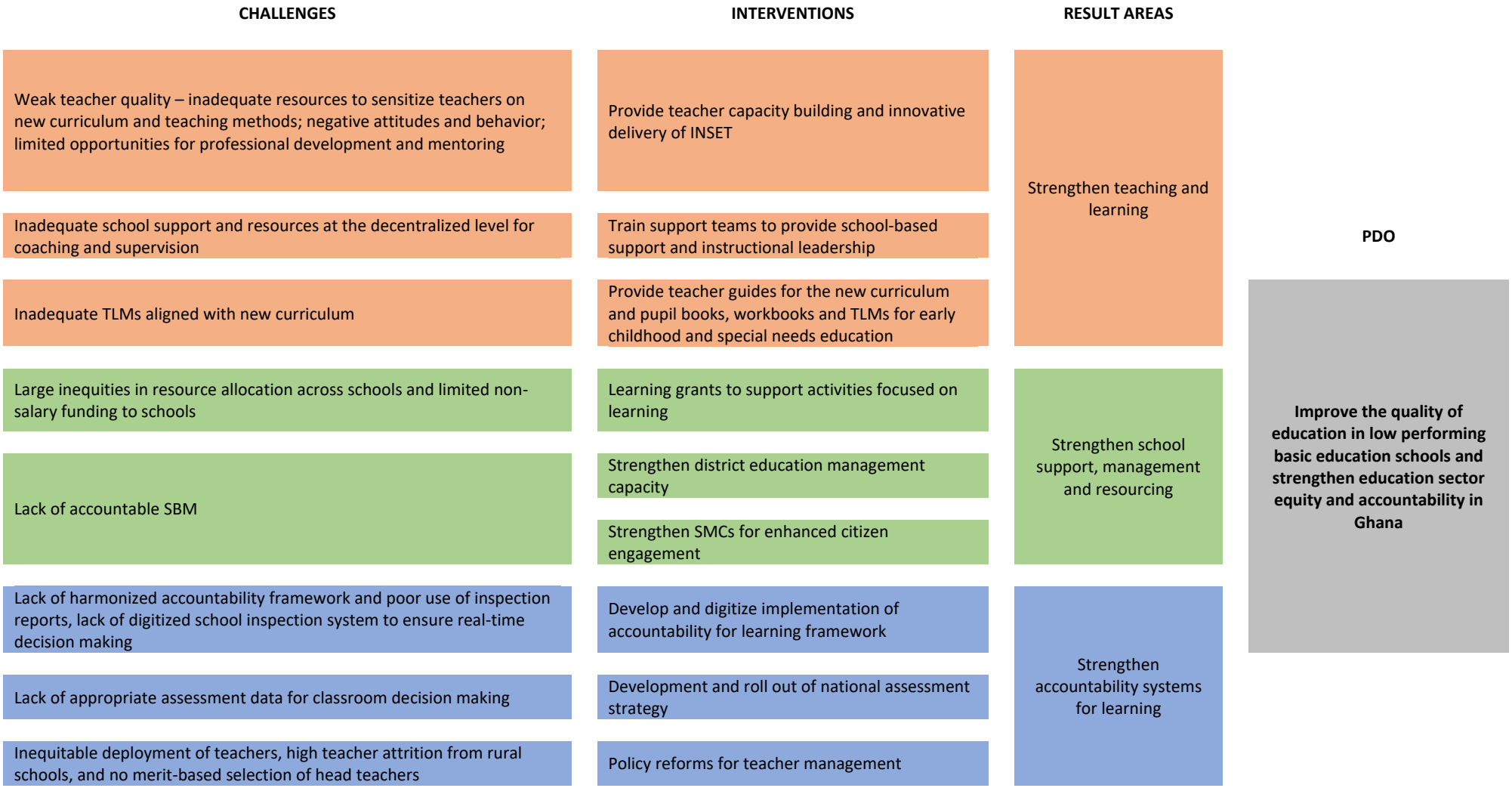
59. Project beneficiaries will include pupils; teachers; head teachers; circuit supervisors; regional education offices and DEOs; and staff of the MoE, GES, NaCCA, NIB, and NTC. There are an estimated 3.8 million beneficiaries.

60. **School-based targeting.** While the interventions under Component 3 are system-wide, those under Components 1 and 2 will be targeted in 10,000 basic public schools, including special schools for persons with disability. The project has ranked schools based on four criteria (GALOP index): (a) BECE raw scores; (b) percentage of trained teachers; (c) average class size; and (d) district-level measure of poverty (using the Ghana Poverty Mapping Report 2015 produced by the Ghana Statistical Service). The indicators were weighted at 40 percent for the BECE score and 20 percent each for the other three indicators, giving additional weightage to the performance or quality indicator. The schools were then ranked by their GALOP index score. Once a JHS was selected for intervention, all primary and KG feeder schools associated with the JHS were also selected. Primary and KG schools feeding into stand-alone JHSs with low GALOP index scores were selected but not the stand-alone JHS, as the GALOP interventions are not targeted at the JHS level. Further, the MoE will agree on a minimum threshold for the number of schools (between 10 and 15) in a district to prevent high monitoring and administrative costs involved with targeting schools across large geographical distances within a district. If 90 percent of schools in a district are selected, then the remaining schools in the district will also be targeted for interventions under Components 1 and 2. There are 28 schools in Ghana for students with special learning needs. Given the project's focus on equitable education, these schools are included as beneficiary schools under GALOP.

E. Results Chain

61. Figure 4 depicts the Theory of Change for the project and illustrates how interventions address key challenges within the sector and their links to components and to achieving the PDO.

Figure 4. GALOP Theory of Change



F. Rationale for World Bank Involvement and Role of Partners

Rationale for Public Sector Provisioning/Financing

62. Through the 1992 Constitution, the Government recognizes its responsibility to ensure that every Ghanaian child of school-going age has a right to education to the level and to the extent possible within the resources of the nation. The Government rolled out FCUBE program in 1995, with full implementation reached in 2005. To cover operating costs, the Government provides capitation grants, with strong systems in place to ensure effective SBM of these grants. However, there are delays in grant disbursements and inefficiencies in utilization, which contributes to low learning levels at the primary level. The learning grant is intended to provide additional resources to disadvantaged schools while simultaneously ensuring incentives are provided toward efficient expenditure of these grants. Investments in this project would support system improvements in schools with low-quality provision and strengthen efficiency and accountability at the basic education level overall, contributing to improved learning outcomes at the school level. The project further supports reduction in inequities in regional resource allocation. This is consistent with Ghana's commitment to providing quality FCUBE to all children.

Value Added of the World Bank's Support

63. **The World Bank has a long-standing relationship with the MoE in Ghana, having been engaged in the country's education sector for the last 28 years.** The World Bank was also the grant agent for all three of the former Education for All - Fast Track Initiative (EFA-FTI)/GPE-funded interventions in Ghana: the Ghana Partnership for Education Grant (GPEG- P129381) for US$75.5 million; the EFA-FTI US$32.2 million Catalytic Fund allocation (the first two grants -US$8 million in 2005 and US$11 million in 2007 were for direct budget support to improve the quality of basic education). The third grant (P116441)- in the amount of US$14.2 million- in 2009 was a sector investment grant. The World Bank has the institutional knowledge and in-house financial and technical expertise to administer the GPE grant. The World Bank is an active member of the Ghana Education Sector Working Group and LEG. The World Bank is also well placed to lead with financing modalities that encourage pooled financing, co-financing, and parallel funding.

64. **In addition, the Government is familiar with working through the World Bank's processes and procedures and the MoE has had experience with RBF.** The SEIP, funded by IDA since 2014, was the first project in Ghana to use an RBF modality. Given that the SEIP is in its fourth year of implementation, the Government is familiar with World Bank processes and procedures for this modality of funding. The World Bank also provides strong technical expertise in basic education and current IDA-financed projects in secondary and tertiary education in Ghana have ensured that the project design is aligned with the direction of the education sector. The World Bank's team consists of specialists in a variety of fields including education, procurement, FM, social development, environmental assessment, law, and communications.

Role of Partners

65. The project will leverage and scale up initiatives by other education DPs as follows: (a) structured pedagogy for KG1 to P2 in reading and mathematics (USAID-supported Learning Project) using 11 local languages – these materials will also be adapted to English and e-reader formats and scaled to all GALOP

targeted schools; (b) targeted instruction for primary grades P3 to P6 in reading and mathematics using Teaching at the Right Level approach (UNICEF-supported STARS pilot); (c) use of video instruction for remedial after school classes for girls and boys (P4) identified at risk (Discovery Learning Alliance pilot) – these video lessons will be used as supplemental training materials for improved teaching during school hours; (d) e-reading program with apps for pre-reading and e-books for primary grades (World Reader); (e) DTSTs and circuit supervisors providing facilitation, monitoring, mentoring and coaching – based on materials developed under Learning and STARS pilots; (f) classroom observation tools (lesson observation survey administered by NTC, school inspection tool administered by NIB, mSRC and USAID Learning Project tool); (g) Annual Status of Education Report (ASER)-like assessment piloted under STARS; (h) EGRA/EGMA assessments supported by USAID; (i) community engagement through capacity enhancement of SMCs for monitoring and resource mobilization (JICA-supported pilot); (j) disability inclusive TLMs (developed by UNICEF); (k) digitized EMIS (USAID-supported pilot); (l) the Safe Schools Initiative, which combats GBV and corporal punishment, amongst other issues (supported by UNICEF); and (m) implementation road-map for the operationalization of Ghana's Early Childhood Education Strategy being developed through BELDS supported by GPE and UNICEF. Annex 5 provides a list of DP-supported and planned projects in basic education in Ghana.

G. Lessons Learned and Reflected in the Project Design

66. **Investing in human capital leads to higher economic productivity and growth.** Between 10 and 30 percent of per capita GDP differences is attributable to cross-country differences in human capital.[46] Human capital investments constitute improvements in the quality of education and healthcare service delivery. In the United States, replacing a low-quality teacher in an elementary school classroom with an average quality teacher raises the combined lifetime income of that classroom by US$250,000.[47] In Kenya, deworming children reduced absenteeism, and raised wages in adulthood by as much as 20 percent.[48] By generating higher incomes, human capital investments lead to reductions in poverty.

67. **Beyond access, quality of learning is closely correlated with economic growth and Ghana's low learning outcomes are affecting its economic productivity.** Conditional on initial GDP per capita and years of schooling, economic growth is vastly explained by the quality of education, measured by scores in tests of cognitive skills,[49] or the quality of education is substantially more important for economic growth than just the quantity of education.[50] Research indicates that a standard deviation of 1 from the mean in cognitive skills (that is, learning outcomes), results in 0.17 to 0.22 proportional increases in wages.[51] In Ghana, the expected years of schooling (11.6 years) is higher than the LMIC average of 10.2 years. It outperforms Sub-Saharan African countries on all indicators except harmonized test scores (scoring 307 compared to 374 for Sub-Saharan African countries and 394 for LMICs). This implies that the quality of

[46] World Bank. 2019. *World Development Report 2019: The Changing Nature of Work.* Washington, DC: World Bank.
[47] World Bank. 2019. *World Development Report 2019: The Changing Nature of Work.* Washington, DC: World Bank.
[48] J-PAL Policy Bulletin. 2012. *Deworming: A Best Buy for Development*. Cambridge, MA: Abdul Latif Jameel Poverty Action Lab.
[49] Bashir, Sajitha, Marlaine Lockheed, Elizabeth Ninan, and Jee-Peng Tan. 2018. *Facing Forward: Schooling for Learning in Africa.* Africa Development Forum series. Washington, DC: World Bank.
[50] Hanushek, Eric, Ludger Woessmann. 2007. *The Role of Education Quality for Economic Growth. Policy Research Working Paper; No. 4122.* Washington, DC: World Bank.
[51] Psacharopoulos, George, Harry Anthony Patrinos. 2018. *Returns to Investment in Education: A Decennial Review of the Global Literature. Policy Research Working Paper; No. 8402.* Washington, DC: World Bank.

education directly contributes to low economic productivity in Ghana. Its HCI at 0.44 indicates that 56 percent of productivity is lost for a child born today. GALOP's focus on improving learning outcomes is aligned with these lessons.

68. **Structured or targeted pedagogy interventions have the largest and most consistent positive effects on learning outcomes.** The most effective structured pedagogy interventions are generally multifaceted to address the various constraints to learning, and generally include matching teaching to the student's level and targeting training to the level of the teacher with continuous feedback and re-training. The Africa Facing Forward report[52] highlighted this activity as one of the most effective interventions at the school/classroom level in terms of its an impact on learning. In Kenya, a structured pedagogy intervention to improve literacy instruction provided training workshops, semi-scripted lesson plans, and weekly text-message support to teachers and improved literacy outcomes, with larger improvements for girls than for boys.[53] In Ghana, success under a similar intervention has reported learning gains after just one year of implementation. Pilots supported by the World Bank and UNICEF for teaching at the right level and offering remedial lessons, have influenced the proposed GALOP scale-up with key design revisions to mainstream implementation through the existing training, monitoring, and supervision systems.

69. **Ghana has had significant experience (at scale) and success with school grants programs and pilots for strengthening SBM** (JICA-supported pilot). The MoE/GES in Ghana has implemented a school grants program at basic education under IDA and GPE-supported programs that has been sustained through the statutory financing under capitation grants. A difference-in-difference analysis of the GPEG school grants program[54] showed substantial improvements in gross enrolment between intervention and non-intervention districts. Learning outcomes in English and mathematics at the P3 level also improved significantly by 29 percent and 44 percent, respectively. The EGRA/EGMA assessments confirm that there were statistically significant improvements in number identification, letter sounds in English, oral reading in English, and letter sounds for local languages in the GPEG-deprived districts (GPEG ICR4003). In the Gambia, an SBM program offered a training program for SMC members in addition to the school grants – while there was no overall impact on learning outcomes, the program reduced student and teacher absenteeism.[55] Whereas global evidence on SBM interventions is mixed, programs with proposal-based school grants have shown more positive effects on learning outcomes. In Senegal, school grants requiring a call for proposals (schools decided on how to spend, but decisions were verified by a government evaluation committee and had to align with district and system priorities) resulted in an improvement in test scores especially for girls with high ability levels at baseline (and only in third grade).[56] The learning

[52] Bashir, Sajitha, Marlaine Lockheed, Elizabeth Ninan, and Jee-Peng Tan. 2018. *Facing Forward: Schooling for Learning in Africa.* Africa Development Forum series. Washington, DC: World Bank.
[53] Matthew C. H. Jukes, Elizabeth L. Turner, Margaret M. Dubeck, Katherine E. Halliday, Hellen N. Inyega, Sharon Wolf, Stephanie Simmons Zuilkowski, and Simon J. Brooker. 2017. *Improving Literacy Instruction in Kenya Through Teacher Professional Development and Text Messages Support: A Cluster Randomized Trial*. Journal of Research on Educational Effectiveness, 10:3, 449-481.
[54] World Bank. 2017. *GPEG Project Implementation Completion and Results Report.* Washington, DC: World Bank.
[55] Blimpo, Moussa P, David Evans, and Nathalie Lahire. 2015. Parental human capital *and effective school management*: Evidence from The Gambia. Policy Research Working Paper Series *723.* Washington, DC: World Bank.
[56] Carneiro, Pedro Manuel, Oswald Koussihouede, Nathalie Lahire, Costas Meghir, and Corina Mommaerts. 2015. *Decentralizing Education Resources: School Grants in Senegal*. NBER Working Paper No. w21063.

grant activities build on these lessons and the limitations of previous grant activities in Ghana to ensure learning-focused utilization of school resources.

70. **Strong accountability systems use student assessments to target school resources, set performance targets for schools, and ensure appropriate incentives are in place.** This is essentially a decentralized model of RBF, while simultaneously providing resources to ensure that schools can meet results. For example, in Brazil, the state of Minas Gerais tracked the performance of each region, school, and student on a database and used this data to differentiate its approach to schools; it provided strong guidance and enforced tight accountability for schools with the largest target gaps, while allowing greater autonomy to higher-performing schools as long as they continued to meet targets.[57] In the Mexican state of Colima, an intervention that targeted additional support to the lowest-performing schools in a national examination – in the form of technical advisers, development of improvement plans with clear goals and strategies, follow-up / supervision, reinforcement of teachers' knowledge, and specifying of the role of school directors – resulted in substantial increases in test scores only a few months after the program was launched.[58] In Peru and Chile, data collected on student assessments and the schools are used to produce reports comparing performance at various disaggregated levels and offering monetary incentives when performance targets are met while also influencing national policy and providing feedback to schools. Strengthening the accountability system through a digitized and integrated framework would be expected to contribute to better allocation of resources.

71. **Robust data processes and systems are required to support reforms in accountability systems.** Ghana collects a substantial amount of education data including administrative data on schools, students and teachers, circuit supervisor inspection reports, learning assessment data for national examinations, sample learning assessment data, and so on. However, each of these data systems exist independently or have not been scaled-up nationally. As a result, they do not inform each other, preventing robust accountability systems that link inputs with teacher behavior and learning outcomes. In Ghana, the mSRC was piloted in about 20 districts and found to be effective in providing real-time school data. Plans to have this replace the traditional pen-and-paper SRCs are being explored. The USAID Learning Project has also developed a dashboard to present learning outcomes data, but this again has not been scaled and is not linked to the EMIS database. Therefore, GALOP would aim to build on these tools and integrate data for more effective decision making.

72. **In addition, the project's focus on early years (KG1–P6) is not only equity enhancing but also has long-term benefits in terms of readiness to learn and improved future learning outcomes.** Data from Programme for International Student Assessment (PISA) found that after controlling for socioeconomic differences, for a cohort of 15-year-olds in school, those who attended preschool scored a year ahead of their peers.[59] A study in Kenya and Tanzania found that although those who attend preschool enroll in primary school late, once in school they progress faster and between the ages of 13 and 16 have completed one-and-a-half months more than their peers who did not attend preschool while also scoring higher on

[57] McKinsey, Informe. 2010. *How the world's most improved school systems keep getting better.*
[58] De Hoyos, Rafael, Vicente A. Garcia-Moreno, and Harry Anthony Patrinos. 2015. *The impact of an accountability intervention with diagnostic feedback: Evidence from Mexico*. Washington, DC: World Bank.
[59] World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific. World Bank East Asia and Pacific Regional Report*. Washington, DC: World Bank.

cognitive tests.[60] Furthermore, given the implications on distributional equity associated with high and increasing ratios of per-student spending between primary and tertiary (from 1:8.5 in 2014 to 1:11.6 in 2015) and much lower access to higher levels of education for those from low-income backgrounds, this project will be equity enhancing by ensuring increased investment at the early grade levels.

73. **Building on ongoing interventions in Ghana using digital education, virtual coaching, and targeted instruction,** the project proposes scaling some of these successful and cost-effective pilots. In addition, GALOP has learned from best practices in India, Kenya, South Africa, and other countries where teacher training has been effective and alternative methods for supporting teachers and schools have been tested. The Government is also committed to an ambitious program of digitizing monitoring for accountability systems spanning multiple levels, the EMIS, and linking the various data sources on a user-friendly accountability dashboard interface. The project will explore digitized options to: collect data, provide timely feedback to teachers and supervisors, deliver key messages to teachers and students, link remote schools, and assess system accountability.

74. **Experience with RBF**. The GALOP will build on the lessons learned from the use of RBF in other projects, including the ongoing IDA-funded SEIP. As a mainstreamed project within both the MoE and GES, capacity has been strengthened for RBF. With strategic TA and carefully determined annual results and pricing, the GALOP will build on the knowledge and experience acquired from the SEIP. There is a high responsiveness to DLIs in the education sector, especially when technical and management responsibility is well aligned with implementing departments. Pricing of the DLRs under the SEIP were uniform, resulting in challenges with balancing incentives and flow of funds for implementation. Under GALOP, the DLR values have been determined based on estimated 'incentive value' as well as costs of implementing the overall program. Further, DLRs are scalable, allowing for smoother disbursement of funds.

III. IMPLEMENTATION ARRANGEMENTS

A. Institutional and Implementation Arrangements

75. **The implementation of the GALOP will be mainstreamed in the MoE and the GES.** Project coordination will be led by the MoE or designate; however, the various tasks and reform owners will also coordinate their implementation along the units and departments mandated for those tasks and reforms. A Project Technical Team (PTT) comprising Ministry of Finance (MoF), MoE, GES, NaCCA, NTC, and NIB staff will be set up to implement the GALOP. The PTT will implement under the direction of a Project Oversight Committee (POC) made up of the key management of the MoE and GES chaired by the Minister for Education or designate and comprising deputy minister of MoE, chief director of MoE, as well as director general, and deputy director generals of GES and the Minister of Finance or a representative. The POC will provide oversight for the entire project and will meet at least twice a year (bi-annually) to ensure speedy and effective implementation. The POC will be set up not later than three months after effectiveness. The Project Coordinator will liaise with management on approval of agreed activities for speedy implementation. Key institutions for purposes of GALOP implementation include the GES and three semi-autonomous agencies that fall under the purview of MoE: (a) the NaCCA, which has completed and is rolling

[60] Bietenbeck, Jan, Sanna Ericsson, and Fredrick M. Wamalwa. 2017. *Preschool Attendance, School Progression, and Cognitive Skills in East Africa.*

out the new standards-based curriculum that teachers will be trained on under Component 1; (b) the NTC, which is in charge of teacher licensing and will therefore be involved in the design of the teacher training under Component 1, as well as reform of teacher management under Component 3; and (c) the NIB, which is in charge of school supervision, and will provide support to the design and implementation of the inspection tool under Component 3. Where necessary, TA would be recruited to augment the technical team's activities. Innovations in improving project implementation will include direct disbursement of learning grants to school bank accounts with the collaboration of district offices, an effective communications strategy for community engagement and dissemination of policy reforms, digitized process monitoring, and efficient procurement at the school level using school/community-based procurement and 'last-mile' delivery of centralized procurement only where necessary with items delivered to basic schools.

76. **The MoE and the GES have successfully implemented World Bank-financed projects over many years.** Since 2014, the MoE and GES have been implementing the SEIP using an RBF modality (IPF with DLIs) and have adequate staffing and capacity for FM, procurement, safeguards, and M&E. The MoE will oversee the administration of all components under GALOP. The GES, NTC, and NaCCA will be responsible for the implementation of Component 1; the GES will be primarily responsible for implementation of Component 2; and NaCCA, NIB, and GES (HR) and NTC will be primarily responsible for Sub-components 3.1, 3.2 and 3.3 respectively. Implementation of Component 4 will be led by the MoE. However, given the range and sequencing of activities that will be required to achieve the proposed results, all these agencies will need to coordinate and collaborate on annual work planning, budgeting, reporting and expenditure tracking. GALOP would finance additional capacity to support coordination and implementation, as needed, complementing planned TA from other DPs (for example, DFID, USAID, UNICEF, and JICA).

B. Results Monitoring and Evaluation Arrangements

77. Monitoring of project results will be integrated in the existing M&E systems of the MoE and its associated agencies – GES, NaCCA, NIB, and NTC. The Planning, Budgeting, Monitoring, and Evaluation (PBME) Unit in the MoE will have the overall responsibility of reporting on the Results Framework. The unit will be guided by the GALOP Results Framework which includes the PDO-level and intermediate results indicators that have been agreed upon by Government and the World Bank. The Results Framework also has indicator targets that have been agreed upon by the Government and the World Bank as reasonable development milestones to be achieved under the project. Progress reporting against the agreed indicator targets in the Results Framework will be furnished by various administrative data sources, with oversight and guidance of the PBME Unit, complemented by the EMIS data managed by the EMIS Unit.

78. Monitoring of system-wide indicators for the Results Framework would rely primarily on existing systems, including EMIS and other digitized systems being/to be developed under the project such as the accountability dashboard. Learning outcomes data at the P4 level will be collected through the national P4 assessment in English and mathematics. Data on teacher training will be collected by the NIB and NTC, and on cluster-level meetings and utilization of learning grants through circuit supervisor reports consolidated at the district and validated by the NIB. Efforts will be made to digitize and decentralize monitoring to the district level for cost effectiveness in M&E.

79. Efforts to strengthen EMIS annual school census and NIB inspection data are being supported under GALOP to improve data quality and timeliness of analysis and reporting on the RF. This support will include review and digitization of the annual school census tool, harmonization of school inspection tools building on tools from the NIB, NTC, TEACH and Service Delivery Indicators (SDI), digitized data collection; and automated preliminary analyses on the accountability dashboard. An M&E capacity development plan will be supported under Sub-component 4.2.

80. GALOP will support the implementation of an assessment at P4 to monitor improvements in learning outcomes. As part of this activity, a database will be developed which will include the national assessment results with unique student identifiers to enable student tracking in the future. This database will be linked with the EMIS database as well as the accountability dashboard, enabling analysis of inputs or interventions that have an impact on learning outcomes.

81. A set of DLIs with corresponding annual DLRs have been agreed. These draw from the PDO- and intermediate results level indicators to ensure focused attention to developmental objectives of the project. The monitoring and achievement of DLRs will be determined based on the verification protocol for each DLR. In some instances, verification will be conducted by an independent third-party private sector entity to ensure enough independence. Possible options for the independent verification firm include Ghana Statistical Services, the Ministry of Monitoring and Evaluation, Institute of Statistical, Social and Economic Research (ISSER), Ghana Institute of Management and Public Administration (GIMPA) and selected CoEs, and research institutions of public and private universities, among others. In other instances, verification will be conducted by one of three education sector agencies: the NaCCA, the NIB, or the NTC. These education sector agencies were chosen as independent verification agents only for those DLRs where they are sufficiently independent from the achievement of the DLR, and to build the agencies' capacity in areas that fall under their purview and will continue to do so beyond the lifetime of GALOP. This independent verification firm will be decided upon shortly after effectiveness.

82. The project will also support a research agenda under Component 4. This will provide on-demand, in-depth robust research to inform education policy. These can be presented at the NESAR. Further, participation in NESAR will be strengthened using monthly reports generated by the accountability dashboard. These reports will also be used to inform GALOP implementation support meetings. The World Bank will conduct two annual supervision missions to monitor project implementation and performance.

C. Sustainability

83. The design of GALOP ensures system-wide reforms and behavioral changes in teachers and support structures that are likely to persist beyond the project time line since they entail modification and adaptation of existing processes and roles. These include (a) training of teachers in targeted instruction and structured pedagogy; (b) increasing inclusiveness in education by teaching at the right level of the child; (c) reforming the role of the circuit supervisor from an inspector to an instructional coach and mentor; (d) training head teachers in instructional leadership; (e) realigning the focus of SPIPs from inputs to learning outcomes; (f) increasing the use of data for decision making through the creation of an integrated accountability dashboard and institutionalization of cluster-level data sharing meetings; and (g) policy reform to improve teacher performance, deployment, and professional development.

84. Sustaining the quantities of provided inputs such as TLMs or the school learning grants will remain a challenge. However, these one-time inputs to support the roll out of the new curriculum and the introduction of targeted instruction and structured pedagogy will provide a strong foundation for improved learning and provide the MoE with robust evidence to support these interventions after the project if there are positive impacts on learning. The learning grants will provide proof of concept for realigning the SPIP to focus on learning, so that the MoE can consider adopting lessons learned in the utilization of the capitation grants. Certainly, administrative capacity gains will be sustained by working through existing Government systems and agencies while financial sustainability would be more incremental as annual budgets begin to capture the GALOP programs/activities.

IV. PROJECT APPRAISAL SUMMARY

A. Technical, Economic and Financial Analysis

Technical

85. The technical design has been informed by global and Ghana-specific knowledge on strategic interventions that improve quality and accountability in basic education.[61] The following lessons have been reflected in the project design: (a) structured pedagogy interventions have the largest and most consistent positive effects on learning outcomes; (b) effective teachers collaborate with other teachers to improve their teaching, plan their lessons meticulously, identify misconceptions in student understanding of content, have high content knowledge, and use questioning techniques; (c) programs with proposal-based school grants have shown positive effects on learning outcomes; (d) strong accountability systems use student assessments to target school resources, set performance targets for schools, and ensure appropriate incentives are in place; and (e) robust data processes and systems are required to support reforms in accountability systems. These lessons reflect the insights from the World Bank's 2018 and 2019 World Development Reports[62] as well as the Human Capital Project (HCP) and have been further elaborated in annex 6.

86. The design benefitted from the deep-dive assessment on accountability for improved learning outcomes undertaken by the MoE Reform Secretariat. Key recommendations included review of the teacher recruitment, deployment, transfer and incentive policies; introduction of a dedicated school leadership program and accompanying qualification for head teachers; and enhancement of community engagement and involvement in accountability for learning. These recommendations are reflected in the project design.

Economic and Financial Analysis

87. Economic benefits are expected from higher labor market returns to improved learning outcomes resulting from better education quality, and from a larger number of people benefiting from higher wage

[61] Bold et. al, 2017; Jukes et al., 2017; Snilsteveit et al., 2015; Carneiro et al., 2015; Hoyos, Garcia-Moreno and Patrinos, 2015; Glennerster and Rudge, 2019.
[62] World Bank. 2018. *World Development Report 2018: Learning to Realize Education's Promise.* Washington, DC: World Bank World Bank. 2019. *World Development Report 2019: The Changing Nature of Work.* Washington, DC: World Bank.

premiums due to improved education attainment. The bulk of the economic benefits is expected to flow from the improvement in the quality of education. Interventions are targeted toward improving quality of education and it is expected that this improved quality will directly translate into improvements in learning outcomes and in turn into improvements in the income of individuals who benefit from the project in the long term. Improvements in education quality are likely to persist due to the development of a strong accountability framework and improved monitoring and supervision. Smaller benefits will accrue from the differential increase in progression rates or educational attainment because of improved quality.

88. Benefits from improved learning outcomes will not only increase productivity levels but individual returns as well. Globally, it is estimated that the private average rate of return to one extra year of schooling is 9 percent a year, and social returns to schooling is above 10 percent at the secondary and higher education levels.[63] There are long-term poverty reduction benefits – according to Seventh-round of the Ghana Living Standards Survey (GLSS7) data, 37 percent of households with household heads having no formal education live under the poverty line, compared to only 12.4 percent for households where household heads had at least BECE qualifications. Social returns to education, although difficult to quantify, are likely to exceed private returns due to the positive effect of education on crime, fertility, health, intergenerational mobility, and improved citizen participation, and on growth and productivity of the economy because of positive spillovers and complementarities between industries.[64]

89. Fiscal sustainability considerations point towards a need to reorient education financing from inputs to learning outcomes, to build on existing systems and interventions, and integrate pilots with mainstream programmes. The cost benefit analysis of the GALOP shows an internal rate of return (IRR) of 8.6 percent with sensitivity test results ranging between 4.4 percent and 11.6 percent which shows that the economic returns to the beneficiaries supported by the project largely outweigh the project cost, an indication that the development impact of the project is significant.

B. Fiduciary

(i) Financial Management

90. The implementation of FM arrangements under this results-based IPF will follow country system arrangements with oversight responsibilities by the MoF and Controller and Accountant General's Department (CAGD), and a supervisory role for the MoE. Thus, the project's FM arrangements will follow as much as possible the full use of country systems for Components 1, 2, and 3 and adopt some aspects of the country systems for Component 4. The MoE will oversee the implementation of all components under GALOP. The NTC, NaCCA, and the GES will be responsible for the implementation of Component 1; the GES will be primarily responsible for implementation of Component 2; and NaCCA, NIB, and NTC will be primarily responsible for Sub-components 3.1, 3.2 and 3.3 respectively. Implementation of Component 4 will be led by MoE. As the beneficiary agencies responsible for activities under Components 1, 2, and 3 fall under the auspices of the MoE, it will be the only implementing agency receiving IDA funds and will pay suppliers for activities under Components 1 to 4. With this arrangement, the MoE's Director of Finance,

[63] Psacharopoulos, George, Harry Anthony Patrinos. 2018. *Returns to Investment in Education: A Decennial Review of the Global Literature. Policy Research Working Paper; No. 8402.* Washington, DC: World Bank.
[64] An overview of these relationships for countries in Sub-Saharan Africa can be found in: Majgaard, Kirsten, and Alain Mingat. 2012. *Education in Sub Saharan Africa: a comparative analysis.* Washington, DC: World Bank.

together with CAGD staff, will be responsible for various aspects of the project's FM arrangements. Throughout implementation, the MoE will be required to ensure that there are adequate FM arrangements and the project complies with the financial covenants detailed in the Financing Agreement. The GES, and other agencies of the MoE, will not report to the World Bank but will maintain a project account to receive funds from the MoE for implementation of Components 1, 2, and 3 based on an AWP&B agreed with the MoE.

91. Overall, the FM arrangements of the project are adequate and meets the minimum requirements per World Bank policy on Investment Financing and the overall risk is considered ***Moderate***. Any challenges which arise during the project's implementation, particularly with the EEPs will be reflected in the Government's annual audit and will be addressed during implementation. Details of the FM arrangements are included in annex 1.

(ii) Procurement

92. It was agreed that since GALOP will be implemented using the New Procurement Framework (NPF), the procurement staff of the MoE and the GES will be trained on the application of Procurement Regulations by the World Bank, and the World Bank's procurement specialists will provide support during project implementation. The MoE and the GES have a well-established structure for procurement decisions and are led by the Minister and supported by the Chief Director. The Ministry has internal manuals based on previous projects including the SEIP. To suit GALOP implementation, these manuals will be modified as necessary within six (6) months of the project effectiveness. As the EEP consist of non-procurable items, the NPF would only apply to the IPF Component (Component 4). After effectiveness, the project may competitively hire a short- term procurement consultant who is knowledgeable in the NPF to provide hands-on procurement support to the Ministry. The consultant will work closely with the procurement officers of the MoE and the GES.

93. The Project Procurement Strategy for Development (PPSD) has been developed and includes an initial 18-month Procurement Plan, which will be updated regularly. The Procurement Plan for Component 4 would be entered in the Systematic Tracking of Exchanges in the Procurement (STEP) system, and the MoE and the GES will be trained on the use of STEP. The Procurement risk assessment is ***Moderate*** because the MoE is currently implementing SEIP, and a few procurement staff are somewhat familiar with the NPF. In view of the capacity-building needs of the procurement team of the MoE and the implementing agencies to carry out the procurement regulations, the World Bank will provide capacity building and continuous support throughout project implementation.

C. Legal Operational Policies

	Triggered?
Projects on International Waterways OP 7.50	No
Projects in Disputed Areas OP 7.60	No

D. Environmental and Social

The overall risk classification is proposed as moderate. Project Interventions (eg minor repairs of school building, refurbishment of ICT laboratory, refurbishment of science laboratory, beautification of school compound construction of walkways and construction of fence wall/main gate) are not envisaged to be significant or irreversible. They will be site specific, limited to existing school compound, and can be managed through the implementation of cost-effective mitigation measures.

94. **The project environmental and social risk is classified as Moderate.** It is envisaged that the project will have a number of sub-project activities, especially in the area of providing learning grants to schools which could potentially include some minor construction, renovation and refurbishment works (including the construction of walkways, fence walls, repairs of school buildings, and so on). These activities are expected to be limited to existing school compounds. However, some due diligence is required to mitigate against potential issues of boundary dispute or impact on livelihoods. Key environmental risks are related to noise, dust, and community health and safety of workers, students and teaching staff. Because the specific schools that will receive grants and the specific activities each of the grant proposals will likely fund is undetermined at this point, an Environmental and Social Management Framework (ESMF) and Resettlement Policy Framework (RPF) have been prepared, consulted upon, and disclosed in-country and on the World Bank's website. These Environmental and Social assessments considered the potential environmental and social risks and impacts presented by the project, as related to noise, dust, and community health and safety of workers, students and teaching staff. The assessments also considered the project's capacity and institutional arrangements to manage these potential risks and impacts in compliance with ESS1. The ESMF sets out the principles, rules, guidelines and procedures to screen, assess, manage, and monitor the mitigation measures of environmental and social impacts of sub-project activities. The project has prepared an Environmental and Social Commitment Plan (ESCP) which outlines the Client's commitments to screen all sub-projects further during implementation and prepare associated Environmental and Social Impact Assessments (ESIAs), Environmental and Social Management Plans (ESMPs), Resettlement Action Plans (RAPs), Abbreviated Resettlement Action Plans (ARAPs) or Livelihood Restoration Plans as may be required. The screening criteria have been included in the ESMF and RPF. The ESMF, RPF, ESCP and Stakeholder Engagement Plan (SEP) have been disclosed in-country and on the World Bank's website on May 16, 2019 and May 17, 2019, respectively.

95. **Capacity Assessment.** Since 2017, the MoE engaged two environment and social safeguards officers for the SEIP. These officers will continue to work on all World Bank-funded education projects in Ghana including GALOP. The SMCs, district engineers, planning officers, district environmental health officers, and so on, will support implementation at the local levels. The project will add focal persons from the MoE special education unit to handle other social issues including GBV and disability inclusion. The safeguards team forms part of the PTT, reporting directly to the Chief Director of the MoE. The project will always maintain environmental and social officers as necessary throughout project implementation. This arrangement is deemed sufficient to handle the scale of environmental and social risks anticipated. The ESCP commits to regular training of the safeguards team and relevant stakeholders to ensure effective implementation of the environmental and social safeguards framework.

96. **Labor risk.** The project footprint is envisaged to be relatively small and short term. No workers camp will be established. Both skilled and unskilled laborers are expected to be sourced from local and surrounding communities. The likely labor risk may include health and safety of workers during the

construction and operational phases, general labor working conditions, community grievances over recruitment process and selection, and protection of female workers. The project ESIAs during project implementation will determine whether a specific labor management plan is required. In the case of significant impacts, a Labor Management Procedures (LMP) will be developed by the contractor and submitted to the MoE for review and the World Bank for clearance before implementation. The contractor's ESMP will include labor-related clauses and mitigation measures to ensure the health and safety of workers.

97. **Grievance Redress Mechanism (GRM).** The project design will incorporate a comprehensive project-wide GRM which will enable a broad range of stakeholders to channel concerns, questions, and complaints to the various implementation agencies. The project will harness the existing system established under the on-going Ghana SEIP. The system has three toll free numbers. These numbers will be disclosed at schools, district assemblies, community centres, DEOs and regional education offices, and on the ministry website. It will also be publicized by community information centers, advertisements and jingles. Complaints can be registered through phone calls, text messages, or WhatsApp messages. All complaints will be responded to within 24 hours and resolved within 10 days. If the complainant is not satisfied with the response, s/he may appeal to the Minister of Education through existing protocols. Complaints may also be registered with SMC members or circuit supervisors, who will then register the call with the central system. They will maintain a Complaints Sheet to document all complaints and how they were resolved. The GRM system will track the school with which the complainant is associated to ensure that feedback can be directed to them if the grievance cannot be resolved immediately and requires further action. A summary of the issues raised (with personal identifiers removed to ensure confidentiality) will be discussed each month at the project management meetings. A citizen survey will be conducted so that the project can address issues/challenges that may have been raised/identified by citizens. This will be done during the last three years of the project in which selected numbers will be chosen for follow up to check whether a satisfactory response was received and/or action taken.

98. **Gender.** The project has undertaken a social assessment including assessing gender disparities or gaps in access and learning achievement for boys and girls (including gaps in enrolment, retention, performance in examinations, completion rate, progress rate, and so on). Gender parity has been achieved at all levels of pre-tertiary education in Ghana. Differences however begin to emerge at the higher levels. GERs at the KG and primary levels are over 100 percent while at the secondary level, GPI is 0.97. The free SHS program has greatly improved access to secondary education. Under the World Bank-funded SEIP, scholarships and bursaries were provided to over 10,000 students of which 60 percent were girls. Though enrolment rates are high in Ghana, it is still estimated that roughly 450,000 children are out of school today.[65] There are also disparities in performance by gender in rural regions and the main issues are those of poverty and poor service delivery.

99. The challenges with regards to gender-responsiveness include: (a) increasing gender parity in regions that are lagging; (b) breaking gender stereotypes in teacher training and curriculum; and (c) maintaining a safe school environment. The project will respond to these gender gaps as detailed in the section on key cross-cutting design aspects. In addition:

a) A minimum standard will be set in SPIPs to ensure safe and confidential reporting mechanisms and

[65] Sabates, Ricardo. October 5, 2018. *Moving Beyond Aid in Education: The Case of the Complementary Basic Education Programme in Ghana*, accessed at *https://www.riseprogramme.org/blog/beyond_aid on* April 25, 2019.

redress of GBV issues are in place;

b) Learning grant could be used to fund additional sanitary facilities, fixing of lighting, and setting up safe schools' protocols; and
c) Deployment of teachers, National Service Personnel, and Nation Builders Corps personnel to support school-based in-class teaching will be gender sensitive.

100. **Attention will also be paid to mitigating any GBV risk arising from infrastructure works within schools.** The project has been assessed for GBV risks using the World Bank's corporate GBV Risk Assessment Tool. The assessment indicated a Moderate GBV risk score. Measures to minimize and respond to GBV risks and impact from any works will be done in accordance with the Good Practice Note on GBV risks related to civil works: (a) the project's ESIA will include an assessment of GBV risk and measures to address them will be included in the contractor ESMPs and adequately costed; (b) all bidding documents for works and procurement contracts will include clear requirement to address GBV risk including requirement for a Code of Conduct that prohibits sexual harassment and exploitation throughout the contract's life; (c) local service providers will be identified and partnered to assist in GBV response; and (d) a GBV-sensitive GRM will be established for confidential reporting.

101. **Disability inclusion.** Persons with disabilities constitute one of the largest vulnerable groups at risk of exclusion in the education sector of developing countries, including Ghana. Without consideration for disability-related needs and support, the project may exacerbate this inequality and limit access to quality learning for persons with disabilities. The World Bank made 10 corporate commitments in July 2018 on disability inclusion and one of these commitments is to ensure that all World Bank-financed education programs and projects are disability inclusive by 2025. The project will support some ongoing government interventions including the roll out of the new curriculum, INSET, targeted instruction and coaching, learning materials, and school management and instructional leadership training. Specific interventions are detailed in the section on key cross-cutting design aspects.

102. **Climate screening and co-benefits.** School learning grants under Component 2 are intended for learning inputs, which may lead to some schools procuring computers or other devices that require electricity. Because the majority of basic schools lacks electrical connectivity, the schools will be encouraged to make use of green technology such as solar panels. In addition, learning grants may be utilized for minor rehabilitation and renovation. The project may consider rain water harvesting from school roofs based on school needs and to reduce the cost of water bills. Rainwater harvesting acts as a means of adapting to water problems caused by climate change and water harvesting experiences of schools can be shared with other organizations. By providing water in schools, the project ensures that children who go to school learn without any interference from water shortages.

103. **Citizens' engagement.** The project has prepared a SEP to ensure early, continuous, and inclusive (including vulnerable/disadvantaged groups) stakeholder engagement. In addition to promoting the stakeholder engagement, a selected set of citizen engagement activities under Component 3 will be supported to improve the quality of education services through better participation, transparency and accountability. These activities include (a) regular monitoring and disclosure of results from inspection findings and dashboard updates; (b) building on existing dashboards such as the mSRC and the USAID Partnership for Learning project dashboard, which will be accessible to decision makers at the school, district, regional and headquarters levels, as well as to parents and students; (c) student tracking through

the introduction of unique student identification numbers supplemented by biometric technology, starting with P4 students to align national assessment data with EMIS and mSRC databases; (d) annual expenditure tracking survey on learning grants by CSOs to validate results; and (e) citizen satisfaction survey by CSOs conducted at mid-term and at the end of the project which would be linked to the dashboard. This will ensure that the project can address and resolve issues/challenges that may have been raised/identified by citizens. Such linkages would encourage discussion and monitoring of how beneficiaries' feedback is addressed. The proposed activities would also include training for SMCs to support the use of grants for learning activities and further leverage community contributions to strengthen capacity for accountable and transparent FM of learning and capitation grants and resource mobilization. The SEP has been disclosed in-country and on the World Bank's website.

V. GRIEVANCE REDRESS SERVICES

104. Communities and individuals who believe that they are adversely affected by a World Bank (WB) supported project may submit complaints to existing project-level grievance redress mechanisms or the WB's Grievance Redress Service (GRS). The GRS ensures that complaints received are promptly reviewed in order to address project-related concerns. Project affected communities and individuals may submit their complaint to the WB's independent Inspection Panel which determines whether harm occurred, or could occur, as a result of WB non-compliance with its policies and procedures. Complaints may be submitted at any time after concerns have been brought directly to the World Bank's attention, and Bank Management has been given an opportunity to respond. For information on how to submit complaints to the World Bank's corporate Grievance Redress Service (GRS), please visit http://www.worldbank.org/en/projects-operations/products-and-services/grievance-redress-service. For information on how to submit complaints to the World Bank Inspection Panel, please visit www.inspectionpanel.org.

VI. KEY RISKS

105. The overall risk of the project is considered **Substantial** given the uncertainties around the political climate during project implementation, the level of ambition in measuring learning outcomes and implementing selected interventions at scale, and the ability of newly instituted structures to smoothly coordinate interventions. The macroeconomic risk rating is **Moderate** reflecting Ghana's successful completion of the Extended Credit Facility-supported program with the International Monetary Fund in April 2019. The Ghanaian economy grew by 6.7 percent in the first three quarters of 2018, compared with the same period in 2017; and a GDP rebase in 2018 roughly increased the recorded size of the economy by one quarter.[66] The overall fiscal balance is expected to remain contained guided by the new fiscal rule capping the budget deficit at 5 percent of GDP, which is critical to curbing public expenditure in the run up to elections. Some risks persist owing to fiscal challenges related to the volatility of oil prices, and with the introduction of free SHS, expenditures for basic education could be squeezed.

[66] International Monetary Fund. April 2019. *Ghana: Seventh and Eighth Reviews under the Extended Credit Facility Arrangement and Request for Waivers of Nonobservance of Performance Criteria – Press Release; Staff Report; and Statement by the Executive Director for Ghana.* IMF Country Report No. 19/97. Washington, DC: International Monetary Fund.

106. **The political and governance risks are Substantial** because of the planned elections in 2020 and 2024, and the expectation with any election of increased expenditures and staff turnover in key ministries, departments, and agencies. There is also the risk of crowding out investments in basic education by the free SHS; and the difficulties with implementing key education reforms, especially related to teacher policies as these usually occupy the attention of teachers' unions. Ensuring wide stakeholder involvement in program design and implementation especially at decentralized levels has been further supported by an integrated communications strategy. A strong communications plan would be supported to ensure effective dissemination of information, especially related to accountability interventions. The establishment of a Reform Secretariat within the MoE is also expected to help mitigate the sector strategies and policies risk.

107. **Technical design risk of the project is Substantial.** Measurement of improvements in learning outcomes poses a substantial risk. GALOP is targeting an increase in P4 English and mathematics proficiency in 2024 from a baseline value collected in 2021 or 2022. Trends from the NEA assessment shows an average 7 percentage point fall in percentage of P4 pupils with proficiency in mathematics and English between 2016 and 2018, implying that any increase represents a considerable stretch for the system. This risk is partially mitigated by incentivizing improvements in learning outcomes only at the end of the project, and further by rewarding any improvements rather than a prescribed target. High-stakes learning outcome assessments linked to DLIs could lead to false reporting, exam fraud, and a lack of disbursement if targets are not achieved. Digitizing reporting and assessment data and creating new national assessments with requisite training and sensitization for all stakeholders would be required. The credibility of national assessments would need to be guarded closely to ensure success in meeting learning outcomes. In addition, developing an accountability dashboard for monitoring could be delayed if a comprehensive system is pursued from the start, rather than a system that builds different aspects of functionality over time.

108. **Institutional capacity for implementation and sustainability risk is Substantial.** The project's reliance on multiple institutions and agencies, several of which are newly established (Reform Secretariat, NTC, NaCCA, and NIB), may have an impact on the coordination of activities. The PTT would be established (and strengthened by TA as needed) with representatives from key agencies. Coordination would be led by the Ministry and the project would benefit from the Reform Secretariat's technical expertise as needed. A Project Implementation Manual (PIM) will be developed before effectiveness which will clarify the roles of implementing institutions and agencies. Frequent teacher transfers may hinder implementation of school-based activities. The rollout of new teacher policies would be expected to help reduce high turnover. The roll out of accountability activities in all districts/schools would ensure increased capacity/orientation to project objectives nationally. There is the risk that with the completion of the project, some of the reforms will be discontinued due to insufficient budget or to a change in administration that could lead to a shift in priorities. The project would encourage the Government to rigorously evaluate new reforms and incorporate budget lines (non-salary) that support scalable activities at the end of the project. Mainstreaming the project's implementation within existing structures will further strengthen implementation capacity and ensure technical and institutional sustainability.

Results Framework
COUNTRY: Ghana
Ghana Accountability for Learning Outcomes Project

Project Development Objectives(s)

To improve the quality of education in low performing basic education schools and strengthen education sector equity and accountability in Ghana.

Project Development Objective Indicators

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Improve quality of education in low performing basic schools							
Increased percentage of targeted schools with teaching practices meeting inspection standards (percentage point increase from baseline) (Percentage)		0.00	0.00	0.00	10.00	0.00	25.00
Students benefiting from direct interventions to enhance learning (CRI, Number)		0.00	1,106,250.00	1,811,250.00	1,940,625.00	2,199,375.00	2,328,750.00
Students benefiting from direct interventions to enhance learning - Female (CRI, Number)		0.00	533,125.00	906,625.00	970,313.00	1,099,688.00	1,164,375.00
Strengthened education sector equity							
Increased percentage of targeted KG and primary		75.00	78.00	81.00	84.00	87.00	90.00

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
schools with pupil trained teacher ratio below 50:1 (Percentage)							
Strengthened education sector accountability							
Increased number of schools using accountability dashboard data during cluster level meetings (Number)		0.00	0.00	5,000.00	8,000.00	12,000.00	15,000.00

Intermediate Results Indicators by Components

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Strengthen teaching and learning through support and resources for teachers							
Teachers recruited or trained (CRI, Number)		0.00	36,000.00	60,000.00	65,000.00	70,000.00	76,000.00
Number of teachers trained (CRI, Number)		0.00	36,000.00	60,000.00	65,000.00	70,000.00	76,000.00
Teachers recruited or trained - Female (RMS requirement) (CRI, Number)		0.00					35,000.00
Number of teachers recruited (CRI, Number)		0.00					0.00
Share of targeted schools using targeted instruction TLMs (percentage) (Percentage)		0.00	0.00	50.00	70.00	80.00	100.00
Strengthen school support, management and resourcing							

Indicator Name	DLI	Baseline	Intermediate Targets				End Target
			1	2	3	4	
Number of targeted schools utilizing at least 80% of learning grant (Number)		0.00	0.00	7,000.00	7,500.00	8,500.00	9,000.00
Number of targeted schools with continuous coaching and mentoring support (Number)		0.00	0.00	5,000.00	7,000.00	8,000.00	10,000.00
Strengthen accountability systems for learning							
Survey on beneficiary satisfaction conducted (Yes/No)		No	No	No	Yes	No	Yes
Number of schools with SMC member attending cluster level meeting to discuss accountability dashboard data (Number) (Number)		0.00	0.00	2,000.00	5,000.00	8,000.00	10,000.00
Percentage decrease from baseline in national teacher absenteeism rate (Percentage)		0.00	0.00	0.00	10.00	20.00	30.00
Percentage increase from baseline in national student attendance rate (Percentage)		0.00	0.00	0.00	15.00	20.00	25.00
Timely disbursement of capitation grants (Yes/No)		Yes	Yes	Yes	Yes	Yes	Yes

Monitoring & Evaluation Plan: PDO Indicators					
Indicator Name	**Definition/Description**	**Frequency**	**Datasource**	**Methodology for Data Collection**	**Responsibility for Data Collection**
Increased percentage of targeted schools with teaching practices meeting inspection standards (percentage point increase from baseline)	Percentage point increase from baseline (to be determined in 2020) in percent of targeted schools with "good" inspection score (averaged score of 3 or higher, averaged across Math and English lessons observed)	Biennial	NIB Harmonized Lesson Observation Tool	This data will be collected through flash surveys conducted over a period of no more than one month in a sample of targeted schools. At least one Math and one English lesson will be observed in each school sampled.	NIB
Students benefiting from direct interventions to enhance learning		Annual	EMIS	Annual School Census data collection	MOE
Students benefiting from direct interventions to enhance learning - Female		Annual	EMIS	Annual School Census data collection	MOE
Increased percentage of targeted KG and primary schools with pupil trained teacher ratio below 50:1	PTTR for each targeted KG is total enrolment in KG1 and KG2 divided by the total number of trained KG teachers in the school. Similarly, PTTR for each targeted primary school is total enrolment in P1 to P6 divided by the total number of trained primary teachers in the school. A trained	Annual	EMIS	Annual School Census data collection	**MOE**

	teacher is one that has a Diploma in Basic Education or a higher qualification. The share of KGs with PTTR below 50:1 as a ratio of all targeted KGs and the share of primary schools with PTTR below 50:1 as a ratio of all targeted primary schools is averaged to report on this indicator.				
Increased number of schools using accountability dashboard data during cluster level meetings	Cluster level meetings will be held at least once a year to discuss data on key dashboard indicators (teacher absenteeism, student attendance, capitation grant amount, CS visits). These visits will be supported by the Districts. CSs will maintain minutes of the meetings, which will be collected at the district office.	Annual	Digitized records/minutes of cluster level meetings	CSs organizing cluster-level meetings will use digitized monitoring to record attendance and outcomes from minutes. They will also maintain minutes of meetings.	District Directors and MOE

Monitoring & Evaluation Plan: Intermediate Results Indicators

Indicator Name	Definition/Description	Frequency	Datasource	Methodology for Data Collection	Responsibility for Data Collection
Teachers recruited or trained		Annual	NTC Teacher Training	DTSTs compile reports on teacher trainings	GES, NTC

			Logbook	conducted at district/cluster level. This is supplemented by reporting on the NTC training logs.	
Number of teachers trained					
Teachers recruited or trained - Female (RMS requirement)		Annual. The project is not anticipating recruitment of new teachers. This indicator would track that almost half of all teachers trained would be female.	NTC teacher logbook	DTSTs reports supplemented by reporting on the NTC training logs	GES, NTC
Number of teachers recruited					
Share of targeted schools using targeted instruction TLMs (percentage)	Number of schools as a share of targeted schools that are observed using	Annual	Targeted instruction lesson	CS observes delivery of targeted instruction in each targeted school at	GES

	TLMs for targeted instruction during lesson observations conducted by Circuit Supervisors		observation tool	least once a year and records use of TLMs in the digitized tool. This data is compiled centrally.	
Number of targeted schools utilizing at least 80% of learning grant	Number of targeted schools using 80% of the learning grant as a share of total targeted schools in each year. This indicator will be measured at the end of the school year.	Annual	HT report on grant utilization	School report on grant utilization; verified by CS	GES
Number of targeted schools with continuous coaching and mentoring support	CSs conduct coaching visits based on classroom lesson observations. Each school must receive at least 3 coaching visits annually.	Annual	CS digital reporting with GPS and time stamp.	CS visit schools at least 3 times each year and conduct a lesson observation using digitized tool. This data is then compiled centrally.	MOE
Survey on beneficiary satisfaction conducted	This indicator will measure whether a survey on project beneficiary satisfaction was conducted and results uploaded to accountability dashboard for dissemination and monitoring during cluster-level meetings.	Biennial	Beneficiary survey	Survey conducted for project beneficiaries in MOE/GES HQ, region, district, cluster, schools (teachers, students) and communities.	MOE
Number of schools with SMC member attending cluster level meeting to discuss accountability dashboard data (Number)	Cluster level meetings will be held at least once a year to discuss data on key	Annual	Digitized records/ Minutes of	CSs organizing cluster-level meetings will use digitized monitoring to	District Directors, MOE

	dashboard indicators (teacher absenteeism, student attendance, capitation grant amount, CS visits). These visits will be supported by the Districts. CSs will maintain minutes of the meetings, which will be collected at the district office. This indicator will measure those schools for which an SMC member attended the meeting.		cluster level meetings	record attendance and outcomes from minutes. They will also maintain minutes of meetings.	
Percentage decrease from baseline in national teacher absenteeism rate	This indicator will measure the number of teachers absent (without valid excuse/ permission from the school head) on a given day as a percentage of total teachers in a school.	Annual	NIB/CS reports	This data will be collected through unannounced NIB/CS visits in a sample of schools.	NIB
Percentage increase from baseline in national student attendance rate	This indicator will measure the number of students present on a given day as a percentage of total enrolment in a school.	Annual	NIB/CS reports	This data will be reported by the school head on the accountability dashboard and averaged across the school year for each school. NIB/CSs will validate attendance data reported on the dashboard during regular school visits.	NIB

Timely disbursement of capitation grants	Timely disbursement implies a delay of no more than one term	Annual	GIFMIS	Data is compiled by GES Budget department for each tranche of disbursements	GES (Budget)

ANNEX 1: Implementation Arrangements and Support Plan

COUNTRY: Ghana
Ghana Accountability for Learning Outcomes Project

Project Institutional and Implementation Arrangements

1. **The implementation of the GALOP will be mainstreamed in the MoE and the GES.** Project coordination will be led by the MoE. The PTT, comprising the MoF, MoE, GES, NaCCA, NIB, and NTC staff will be set up to lead implementation. The project coordinator will coordinate with the relevant institutions and liaise with management on approval of agreed activities for speedy implementation. Key institutions for purposes of GALOP implementation include three semi-autonomous agencies that fall under the purview of the MoE: (a) the NaCCA, which has completed and is rolling out the new standards-based curriculum that teachers will be trained on under Component 1; (b) the NTC, which is in charge of teacher licensing and will therefore be instrumental in the design of the teacher training under Component 1, as well as policy reform to improve teacher performance under Component 3; and (c) the NIB, which is in charge of school supervision, and will provide support to the design and implementation of the inspection tool under Component 3. Where necessary, TA would be recruited to augment the technical team's activities. A POC comprising the Minister, deputy minister, director general, deputy director general, chief director, and/or other delegated officials will provide oversight for the entire implementation team. Innovations in improving project implementation will include direct disbursement of learning grants to school bank accounts with the collaboration of district offices, effective communications strategy for community engagement and dissemination of policy reforms, digitized process monitoring, and efficient procurement at the school level using school/community-based procurement and 'last-mile' delivery of centralized procurement only where necessary with items delivered to basic schools.

2. **Implementation will be led by the MoE and the GES, both of which have successfully implemented World Bank-financed projects over many years.** Since 2014, the MoE and GES have been implementing the SEIP using an RBF modality (IPF with DLIs) and have adequate staffing and capacity for FM, procurement, safeguards, and M&E. The MoE will oversee the administration of all components under GALOP. The NTC, NaCCA and GES will be responsible for the implementation of Component 1; the GES will be primarily responsible for implementation of Component 2; and NaCCA, NIB, GES (HR), and NTC will be primarily responsible for Sub-components 3.1, 3.2 and 3.3 respectively. Implementation of Component 4 will be led by the MoE. However, given the range and sequencing of activities that will be required to achieve the proposed results, all these agencies will need to coordinate and collaborate on annual work planning, budgeting, reporting, and expenditure tracking. Project coordination would be mainstreamed using existing government systems and staff in the MoE with clear responsibilities delineated for program implementation. The position of Project Coordinator will be competitively selected using World Bank guidelines if the position will be financed under the GALOP. GALOP will finance additional capacity to support coordination and implementation, as needed complementing planned TA from other DPs (for example, DFID, USAID, UNICEF, and JICA).

3. **Implementation arrangements for Component 1: *Strengthen teaching and learning through support and resources for teachers*.** NaCCA will lead development of the new curriculum and training

materials for national rollout; harmonize and develop targeted instruction materials; and develop the assessment framework aligned with the new curriculum. This may also involve adapting targeted instruction materials for KG1 to P2 in to English, as they have currently been developed in Ghanaian local languages. The NTC will coordinate the innovative delivery of INSET, with digital materials being developed by the Center for National Distance Learning and Open Schooling (CENDLOS). These will include WhatsApp reminders, digital training, and videos. The GES will lead the training of DTSTs to deliver training at decentralized levels. They will also lead in the development of the professional learning calendar, working closely with regional officers and DTSTs for effective communication to regions, districts, and individual schools. NTC will be responsible for collecting information on the type of training undertaken by each teacher by consolidating teacher training logbooks digitally.

4. Training of support teams for school-based support and instructional leadership will be led by the GES. Training will be delivered to curriculum leads, circuit supervisors, school heads, DTSTs, district directors, district deputy director (Monitoring and Supervision) and basic schools coordinators. The training will take on a cascade training model. The 10 regions will be divided into four zones, and the zonal trainings of trainers of trainers (ToTs) will be coordinated by the GES and NTC. District-level trainings will be coordinated by the ToTs. The trainings will be activity-based and will be supported by digital training materials. All training materials will be uploaded on the ministry website to make them accessible to teachers, district support teams, and ToTs. Development of the training materials will be led by NaCCA with support from the NTC and CENDLOS.

5. The GES, NaCCA, and EMIS will work together to determine the quantities of teacher guides to be procured for the rollout of the new curriculum. NaCCA will provide the core set of materials required for targeted instruction and the GES will determine the quantities of e-readers and workbooks to be procured. The GES, Special Education Department (SPED), and EMIS will determine types and quantities of TLMs to be procured for KG and special education. All of these materials will be centrally procured by the GES Supply and Logistics Unit. Distribution will be done using 'last-mile' distribution to the school and verified by district level logistics officers on a sample basis. The regional early childhood development (ECD) officers and the GES develop a list of materials for KG classes that are easily available in local markets which can be included in the learning grant guidelines for procurement at the school level.

6. **Implementation arrangements for Component 2: *Strengthen school support, management and resourcing*.** A core team formed by GES Budget, Basic Education, NaCCA, M&E, and GES Supplies and Logistics Unit will lead the development of the guidelines for the learning grants. SPIPs will be developed at the school level and procurement will be done by schools. Circuit supervisors and DTSTs will support schools in preparing proposals, including conducting training on the guidelines. Each school will conduct a self-assessment that will inform the development of three-year SPIP, based on which they will sign a performance agreement with the DEO. The learning grant would be attached to the three-year SPIP, with funding disbursed annually, conditional on grant utilization rates from the previous disbursement, after the first year. There will be an annual internal audit coordinated by the GES. Districts will be supported for incremental costs through the ADEOPs. They will support schools in the development and consolidation of the proposals for learning grants, training of SMCs, and supervision and monitoring of grant utilization. Tablets or mobile applications will be procured/ developed centrally to upload SPIPs and learning grant information. The MoE and GES information and communications technology (ICT) units will design the templates. District officers will use existing guidelines, developed under the JICA-supported project, for

training and engaging SMCs in school SPIP development. Community-Driven Development Procurement Guidelines will be used for any procurements from resources mobilized by the community. An independent firm will be hired to set validation protocols for the reporting and verifying utilization of learning grants before the disbursements of subsequent annual tranches. The firm will further validate the utilization of learning grants and conduct a fiduciary audit in at least 10 percent of beneficiary schools.

7. **Implementation arrangements for Component 3: *Strengthen accountability systems for learning*.** Table 1.1 below provides the key bodies leading implementation of Component 3 activities.

Table 1.1. Component 3 Lead Implementing Agencies

Intervention	Implementing Body
Sub-component 3.1: Development and implementation of an accountability for learning framework	
Harmonization of all inspection tools aligned to meet the needs of schools, districts, regions, and ministry levels	NIB/NTC/NaCCA/ GES/Pre-Tertiary Directorate
Continuous Training Programmes/Use of ICT Experts	GES
Digitization of tools where possible to ensure more timely collection and analysis of data (for example, digitized collection including lesson observation assessments)	NIB
Creation of an accountability dashboard	GES/MoE/NIB/NTC/NaCAA
Continuous and robust communication to stakeholders	MoE/NIB/GES/Reform Secretariat
Regular monitoring and reporting on results from inspection findings and dashboard updates	NIB/GES/ Pre-Tertiary Directorate
Sub-component 3.2: Development and implementation of a national assessment strategy	
National assessment strategy developed and endorsed	NaCCA
P4 mathematics and English assessment tools and test item bank developed and approved	
National assessment piloted at P4 level in a district-representative sample of schools	
National assessment database developed and linked to the EMIS/PBME	
SRC on assessment results disseminated to targeted schools	GES/NIB/Statistics Research, Information Management and Public Relations (SRIMP)
Sub-component 3.3: Policy reforms for efficient education sector human resource management, administrative and leadership practices	
Teacher recruitment, deployment, transfer, and incentive policies	GES
Merit-based selection of head teachers	
Introduction of an administrative fast track for teachers serving in rural schools	
Staffing and roles of GES and DEOs based on a functional analysis of what is required to improve learning outcomes	
Dedicated school leadership program and accompanying qualifications for head teachers	
Review of instructional calendar to include dedicated time for teacher professional development	GES/NTC

8. **Implementation arrangements for Component 4: *Technical assistance, institutional strengthening, monitoring and research*.** This sub-component would fund institutional strengthening and consultancy services to support the effective implementation of Components 1, 2 and 3. This would include TA for quality assurance in: (a) the development and digitization of INSET modules and school leadership and management training; (b) harmonization and digitization of school inspection and lesson observation tools; (c) development of inspection data analysis strategy and operationalization of inspection framework and policy; (d) integrated accountability dashboard and digitized EMIS and mobile school card; (e) consolidation of various data systems (EMIS, IPPD, WAEC, and inspection); (f) development of the assessment framework and operationalization plan for the biennial national assessment; and (g) development of the points based CPD framework. TA will also be provided to support the development of a communications strategy, which would deliver key messages to teachers, parents and students.[67] In addition, training for gender and disability inclusiveness in the implementation of the RBF components will be funded under this sub-component, including analysis of learning assessment data to provide better feedback to teachers on inclusive education and revisions to teachers handbook/code of conduct to address GBV issues. Strengthening of fiduciary systems will be supported by procurement, financial and safeguards audits under this sub-component. Each of these TA will report to the lead implementing body of the intervention they support.

9. This sub-component would support institutional strengthening and capacity building for (a) NaCCA through training in test item bank development, item response theory, analysis of test items, and generation of feedback loops on curriculum implementation; (b) NIB through establishment of inspection protocols aligned with international benchmarks; and support of incremental operational costs to conduct lesson observations to report on the Results Framework and DLI achievement; (c) the NTC through the digitization of teacher training logs and linkage with HRMIS for points-based CPD; and support of incremental operational costs to monitor teacher training on the new curriculum to report on DLI achievement; and (d) the GES through operational costs to implement the communications strategy and undertake FM, procurement and safeguards trainings and audits; and through training in M&E and in the analysis of annual school census data with linkages to other datasets.

10. Additionally, the sub-component would support CSO engagement in the monitoring and supervision of the project by funding CSOs to conduct annual public expenditure surveys on learning grants and project midterm and end line citizen satisfaction surveys.

11. Table 1.2 provides a summary of lead implementing agency by intervention.

Table 1.2. Lead Implementing Agency by Component

Component/Sub-component	Lead Implementing Agency
Strengthen teaching and learning through support and resources for teachers	
Teacher capacity building and innovative delivery of in-service training	NaCCA on new curriculum GES on INSET
Training support teams for school-based support and instructional leadership	GES

[67] Glennerster and Rudge (2019) find that giving information on education benefits (in terms of income), costs, sources of funding available, and school quality to parents and children, via texts, videos, meetings or reminders, was one of the most cost-effective interventions for improving learning outcomes.

Provision of teaching and learning materials	GES
Strengthen school support, management and resourcing	
Learning grants to improve learning outcomes	GES
Support to school level supervision and monitoring	GES
Strengthening SMCs for enhanced citizen engagement	GES
Strengthen Accountability Systems for Learning	
Development and implementation of an accountability for learning framework	GES
Development and rollout of a national assessment strategy and implement biennial learning assessments	NaCCA
Policy reforms to improve teacher performance	NTC
Technical assistance, institutional strengthening, monitoring, and research	MoE

Financial Management

12. The implementation of the FM arrangements under this results-based IPF will follow country system arrangements with oversight responsibilities by the MoF and CAGD. The project's FM arrangements will as much as possible follow the full use of country systems for Component 1, 2 and 3 and adopt some aspects of the country systems for Component 4.

13. The GES, NaCCA, NTC, and NIB are the main implementing agencies whiles the MoE plays a supervisory role of all components under GALOP. Given that all beneficiary agencies of the project fall under the auspices of the MoE, it will be the only implementing agency receiving funds to pay for activities under Component 4 and also receiving funds when results are verified and approved under Components 1 to 3. With this arrangement, the MoE Director of Finance, together with CAGD staff, will have an oversight role for various aspects of the project's FM arrangements. Throughout implementation, the MoE will be required to ensure that there are adequate FM arrangements and the project complies with the financial covenants detailed in the Financing Agreement.

14. From an FM perspective, the key strength of the project is that there is a solid foundation for a strong legal and regulatory framework for public financial management (PFM) in Ghana and this is exemplified by the various laws, regulations, and manuals already in place, for example, the Public Financial Management Act (PFMA), (Act 921). In its quest to improve the robustness of the PFM systems and processes, the Government continues to pursue the implementation of actions to prevent an uncontrolled accumulation of arrears by introducing the commitment control module of the Ghana Integrated and Financial Management Information System (GIFMIS), and strengthening the cash forecasting and management processes along with the funds release management process, to have a better impact on predictability of resource flows to service delivery agencies – a feature which will be very critical to the success of the RBF modality adopted for implementation of this project. Key risks identified with GIFMIS include delays in payments, system downtime, and internet connectivity issues. Detailed mitigation measures can be found under Accounting Arrangements in this annex.

15. As a government agency, the MoE follows the budget preparation guidelines according to the PFMA and the annual budget guidelines issued by the MoF. However, since GALOP is an RBF investment

lending operation, the budgeting of all program expenditures will constitute part of the Government's budgeting process. Components 1, 2 and 3 program expenditures will be captured in the GoG budget according to functional and object classification codes to capture expenditures for the EEPs and the TA consistent with the Government Charter of Accounts. These will form the basis of financial reporting and monitoring of budget appropriations, revisions, releases, and expenditures.

16. The EEP is comprised of the expenditures on salaries incurred and paid by the MoE under compensation for Basic Education employees covering kindergarten, primary and lower secondary level employees. In terms of monitoring and validation processes, EEPs i.e. salaries of teachers are paid by CAGD, and as part of Government's own budgetary controls there are period verification and validation of the number of teachers on Government payroll. The EEP verification will be done with the monthly Budget Execution Reports which indicate how much of the approved budget was released and how much went into actual expenditure of salary payments to MoE employees. In addition, the Ghana Audit Service undertakes periodic verification and validation on the number of staff on Government payroll to ensure that salaries paid are for eligible public servants on active payroll. The World Bank supports CAGD and Ghana Audit Service (GAS) as part of its PFM reforms.

17. Specifically, for this project, before the start of the budget cycle, the project coordinator/(s) will have discussed the various activities and work programs with the respective implementing and beneficiary agencies and this will form the basis for preparing detailed AWP&Bs. Consolidated AWP&Bs will be submitted to the POC for review and approval. Approved budgets will then be submitted to IDA for a 'no-objection' under Component 4 to ensure that the planned activities are in line with the project objectives. The submission should be no later than November 30 (at least one month before the beginning of each GoG fiscal year. Based on the approved AWP&B, a Procurement Plan has been delivered based on yearly implementation. For Component 4, expenditures under each disbursement category will be monitored by the MoE, who will submit interim financial reports (IFRs) with any significant variances explained and the team will take prompt actions to correct any identified significant material variance.

18. Given that the project's FM arrangements will follow the country systems, the MoE Director of Finance will be responsible for overall fiduciary aspects of the various components during implementation. The primary responsibility of the Director of Finance is to ensure that throughout implementation there are adequate FM systems in place which can report adequately on the use of project funds. The EEPs assessed by the Government's audit and the EEP process is currently assessed as satisfactory by the team.

19. The Director of Finance is supported by two principal accountants, and one of whom will be assigned as the dedicated project accountant responsible for accounting and reporting on project activities. The dedicated project accountant will also facilitate interaction with the World Bank on project accounting and FM issues.

20. The MoE currently prepares financial reports using Microsoft Word and Excel. Given that the GoG recently introduced GIFMIS and has rolled out a feature which allows for customization of the software to account for donor-funded activities, World Bank has advised the MoE to transition from a manual process to the GIFMIS software. The system will be used to process and report on GALOP financial transactions to minimize the risk of human error and delays in financial reporting. The MoE engaged the GIFMIS Secretariat to migrate to GIFMIS and to facilitate the configuration, the GIFMIS Secretariat will ensure that the Chart

of Accounts includes EEP codes for key activities and budget line items under the project. The GIFMIS configuration and end-user training expenditure will be eligible under Component 4.

21. Once implemented, GIFMIS will be the primary basis for transaction recording to enable the timely preparation of monthly budget execution reports related to the overall program expenditures, the EEPs, and the TA expenditures and accounting for government finances, managed under the auspices of the CAGD. GIFMIS is maintained by the GIFMIS Secretariat and runs on the Ghana National Data Center platform. GIFMIS has advantages, including reducing human intervention in the payment process, but there have been recent concerns by stakeholders including system down time, internet connectivity, and system closure issues which delay payments to suppliers and may affect operations at the MoE, including the project. Challenges to GIFMIS are detailed in the table 1.3.

Table 1.3. Challenges and Mitigation Measures for the Use of GIFMIS

Item no.	Stakeholder Concern	GIFMIS Secretariat Response
1	System closure resulting in data processing delays.	System closure is required at specific times of the subsequent fiscal year to prepare public accounts. GoG users are allowed 1 – 3 months after the close of each fiscal year to ensure that all transactions relating to that year are captured in the system and included in the final public accounts. The MoE Director of Finance will be responsible for ensuring that all transactions relating to a specific fiscal year are captured into GIFMIS ahead of the period close date set by the GoG.
2	System downtime resulting in data processing and payment delays.	The GIFMIS Secretariat indicated that system downtime does occur on some occasions but is short-lived. Given that the data is stored in the cloud, information is made available to end users as soon as the system is up and running. In terms of safeguarding data, the secretariat has good data backup procedures which include, hot and cold backups and disaster recovery procedures.
3	Internet connectivity issues resulting in delayed financial reporting	The Secretariat noted that during support and maintenance visits, the internet issues reported by users are mostly due to non-payment of internet fees, rather than system issues. The MoE has been urged to maintain a virtual private network, or modem to have alternative internet sources when the National Information Technology Agency (NITA) system is down.

22. The secretariat indicated that delays in payment are largely due to lack of GoG funding rather than system issues. The secretariat is confident that once the approved project budget is uploaded into GIFMIS and funding is made available, there should be very little or no delays in payments.

23. The project's internal controls will rely on the Government's established accounting and internal control guidelines as documented in Internal Audit Manuals and PFMA Act 921. Currently, the internal control features within the GoG provides for pre-auditing of government expenditure transactions. This form of expenditure validation, as part of the payment processing arrangements, will continue and will cover all expenditures, before their approval, including those under the project. In addition, the

expenditure initiation and related controls will follow the authorization and approval processes as within MoE.

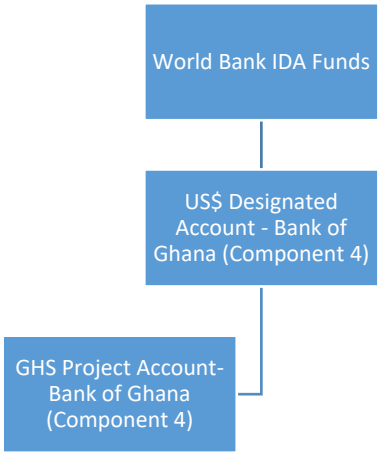
24. The MoE has a functioning internal audit unit which helps to promote a sound control environment for transaction processing. All 22 agencies under the MoE are mandated to provide copies of their financial reports to the MoE HQ Chief Internal Auditor for review. The MoE HQ Internal Audit Unit is managed by the chief internal auditor who is supported by approximately four experienced Internal Audit staff. The internal audit unit is responsible for pre-audit of all payments vouchers before making payments to approved beneficiaries. They also perform post audit reviews of universities and technical institutions. However, they can audit primary schools as 'special audits' upon request from the director general.

25. The chief internal auditor is required to include GALOP in the MoE's internal audit work plan and therefore, the internal audit team is required to periodically perform risk-based audits to monitor project activities and provide periodic internal audit reports. The MoE will maintain a fixed assets log for assets to be acquired or created using project funds. The internal audit will submit at least one internal audit report to the World Bank each year.

26. Given that all beneficiary agencies responsible for activities under Components 1, 2, and 3 fall under the auspices of the MoE, for funds flow, the MoE will be the only implementing agency receiving IDA funds for Components 1, 2, 3 and 4. Proceeds of the credit will be used by the project for eligible expenditures as defined in the Financing Agreement and further detailed in the respective approved AWP&Bs.

27. The design features of the proposed project cater to the requirements of a *hybrid structure*, all within the IPF lending instrument of the World Bank. This basically involves an RBF (DLI/DLR)– financing approach for Components 1 to 3 and a traditional investment financing approach for Component 4. For ease of implementation, the MoE will maintain one US dollar DA to receive funds from IDA for Component 4 and also maintain a local currency project account to support Component 4 operational activities. Both accounts will be opened at the Bank of Ghana.

Figure 1.1. GALOP Flow of Funds



28. The US dollar DA and GHS project account will be managed by the MoE Director of Finance with prior approval of all transactions by the Chief Director. Once the accounts are opened by the MoE, the MoF is required to provide IDA with the bank account details and a list of designated signatories for the project to be set up in Client Connection.

29. The MoE through the MoF is required to notify the World Bank of any changes in signature authority, either electronically in Client Connection or through an updated authorized signatory Designation Letter. The procedures and modalities, signatories, and so on, for operating the DA and project account will be further clarified and outlined in the PIM.

30. With regard to the management of exchange losses, the MoE is required to take steps to ensure that disbursements for GALOP occur in a timely manner in order to quickly draw down funds and minimize the impact of the SDR/US$ exchange differences on the project. One of the key focus areas will be to ensure that independent verifiers are provided with information to perform their verification and submit their findings to the World Bank on time.

31. Funds will be disbursed directly from the World Bank to the Borrower's single treasury account once DLRs have been achieved and verified for Components 1-3. For Component 4, funds will be disbursed directly from the World Bank to the project's US dollar DA maintained at the Bank of Ghana. Once funds are received into the US dollar DA, they can be moved into a local currency project account maintained by the MoE. The MoE will be required to prepare monthly bank reconciliations of the DA (by the project accountant and approved by the MoE Director of Finance). The report-based method of disbursement will apply for the IPF aspect of the project and other methods of disbursement will include Advances, Direct Payments, Special Commitments and Reimbursements.

32. The request for funds will be done based on Withdrawal Applications duly signed by the authorized signatories and supported by unaudited IFRs using the report-based modalities and will include Budget Execution Reports (BERs) generated from GIFMIS together with forecast expenditures against achievement of DLRs.

33. Applications and necessary supporting documents will be submitted to the World Bank electronically, in a manner and on terms and conditions specified by the World Bank, through Client Connection. The World Bank establishes a minimum value for applications for Reimbursement, Direct Payment, and Special Commitment. The World Bank reserves the right to not accept applications that are below such minimum value.

34. The total resource allocation (including the GPE funding) for Components 1, 2 and 3 is US$160 million against a total of five DLIs and US$13.9 million for Component 4. For GALOP, several DLI targets will be scalable, allowing disbursement in proportion to the fraction of the result achieved. According to the design, disbursement under Components 1–3 provides for achievement of a total of five DLIs which will be measured and valued in monetary terms for each respective year through a set of identifiable and measurable DLRs over the five-year period. These DLIs are considered significant indicators of performance that will influence behavioral and policy reforms required for achieving visible outcomes under GALOP. For each component, the respective DLI has been defined into several achievable DLRs which will be translated into variable prices as the equivalent value for achieving the DLR in each year of implementation.

35. Meeting the defined DLRs as identified in the PAD and in the Financing Agreement will constitute the primary basis for triggering credit disbursements under the project's EEPs, that is, Components 1, 2 and 3. The DLRs will be individually priced and the underlying principle will be to disburse after project effectiveness.

36. With regards to retroactive financing, payment may be made prior to the Signature Date, up to an aggregate amount not exceeding SDR 25,000,000 (US$34,755,250 equivalent) for payments made on or after January 1, 2019, for EEPs for the following DLRs: 1.0 (a) and (b), 2.0 (a) and (b), 3.0, 4.0, and 5.0.

37. Subsequently on a half-yearly basis, the Borrower will provide satisfactory documentary evidence including (a) acceptable IFRs; (b) EEP spending reports as verified by the Auditor General and in compliance with the verification protocol; (c) evidence of independent verification of the set of DLRs for that year which have been achieved; and (d) acceptance of results by the World Bank. It is expected that results will be verified half-yearly; however, at any point that the Borrower has met results that have been validated, the MoE may submit a Withdrawal Application, supported by all the documents listed above.

38. In terms of **DLI verification**, the primary responsibility for verifying that the conditions for disbursement are met, lies with the MoE and it is important to establish credible mechanisms for this. Such mechanisms should be independent of the implementing agency and may use private sector or non-governmental entities as well as government bodies. In the case of GALOP, IVAs will be recruited to review the achievements and evidence provided by the Government information systems.

39. The project independent verification report will be submitted as and when results are achieved, or half-yearly, and include evidence of achievement presented to the World Bank for review before disbursement. The IVA will also be tasked with the responsibility to report on any challenges that are preventing the DLIs from being met. The DLI verification process will follow the required World Bank guidelines on IPF with DLIs. The verification protocol for each DLI should include definition of indicator and targets, baseline data, source of data, frequency and timing of reporting, reporting responsibility including internal checking, and methodology for verification. Once the DLR is met, the MoE can submit documentation to confirm achievement to claim the agreed amount. Once approved, these reports will then form the basis of reimbursing funds to MoE.

40. Where the achievement of a DLR cannot be verified, an amount equivalent to the DLR price will be withheld or considered as undocumented and outstanding obligation on the Borrower. This amount will be paid at any later date, during project life, when such achievement can be verified. The task team may consider that a later achievement of the DLR performance would not qualify for disbursement against the unmet DLR if it determines that the on-schedule achievement of the DLR is critically fundamental to achieving the overall objectives of the project.

41. The EEP spending report represents the underlying expenditure incurred by the Government to achieve the DLRs. The overall government program of expenditures to be supported under the component is given in table 1.4. As the selected EEP items in the Chart of Accounts of the Government (listed in table 1.4), are not procurable items, the expenditure will not require any procurement actions under the World Bank's Procurement Guidelines.

Table 1.4. Eligible Expenditure Programs

Budget Code	Description
02302001-2111001	Compensation of Employees (Kindergarten Salaries)
02302002-2111001	Compensation of Employees (Primary Salaries)
02302003-2111001	Compensation of Employees (Junior High School Salaries)

Modalities for Disbursements Under Component 4

42. Component 4 will be implemented under the principles of traditional IPF arrangements using the report-based disbursement arrangements. Under this approach, the allocated resources will be advanced to the MoE's US dollar DA based on a six-monthly forecast of expenditures and replenished quarterly for further periods of six months using IFRs generated from the MoE's GIFMIS software. The IFRs (including the 'procurements subject to prior reviews' and 'DA reconciliation statement') will serve as the basis for requesting for advances and also for documentation. The initial disbursement will be based on the consolidated expenditure forecast for six months, subject to the World Bank's approval of the estimates. Subsequent replenishments of the DA would be done half-yearly based on the forecast of the net expenditures for the subsequent half-year period. It must be emphasized that for Component 4, the World Bank Procurement Guidelines shall govern all the procurement activities.

43. If ineligible expenditures are found to have been made from the DA, the Borrower will be obligated to refund the same, and IDA will have the right to suspend disbursement of the funds if reporting requirements are not complied with as provided for in the Financing Agreement. The World Bank will periodically assess the adequacy of FM systems and this will form the basis of any change in disbursement methods.

Disbursement Categories

44. Based on the project design, there will be only two disbursement categories. The disbursement category for Components 1, 2, and 3 will be DLI/DLR-based and the disbursement category expense line will be for the selected EEPs. For Component 4, there will be a single *category* – 'goods, works, consulting services, non-consulting services, training, research, and operating expenses'.

Table 1.5. Disbursement Categories

Category	IDA Allocation (SDR)	IDA Allocation (US$ millions)	% of expenditures to be financed by IDA (inclusive of Taxes)
(1) EEPs under Components 1, 2, and 3	102.15	142.00	100.00
(2) Goods, non-consulting services, consultants' services, operating costs, and training for Component 4	5.75	8.00	100.00
Total Amount	**107.90**	**150.00**	

45. The MoE will be responsible for preparing semi-annual unaudited IFRs for Component 4 and will submit the IFRs to the World Bank no later than 45 days after June 30 and December 31 of each year. The project coordinator/(s) shall review and sign off on the IFR before the MoE Director of Finance submits the IFR to the World Bank. The existing IFR arrangement, including the IFR format currently in use at the MoE for SEIP Component 2, would apply for Component 4 of the GALOP project.

46. For Component 4, the MoE Director of Finance will be responsible for ensuring that these reports – unaudited IFRs – are prepared on time and submitted to all stakeholders including the World Bank in line with the timelines as per the Financing Agreement. These reports should show clearly, as a minimum,

(a) A statement of sources and uses of funds showing the use of funds by components as per the PAD *(useful in monitoring implementation of the components)*
(b) A statement of sources and uses of funds showing the expenditure by category as per the Financing Agreement *(for allocating expenditure as per the Financing Agreement)*
(c) A budget variance report comparing the utilization of approved budget against expenditure *(useful to the task team leader to monitor implementation and fund utilization)*
(d) A DA reconciliation statement
(e) A list of payments (made in that quarter) made against contracts subject to the World Bank's prior review (no-objection)
(f) List of current commitments, that is, signed and ongoing contracts
(g) A cash forecast for six months (to be the basis of requesting for additional funding)
(h) For DLI components, in addition to the above, the MoE should provide copies of EEP spending reports.

47. Formats of the various periodic financial monitoring reports have been discussed with the client during the preparation and appraisal. Similar reports have been used by the Client on other IDA funded projects such as the SEIP (P145741). These formats will be generated from the FM system The financial reports are designed to provide relevant and timely information to the project management, implementing agencies, and various stakeholders monitoring the project's performance.

48. In addition, the MoE will prepare annual financial statements at the end of each fiscal year in accordance with the International Public Sector Accounting Standards (IPSAS) cash basis and under historical cost convention. The financial statements will comprise, at a minimum, (a) sources and uses of funds (summary of expenditures shown under the main program headings and by main categories of expenditures for the period) and (b) notes to the financial statements, including background information, the accounting policies, detailed analysis, and relevant explanation of the main accounts/major balances to name a few. In addition, the MoE shall provide, as an annex to the financial statements, an inventory of fixed assets acquired under the project according to asset classes, dates of purchase, location, and cost. The MoE should note that advances will not be recognized as expenditures until the goods and/or services have been delivered with the relevant supporting documentation.

49. In line with its mandate as per the Audit Service Act, 2000 (Act 584), the Auditor General is responsible for the auditing of public funds as received by government ministries, departments, and agencies and as such, GAS will be responsible for conducting the GALOP audit. Consistent with the use of country FM systems, GAS will conduct the audit of the project's financial statements as part of the MoE annual audit. Detailed notes to be included in the audited financial statements will incorporate activities

financed under the project. The auditor will express an opinion on the financial statements in compliance with International Standards of Supreme Audit Institutions (ISSAIs) and prepare a Management Letter giving observations and comments, providing recommendations for improvements in accounting records, systems, controls and compliance with financial covenants in the Financing Agreement. External audits will be conducted annually, and the audit report and Management Letter will be submitted to the World Bank within six months after the end of the financial year audited as noted above.

50. Based on the risk rating of the project and the current FM arrangements, it is expected that following project effectiveness, in the first year of implementation, there will be at a minimum of two onsite visits to ascertain adequacy of systems and how effective the country systems are being used to support implementation. The FM implementation support missions will include ensuring that strong FM systems are maintained throughout the life of the project. In adopting a risk-based approach to FM supervision, the key areas of focus will include assessing the accuracy and reasonableness of budgets, their predictability and budget execution, compliance with payment and fund disbursement arrangements, and the ability of the systems to generate reliable project-specific financial reports.

51. A description of the project's FM arrangements as documented in the preceding paragraphs indicates that they satisfy the World Bank's minimum requirements per World Bank policy on Investment Financing. The overall FM risk is assessed to be **Moderate** based on the solid foundation of a strong legal and regulatory framework for PFM in Ghana and based on the MoE's experience with past World Bank-funded projects. To mitigate the risk of delays in financial reporting, the MoE will transition from a manual to an automated accounting system by project effectiveness. The MoE will play a supervisory role of the entire project and will therefore maintain financial records, submit semi-annual unaudited IFRs to IDA as per guidelines in the Financing Agreement and submit annual audited accounts no later than 6 months after the end of each fiscal year.

Procurement

52. **Procurement under the proposed project will be carried out in accordance with the following World Bank procedures:** (a) *the World Bank Procurement Regulations for IPF Borrowers* (July 2016, revised in November 2017), and August 2018); (b) '*Guidelines on Preventing and Combating Fraud and Corruption in Projects Financed by IBRD Loans and IDA Credits and Grants'*, dated October 15, 2006 and revised in January, 2011; and (c) other provisions stipulated in the Financing Agreements. Since there are no procurable items under the EEPs for Component 1 to 3, only procurement under Component 4 will be implemented as IPF.

53. The MoE will be the main implementing agency and will be responsible for the project's coordination, procurement, contract management, FM, and compliance with safeguards policies with the GES, NIB, NTC, NaCCA and other relevant agencies providing their mandated implementation role for service delivery. The MoE has a well-established structure for procurement decisions that is led by the minister and supported by the chief director.

54. The ministry has internal manuals based on previous projects, including the SEIP, which will be updated shortly after effectiveness (within six months of effectiveness). The World Bank has assessed the implementation arrangements. The procurement risk is rated as Moderate because the project will be

implementing the NPF and not the Procurement Guidelines with which the ministry has experience. To address the risks and weaknesses identified, mitigation measures have been discussed and agreed with the procurement staff of the MoE and GES. The procurement functions will be delivered through arrangements listed in the next paragraphs.

55. **Procurement arrangements.** Procurement activities under Component 4 will be carried out at the MoE and GES. The MoE and GES have implemented projects funded by the World Bank since 2000 and have gained extensive experience in procurement. They have also been involved in World Bank and other donor-financed projects such as the Education Sector Project (EdSeP), the EFA-FTI, GPEG, and the on-going SEIP. Key staff of the MoE and its agencies attended the NPF information session organized by the World Bank, but the capacity of the staff in NPF implementation is still very low. Apart from this, procurement capacity at all the agencies is found to be adequate. The Director of Procurement resident at the MoE will be responsible for procurement decisions. He currently has nine procurement staff working in the department. GES has systems in place to support the procurement process during the implementation of GALOP.

56. **Procurement risk assessment:** The World Bank has assessed the above arrangements. The main procurement risks identified for the MoE and mitigation measures agreed are as follows:

i. **Accountability for procurement decisions:** The MoE has a well-established structure for procurement decisions.
ii. **Internal manuals**: The ministry has internal manuals based on previous projects including the SEIP. These can be modified wherever possible to suit GALOP.
iii. **Records keeping**: The Ministry has a dedicated Procurement Unit headed by a Director of Procurement. Records are kept in Arc files. The unit can improve records keeping as the files are scattered and generally unpaged.
iv. **Staffing**: The project identified nine people who undertake procurement in the MoE and GES who will require capacity building in the NPF.
v. **Procurement planning**: This is currently adequate.
vi. **Bidding documents, shortlist reports, RFPs, evaluation reports:** Samples were examined, and they are generally acceptable.
vii. **Advertisement:** Good.
viii. **Evaluation and award:** The agencies follow the laid down procedures for both prior and post-review procurement.
ix. **Review of procurement decisions and resolution of complaints:** The set-up structures (Head of Entity, Entity Tender Committee and the Central Tender Review Committees) undertake the necessary reviews based on the threshold.
x. **Contract management:** Responses on Contract Management questions were not adequate.
xi. **Procurement oversight:** Adequate structures are in place.
xii. **Knowledge of the NPF**: One procurement staff had undergone training on the NPF.
xiii. In summary, the procurement risk is rated **Moderate** although (a) the capacity of the MoE in the NPF is still low despite the fact SEIP Additional Financing has commenced the NPF implementation and use of STEP; and (b) GALOP will be implemented under the World Bank's NPF in which both MoE and GES officers responsible for procurement have no experience**.** The mitigation measures in table 1.6 were discussed and agreed during appraisal.

Table 1.6. Procurement Risks and Mitigation Measures

Ref	Risks	Mitigation Measures	Responsibility	Due Date
1	Low capacity of the MoE procurement staff on the World Bank's NPF	Procurement staff of the MoE and GES to undergo training on the application of NPF	MoE and World Bank	Three months after effectiveness
2	Low capacity on the use of STEP tools, which is being used to manage all procurement transactions and related documentation.	The MoE and GES to be trained on the use of STEP	World Bank	Three months after effectiveness
3	Low capacity of procurement staff of the implementing agencies on the PPSD.	Training of the MoE and GES staff	MoE and World Bank	Three months after effectiveness
4	Unclear defined roles in contract management system and poor record keeping.	Establish an adequate contract management system and effective record keeping to ensure that all contracts under the project are effectively and efficiently managed	MoE	Continuously
5	Delay in processing payments.	Capacity building in FM and the MoE to establish an effective payment system.	MoE	Continuously

57. **Consistent with the PPSD, an initial Procurement Plan has been developed covering activities of the first 18 months of project implementation**. The Procurement Plan will be monitored through STEP. The Procurement Plan will be updated in agreement with the World Bank annually or as required to reflect the project's actual implementation needs and improvements in institutional capacity.

Summary of PPSD

58. Procurement of services under Component 4 will present opportunities for both local and international private sector firms. In Component 4, there are no significant sustainability and environmental aspects that will affect procurement. Compliance with Ghanaian and international standards will be followed.

59. The summary assessment of the procurement risk is Moderate for the project and the prior review thresholds have been set to reflect this rating. The moderate procurement risk rating is related to the number of procuring entities under the project, and the use of the NPF. The procuring entities are the MoE, GES, NaCCA, NTC, and NIB. Procurement post-reviews and technical audits will be carried out annually by the World Bank procurement specialist and technical specialist or independent auditors and based on the findings of the reviews, the prior review thresholds will be reviewed.

60. The education infrastructure and services market are vibrant. There are local and experienced service providers and contractors, willing to take part in competitive procurement to win bids and deliver on them. The supply position of these service providers is for low-risk and low-volume procurement. The Client/Borrower has also approached the market adequately in the past in implementing previous education sector projects and have adequate knowledge of the market.

- **Procurement Risk Assessment and Management for the GALOP.** The procurement and capacity assessment revealed that the procurement risk is Moderate. However, capacity development of the MoE and GES will be a continuous activity both from the World Bank and GoG which in the long run will allow the agencies to develop project management capacity for World Bank-funded projects as well as to have an impact on the Government's procurement operations. Areas for improvement have been noted in the PPSD.

- **Procurement post reviews and independent post reviews by the World Bank.** Based on the assessed agency implementation risk for procurement, which is moderate, the World Bank will carry out procurement post reviews or independent post reviews for a sample of 20 percent of all contracts based on the approved procurement plan which were not subject to prior review by the World Bank. Based on continuing assessment of risk and the success of risk mitigation measures implemented, the sample size will be reduced as risk mitigation measures are successfully implemented.

- **Information on the market approach and procurement methods considering the available choices following the PPSD.** Procurement methods and market approach will be guided by the threshold values provided in the procurement plan prepared by the MoE and approved by the World Bank in STEP.

Safeguards

61. **Safeguards capacity**. The MoE and the GES are the main institutions responsible for leading implementation of this project. The MoE will manage the implementation of all components working with the GES, NaCCA, NTC, and NIB to deliver on AWPs. The MoE and GES will be responsible for the project environmental and social safeguards implementation and ensuring that all bidding documents are accompanied by the required Occupational Health and Safety Guidelines and construction ESMPs and include requirements for GBV prevention as required. They will also be responsible for ensuring that the project complies with the requirements within the ESCP. Although the MoE and GES have recruited two safeguards officers (consultants) to support and coordinate safeguards activities at various levels, the legal and institutional structures of these two institutions do not generally have the capacity to implement the Environmental and Social Framework (ESF). An institutional capacity assessment of the implementing agencies was carried out during preparation and it was identified that the scale of work proposed under GALOP was minimal and the two safeguards consultants were adequate to support environmental and social management. However, the project will include focal persons from the MoE Special Education Unit to support implementation of the other social aspects including disability inclusion and GBV prevention. Training for the safeguards officers on the new ESF will be undertaken. The World Bank team will provide guidance and capacity building throughout the project, especially because of the requirements of the new World Bank Environmental and Social Standards.

62. **Implementation Support Plan.** Tables 1.7 and 1.8 provide the implementation support plan and the skills mix required for GALOP.

Table 1.7. Implementation Support Plan and Skills Mix

Time	Focus	Resource Estimate (staff weeks [SWs])
First 12 months	*Leadership and coordination* Technical supervision of overall coordination and supervision of project activities for quality preparation and timely start of implementation.	• Task team leaders (30 SWs)
	Fiduciary preparations and oversight 1. Training for client teams (FM and procurement) 2. Disbursement planning and monitoring. • Training of client procurement team including EEPs. • Support toward preparation of procurement documents. • Procurement reviews for EEPs	• FM specialist (5 SWs) • Procurement specialist (6 SWs)
	Technical guidance and oversight at start of project strategic interventions: • Curriculum orientation and training • School management and instructional leadership training • Design and operationalization of national assessment • Digitization of school inspection • Digitization of EMIS and other data systems	• Education specialist (20 SWs) • Assessment specialist (4 SWs) • Education data systems specialist (8 SWs) • ICT specialist (3 SWs)
	Safeguards • Social safeguards • Environmental safeguards	• Social safeguards specialist/s (5 SWs) • Environment specialist/s (5 SWs)
13-60 months	*Leadership and coordination* • Overall coordination and supervision of project activities. • Ensuring timely assessments of progress made on the DLIs. • Regular support supervision to implementing teams. • Field work to implementing sites.	• Task team leaders (90 SWs)
	Technical guidance and oversight of project strategic interventions: • Ensuring timely disbursement and utilization of learning grants and teaching and learning materials • Quality implementation and monitoring of support teams and school leadership training • Continued support to implementation of biennial national assessments • Ensuring quality of school inspection data collection and utilization • Review of policy development and reform	• Education specialist (80 SWs) • Assessment specialist (16 SWs) • Education economist (32 SWs)
	Fiduciary oversight	• FM specialist (30 SWs)

Time	Focus	Resource Estimate (staff weeks [SWs])
	• Ensuring timely procurement and adherence to norms. • Ensuring compliance to FM guidelines including audits and post audit actions.	• Procurement specialist (40 SWs)
	Monitoring and evaluation • Progress made against Results Framework • Reporting for DLIs • Ensuring functional and timely external validation • Mid-line and end line impact evaluations • Functionality of established accountability dashboard • Validation of AWPs	• Education economists (20 SWs) • Consultants – external validation (40 SWs) • ICT based school-based data systems (32 SWs)
	Safeguards • Social safeguards • Environmental safeguards	• Social safeguards specialist/s (30 SWs) • Environment specialist (30 SWs)

Table 1.8. Skills Mix Required

Skills Needed	Number of Staff Weeks (SWs)	Number of Trips	Comment
Task team leadership	120	Minimum of 10 trips over 5-year period including support	Two technical missions per year are envisaged in addition to regular technical supervision support. This would enable smooth project implementation and timely identification and resolution of emerging challenges.
Economists	70	At least 6 trips over 5-year period	Implementation supervision is needed with respect to targeting of schools under the project, envisaged strategic reforms including teacher deployment and management strategy and impact evaluation of PPPs.
Procurement specialists	60	Based in country	Support in the development and timely approval of procurement documentation. Field trips to project sites as and when required.
FM specialists	30	Based in country	Field trips to project sites as and when required.
ICT	55	Based on contract specifications	Field travel will be required as part of contract execution – whether local or international.
School inspection specialist	15	Based on contract specifications	
Communications specialist	15	Based on contract specifications	
Assessment specialist	20	Based on contract specifications	

Skills Needed	Number of Staff Weeks (SWs)	Number of Trips	Comment
Social safeguards specialist	35	Based in country	Field trips to project sites as and when required.
Environment specialist	35	Based in country	Field trips to project sites as and when required.
M&E specialist	50	Based on contract specifications	A firm may be needed to undertake the external validation.

ANNEX 2: Disbursement Linked Indicators – Description, Verification Protocols and Disbursement Protocols

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
DLI 1: Improved teaching practices in targeted schools							
DLR 1.0a	Lesson observation tools harmonized by NIB and approved by MoE	2019		8.00	8.00		The NIB will lead the development of a harmonized lesson observation tool, which will be used by district-, cluster- and school-level inspectors and supervisors. The harmonized lesson observation tool will: (a) be discussed and agreed by relevant stakeholders including the NIB, NaCCA, NTC, and the GES; (b) be supported by an inspections handbook that provides clear and objective definitions for inspection standards for each indicator; (c) include indicators to measure gender and disability inclusiveness in teaching practices; and (d) allow for the measure of a numerical aggregated score. Disburse 100 percent of eligible resources when the lesson observation tool meets the above criteria, is signed off by the MoE (chief director) for implementation and is satisfactory to the World Bank. Achievement on this DLR can roll over one year in to 2020 if not met in 2019.
DLR 1.0b	National INSET Framework developed by NTC and GES and approved by MoE.	2019		5.00	5.00		The National INSET Framework will be developed by the GES. It will include the following sections: (a) instructions on how school-based, cluster-based and district-based INSET for teachers and district support teams will be rolled out; (b) guidelines on training for circuit supervisors on coaching and mentoring; (c) roadmap for the development of e-learning modules for standardized delivery of INSET where possible; (d) process to gather feedback from teachers to inform review of training

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							modules and delivery; (e) process to assess quality of training modules and delivery; (f) roadmap for INSET linkage with points-based professional development and teacher training logs; and (g) integration within a professional learning calendar. It will prescribe INSET on areas including but not limited to curriculum orientation, targeted instruction, structured pedagogy, play-based and active learning pedagogy for KG teachers, gender responsive pedagogy, disability inclusiveness, child protection and digital literacy. Disburse 100 percent of eligible resources when the INSET framework meets the above criteria, is signed off by the MoE (chief director) for implementation and is satisfactory to the World Bank. Achievement on this DLR can roll over one year in to 2020 if not met in 2019.
DLR 1.1	Baseline on teaching practices in targeted schools established	2020		10.00	5.00	5.00	The baseline is determined using the harmonized lesson observation tool and school level sampling protocols (number of English and mathematics classes observed) as laid out in the Ghana National Inspections Handbook. The NIB collects data in a representative sample of targeted schools. TA will be provided for quality assurance on inspection tool and rating definitions, sampling strategy, training of inspectors, data collection, data entry and analysis, and reporting. TA will develop a quality assurance report on the collection and reporting of baseline data. Disburse 100 percent of eligible resources upon submission of the report to the MoE (PBME).

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
DLR 1.2	Number of targeted schools trained in targeted instruction	2020 - 2024	✓	10.00	10.00		The GES (DTSTs) record number of targeted schools trained in targeted instruction (TI). Targeted instruction refers to teaching students at their level of knowledge, and not their grade level. Each targeted instruction trained school must receive three training sessions of five days, three days, and two days across the three school terms. Training records are compiled by GES. For each targeted school receiving the core targeted instruction training once during the course of the project disburse US$1,000. Funding formula: US$1,000 unit cost* number of schools receiving core targeted instruction training in years 2020 and 2021 up to a ceiling of US$10 million. The IVA verifies the number of schools trained in targeted instruction using a sample from training records submitted by the GES. *Target: 10,000 targeted schools trained in targeted instruction*.
DLR 1.3.1 – 1.3.4	Number of targeted schools with continuous coaching and mentoring support	2021 - 2024	✓	12.00	12.00		The circuit supervisors conduct coaching and mentoring visits to targeted schools, which includes classroom observation of teacher instruction followed by feedback to the observed teacher. They record visits using tablet-based monitoring with GPS and time stamp based on the harmonized lesson observation tool. Schools also maintain records in visitor logbooks. For each targeted school receiving a minimum of three coaching visits annually, disburse US$400. Disbursements cannot be made against achievement of DLR in the same school more than once in an academic

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							year. IVA verifies the number of schools receiving continuous coaching and mentoring support by compiling data from tablet-based monitoring and verifying in a sample of targeted schools by reviewing visitor logbooks. Funding formula: US$400 unit cost * number of targeted schools receiving a minimum of three coaching visits annually each of the years of 2021, 2022, 2023, and 2024 up to a ceiling of US$12 million.
DLR 1.4	Percentage point increase from baseline in percent of targeted schools with teaching practices meeting inspection standards of teaching practices	2024	✓	5.00	5.00		Teaching practices are defined by inspection standards where 1= Unsatisfactory; 2= Satisfactory; 3= Good; and 4= Outstanding. The end line is determined using the harmonized lesson observation tool and school level sampling protocols (number of English and mathematics classes observed) as laid out in the Ghana National Inspections Handbook. NIB collects data in a representative sample of targeted schools. TA will be provided for quality assurance on inspection tool and rating definitions, sampling strategy, training of inspectors, data collection, data entry and analysis, and reporting. TA will support development of a quality assurance report on the collection and reporting of endline data, which will be submitted to MoE (PBME). For every percentage point increase above baseline in percent of targeted schools meeting inspection standard '3' (=Good), disburse US$200,000. Funding formula: US$200,000 unit cost* percentage point increase

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							above baseline in percent of targeted schools meeting inspection standard '3' (=Good) in the year 2024 up to a ceiling of US$5 million. *Target: 25 percent point increase from baseline (to be established in 2020) in percent of targeted schools with average inspection rating of '3' or higher.*
Total DLI Value (US$ millions)				**50.00**	**45.00**	**5.00**	
DLI 2: Strengthened school support for learning in targeted schools							
DLR 2.0a	Agreed targeting criteria applied to list of public schools to identify targeted schools	2019		6.50	6.50		Agreed targeting criteria are: (a) public basic schools are ranked by four indicators (BECE) raw scores, percentage of trained teachers, average class size and district level poverty headcount); (b) poorest performing 10,000 schools are targeted for interventions under Components 1 and 2; and (c) minimum threshold for the number of schools in a district (between 10-15 schools) is applied. If 90 percent of schools in a district are selected, then the remaining schools in the district are also targeted under Components 1 and 2. Disburse 100 percent of eligible amount if the final list of targeted schools submitted by GES meets targeting criteria defined in the PAD and is satisfactory to the World Bank.
DLR 2.0b	Guidelines for learning grants developed by GES and approved by MoE	2019		6.50	6.50		Learning grants are financial transfers to targeted schools intended for improving student learning outcomes. They comprise a base grant and a per student allocation to be determined and described in the PIM. The learning grants will be disbursed to targeted schools and will be used to finance activities aimed at improving learning outcomes. The base and per student allocations will be disbursed to targeted schools within one month of the first and second school terms respectively.

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							Guidelines include eligible expenditure lists (with specific activities for KG), self-assessment and performance contract templates, and procurement and FM processes. Disburse 100 percent of eligible resources when the guidelines meet the above criteria, signed off by MoE (Chief Director) for implementation and is satisfactory to the World Bank. Achievement on this DLR can roll over one year in to 2020 if not met in 2019.
DLR 2.1	Number of targeted schools receiving first allocation of learning grants	2020 - 2024	✓	10.00	5.00	5.00	GES reports the total number of schools receiving the learning grant. IVA verifies the number of schools receiving the learning grant in a sample of targeted schools. Verification is done in the first term of the school year for disbursements in the previous school year. For every targeted school receiving the first allocation of the learning grant, disburse US$1,000. Funding formula: US$1,000 unit cost* number of targeted schools receiving first allocation of the learning grant up to a ceiling of US$10 million. *Target: 10,000 targeted schools receive the first annual allocation of the learning grant*
DLR 2.2.1 – 2.2.4	Number of targeted schools utilizing at least 80 percent of the learning grant	2021 - 2024	✓	40.00	40.00		The learning grant's base and per student allocations will be disbursed to targeted schools within one month of the first and second school terms respectively. Circuit Supervisors will report utilization rates at the end of the third school term for each school in the cluster. GES will

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							compile utilization rates for each school before the start of the school year. GES reports the total number of schools utilizing at least 80 percent of the learning grant. IVA verifies achievement in a sample of targeted schools. Verification is done in the first term of the school year for disbursements in the previous school year. For each targeted school utilizing at least 80 percent of the learning grant, disburse US$1,250 annually. Funding formula: US$1,250 unit cost * number of targeted schools utilizing at least 80 percent of the learning grant in each of the years of 2021, 2022, 2023, and 2024 up to a ceiling of US$40 million.
Total DLI Value (US$ millions)				**63.00**	**58.00**	**5.00**	
DLI 3: Improved accountability for learning in public basic schools							
DLR 3.0	Accountability for Learning framework developed by participating agencies and approved by MoE	2019		4.00	4.00		The GES will lead the development of the Accountability for Learning framework. It provides an overview of basic education accountability systems including levels of monitoring and reporting, roles and responsibilities of key stakeholders, key accountability indicators, purposes of assessments, targeted support measures for low performing schools, processes for compliance with teacher code of conduct, and policy frameworks that guide system responsiveness. It will also ensure a harmonized system of inspection for all levels of the education system and development of an integrated real time accountability dashboard. Disburse 100 percent of eligible amount if MoE (Chief Director) signs off the Accountability for Learning Framework as final and it is satisfactory

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							to the Association. Achievement on this DLR can roll over into subsequent years if not met by 2019.
DLR 3.1	Accountability dashboard developed by MoE and is functional	2020		6.00	6.00		Accountability dashboard refers to a portal that integrates key accountability data (as identified by MoE and its implementing agencies such as teacher absenteeism, student attendance, capitation grant amount, CS visits etc.) from different data sources in a user-friendly interface that allows for data-driven decision making and is accessible to stakeholders at national, regional, district, cluster, school and community level. Disburse 100 percent of eligible resources when dashboard is fully developed and functional. This DLR will be achieved when: (a) Digitization of EMIS and mSRC is completed and linked; (b) dashboard app is developed and linked to EMIS and mSRC; and (c) electronic devices for all Circuit Supervisors and public basic schools are uploaded and configured with software applications for dashboard functionality. IVA verifies achievement of three criteria of the DLR. Achievement on this DLR can roll over into subsequent years if not met by 2020.
DLR 3.2.1 – 3.2.4	Number of schools using accountability dashboard data during cluster-level meetings	2021 - 2024	✓	6.00	3.00	3.00	Cluster level meetings will be held at least once a year to discuss data on key dashboard indicators using accountability dashboard (i.e., teacher absenteeism, student attendance, capitation grant amount, CS visits). These meetingss will be funded with support from the district. CSs will record attendance of school heads and SMC members on their

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							tablets, and will maintain minutes of the meetings, which will be collected at the district office. IVA reports achievement using data from electronic-based monitoring system and verifies in a sample of clusters based on the minutes of cluster meetings. For each school participating in an annual cluster level meeting, disburse US$150. Disbursements cannot be made against achievement of DLR for the same school more than once in an academic year. Funding formula: US$150 unit cost * number of schools participating in the cluster level meeting annually in each of the years of 2021, 2022, 2023, and 2024 up to a ceiling of US$6 million.
DLR 3.3.1 – 3.3.5	Timely disbursement of capitation grants	2020 - 2024		6.00	6.00		This DLR is achieved if capitation grant disbursement is delayed by no more than one term for all public basic schools. GES (Budget) submits a report on the disbursement of capitation grants for the previous school year at the end of the first term of each school year. IVA verifies achievement using bank statements of a sample of public basic schools. For each year in which this DLR is met, disburse US$1.2 million. *Target: Timely disbursement of capitation grants for 5 years.*
Total DLI Value (US$ millions)				**22.00**	**19.00**	**3.00**	
DLI 4: Improved proficiency in P4 mathematics and English in targeted schools							
DLR 4.0	National Assessment	2019		3.00	3.00		NaCCA will lead the development of the National Assessment Strategy.

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
	Strategy developed by NaCCA and approved by MoE						It refers to an overview of Ghana's assessment system covering national and international assessments (both census and sample-based). The Strategy provides the purposes, grade levels, time frames, implementation mandates and costs for various assessments. It includes a costed implementation, communication and results dissemination plan. The National Assessment Strategy should incorporate consultations with District Directors, Regional Directors, Heads of Schools, Circuit Supervisors, NIB, GES and MoE management, and the SWG. Disburse 100 percent of eligible amount if MoE (Chief Director) signs off the National Assessment Strategy for implementation and it is satisfactory to the World Bank. Achievement on this DLR can roll over into subsequent years if not met by 2019.
DLR 4.1	Operational plan for roll-out of P4 mathematics and English assessment developed by NaCCA	2020		4.00	4.00		NaCCA will develop the operational plan including the P4 mathematics and English assessment tool, test item bank and digitized assessment protocols for improved timeliness and cost effectiveness. TA will be provided for quality assurance. TA will develop a quality assurance report on piloting of test items and review of assessment tool, mechanisms for digitized evaluation, logistics for rollout, and roadmap for analysis and results dissemination. Disburse 100 percent of eligible resources upon submission of the report to MoE (PBME).

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							Achievement on this DLR can roll over into subsequent years if not met by 2020.
DLR 4.2	Baseline on P4 mathematics and English proficiency in targeted schools established	2021		4.00	4.00		If IVA report validates quality of assessment administration and report confirms assessment of P4 students in at least a representative sample of GALOP targeted schools, disburse 100 percent of eligible resources. Achievement on this DLR can roll over one year if not met by 2021.
DLR 4.3	Increase from baseline established in DLR 4.2 in percent of P4 pupils in targeted schools with proficiency in mathematics and English	2024		4.00	2.00	2.00	IVA report validates quality of assessment administration and report confirms assessment of P4 students in at least a representative sample of GALOP targeted schools. Data analysis and reporting on P4 proficiency will be supported by TA. TA submits report to MoE (PBME). For any increase from baseline (as determined in the P4 assessment in targeted schools) in the percent of P4 pupils with proficiency in mathematics and English (averaged), disburse US$4 million.
Total DLI Value (US$ millions)				**15.00**	**13.00**	**2.00**	
DLI 5: Improved equity in the distribution of KG and primary trained teachers in targeted schools							
DLR 5.0	Review of teacher deployment and transfer strategy completed by GES and approved by MoE	2019		3.00	3.00		GES (HR) will lead the review of the teacher deployment and transfer strategy. The strategy will be aligned with (a) review of teacher norms, and establishments and vacancies at the school level; (b) review and improvement of incentives for rural deployment and retention; (c) processes for data-driven deployment; and (d) implementation of decentralized recruitment. Disburse 100 percent of eligible resources when the Strategy meets the above criteria, is signed off by MoE (Chief Director) for implementation and is satisfactory to the World Bank.

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							Achievement on this DLR can roll over into subsequent years if not met by 2019.
DLR 5.1.1 – 5.1.5	Percentage of targeted KG schools with PTTR below 50:1	2020 – 2024	✓	4.00	2.00	2.00	MoE submits the percentage of targeted KG schools (counted individually) with PTTR below 50:1 using EMIS Annual School Census data. Pupil trained teacher ratio is defined as total enrolment in KG1 and KG2 in each school divided by the total number of trained teachers in that school, where a trained teacher has a Diploma in Basic Education or a higher qualification. IVA verifies PTTR (using enrollment and trained teacher data) in a sample of schools. For every additional percentage point increase from previous year in percentage of targeted KG schools with PTTR below 50:1, disburse US$250,000. Funding formula: US$250,000 unit cost * percentage point increase from previous year in percentage of targeted KG schools with PTTR below 50:1 in each of the years of 2021, 2022, 2023, and 2024 up to a ceiling of US$4 million. *Baseline: 74 percent of targeted KG schools have PTTR below 50:1 (to be confirmed using EMIS 2018/19 data once list of targeted schools is finalized) Target: 90 percent of targeted KG schools have PTTR below 50:1*
DLR 5.2.1 – 5.2.5	Percentage of targeted primary schools with PTTR below 50:1	2020 – 2024	✓	3.00	2.00	1.00	MoE submits the percentage of targeted primary schools (counted individually) with PTTR below 50:1 using EMIS Annual School Census data. Pupil trained teacher ratio is defined as total enrolment in P1 to P6 in each school divided by the total number of trained teachers in that school, where a trained teacher has a Diploma in Basic Education

DLR #	Disbursement Linked Results (DLRs)	Indicative Timeline	Scalable	Amount of Financing Allocated (US$, millions)			Disbursement and Verification Protocol
				Total	IDA	GPE	
							or a higher qualification. IVA verifies PTTR (using enrollment and trained teacher data) in a sample of schools. For every additional percentage point increase from previous year in percentage of targeted primary schools with PTTR below 50:1, disburse US$200,000. Funding formula: US$200,000 unit cost* percentage point increase from previous year in percentage of targeted primary schools with PTTR below 50:1 in each of the years 2021, 2022, 2023, and 2024 up to a ceiling of US$3 million. *Baseline: 75 percent of targeted primary schools have PTTR below 50: (to be confirmed using EMIS 2018/19 data once list of targeted schools is finalized) Target: 90 percent of targeted primary schools have PTTR below 50:1*
Total DLI Value (US$ millions)				**10.00**	**7.00**	**3.00**	
TOTAL DLI ALLOCATION				**160.00**	**142.00**	**18.00**	

ANNEX 3: Stretch Indicators and DLIs for GPE Variable Part Financing

1. The variable part of the GPE grant will be disbursed based on the achievement of DLRs of three stretch indicators, presented under each of the GPE variable part dimensions in table 3.1. These stretch indicators, along with their targets, DLR allocations and verification protocols are presented in tables 3.2-3.4.

Table 3.1. GPE Variable Part Stretch Indicators/DLIs

GPE Dimension	Indicator
Quality	DLI 4: Improved proficiency in P4 mathematics and English in targeted schools
Efficiency	DLI 3: Improved accountability for learning in public basic schools
Equity	DLI 5: Improved equity in the distribution of KG and primary trained teachers in targeted schools

Stretch Indicator 1 (DLI 4): Improved proficiency in P4 mathematics and English in targeted schools

2. **Background and rationale.** Ghana has low learning outcomes that have remained stagnant over the last five years. There were no changes in EGRA scores between 2013 and 2015 and high percentages of zero scorers in 2018 (85 percent for reading comprehension, 57 percent for oral reading fluency, and 64 percent for non-word reading). The 2015 EGMA found that higher order mathematical concepts were a challenge with 75 percent of P2 pupils unable to answer a single conceptual knowledge subtask (that is, word problem) correctly. The 2016 NEA confirms these findings with 29 percent and 45 percent of P4 pupils below the minimum proficiency for English and mathematics, respectively; at the P6 level, these figures are approximately 30 percent for both subjects. Between 2016 and 2018, NEA test scores remained essentially the same.

3. Component 1 would provide teacher training on the new curriculum, targeted instruction and structured pedagogy, training on school support and instructional leadership, and supplementary TLMs. Component 2 would provide learning grants as a top-up to the capitation grant and expenditure guidelines with a menu of activities focused on improving learning. These interventions are expected to improve the quality of teaching practices and the resource level of the school, which will ultimately ameliorate low learning outcomes.

4. **Indicator description.** Learning outcomes will be tracked through the duration of the project through the introduction of an assessment at the P4 level that is at least representative of the GALOP-targeted schools. The National Education Assessment Unit (NEAU) conducts a sample-based NEA at the P4 level biennially, with the last assessment conducted in 2018. 'Proficiency' is defined as an (individual) test score with at least 55 percent of the items correct (19.25 items correct on the P4 tests). The project will support the assessment of P4 pupils in targeted schools in 2021 and 2023. It is expected that while this P4 assessment will be modelled around the NEA P4 assessment, results from the 2018 NEA will not be comparable as it covers both public and private schools and might not be representative of the GALOP targeted schools. As such, this DLI will measure changes in the percentage of P4 pupils with proficiency in mathematics and English over two years.

5. **Compliance with GPE requirements for stretch indicators.** Improvements in learning outcomes as measured by the increased percentage of P4 pupils with proficiency in mathematics and English qualifies as a stretch indicator for the learning outcomes/quality dimension of the GPE variable part funding for several reasons. First, public expenditure in education is inadequate to cover improvements in quality or any other non-salary investments after spending over 95 percent on teacher salaries and compensation. In such a resource-constrained environment, there are severe challenges to improving the quality of learning and the quality of teaching practices, especially for existing teachers in low performing and under-resourced schools. Second, beyond having sufficient resources in terms of training and TLMs, achieving these targets requires behavioral changes in teachers arising from improved school leadership, mentoring, and support. This represents a shift from the traditional business-as-usual teacher-inspector, teacher-school leadership, and teacher-student roles to create a conducive environment for learning. Achieving these results will translate into improvements in learning outcomes and ensure sustainability through behavioral change. In 2016, percentage of P4 pupils with proficiency in mathematics and English was 22 percent and 37 percent respectively. In 2018, these figures fell to 19 percent for mathematics and 25 percent for English. While a baseline for the assessment will be established in 2021, these figures provide evidence of the low learning outcomes and downward trend registered in recent years. While the assessment may cover all public schools (or a nationally representative sample), this indicator measures improvements in learning outcomes in the GALOP-targeted schools, which are targeted as low performing from the onset – as such, achieving improvements in learning outcomes in these schools presents a greater stretch than at the national level.

Table 3.2. GPE Quality Dimension Stretch Indicator

Stretch Indicator	End Target (2023)	GPE Allocation	Disbursement Protocol	Verification Protocol
Increase from baseline in percent of P4 pupils in targeted schools with proficiency in mathematics and English	Any increase from baseline	US$2 million	For any increase from baseline (as determined in the P4 assessment in targeted schools) in the percent of P4 pupils with proficiency in mathematics and English (averaged), disburse 100 percent of eligible resources.	The IVA report validates quality of assessment administration and report confirms assessment of P4 students in at least a representative sample of GALOP targeted schools. Data analysis and reporting on P4 proficiency will be supported by TA. TA submits report to the MoE (PBME).

Stretch Indicator 2 (DLI 3): Improved accountability for learning in public basic schools

6. **Background and rationale.** Ghana collects a substantial amount of education data; however, data systems are not integrated and fail to inform decision making at various levels in an efficient and robust manner. This prevents education officials and stakeholders from efficiently allocating and monitoring

limited resources. System efficiency gains in teacher allocation and management, targeted INSET, improved student attendance, support to school leadership and monitoring of learning grants would lead to improvements in the utilization of both salary and non-salary public expenditure in education. Further, strong accountability systems can use student assessments to target school resources, set performance targets for schools, and ensure appropriate incentives are in place to realign the focus from inputs to learning outcomes.

7. Sub-component 3.1 will support the following activities: (a) harmonization of all inspection tools aligned to meet the needs of schools, districts, regions, and ministry levels, including digitization for improved data collection; (b) digitization of EMIS annual school census tool with tablet-based collection to ensure more timely collection and analysis of data, including school mapping and student tracking; (c) creation of an integrated dashboard through the review and scale-up of the mSRC to include linkages with EMIS, HRMIS, inspection, assessment and other databases; (d) continuous and robust communication to stakeholders; and (e) regular monitoring and reporting on results from inspection findings and dashboard updates. These interventions will lead to improved efficiency in the management and allocation of resources with a focus on learning outcomes. The dashboard will ensure that school level data is available to heads of schools, circuit supervisors, district and regional directors, and stakeholders at MoE and GES headquarters. Sub-component 2.2 supports districts to organize annual cluster-level meetings with school heads and SMC members to discuss data reported on the accountability dashboard. This will ensure that the data collected are used to improve teaching practices and school management through sharing of best practices, knowledge, and innovation within a cluster. Encouraging SMC members to attend these cluster-level meetings will increase citizen engagement and allow communities to use school-level data to hold their head teachers accountable for school performance, resulting in improved efficiency in the use of school resources.

8. **Indicator description.** Circuit supervisors will organize cluster-level meetings at least once a year to discuss accountability dashboard data collected using tablets and encourage best practices and knowledge exchange between schools. The key efficiency indicators from the dashboard to be discussed include teacher absenteeism, student attendance, amount of capitation grant received and number of circuit supervisor visits. All meetings will be documented through minutes that will include a list of participants and actions taken/ school exchange visits organized.

9. **Compliance with GPE requirements for stretch indicators.** The number of schools participating in cluster-level meetings held to discuss data from the accountability dashboard qualifies as a stretch indicator for the efficiency dimension of the GPE variable part funding since it requires the development of a functional accountability for learning framework, a complete integration of existing data systems, development of a dashboard that is accessible and informs decision making, collection of real-time data on all basic education schools annually, automated development of school report cards, a comprehensive communications campaign to improve citizen engagement and finally organization of cluster-level meetings with heads of schools as well as SMC members. Further, by including learning outcomes with accountability indicators in the dashboard, the framework allows for data to be used to improve learning. The end target for the indicator represents a stretch as it implies that the accountability dashboard data is being reported on and used in over 70 percent of public basic schools within four years of its development.

Table 3.3. GPE Efficiency Dimension Stretch Indicator

Stretch Indicator	End Target (2024)	GPE Allocation	Disbursement Protocol	Verification Protocol
Number of schools using accountability dashboard data during cluster-level meetings	15,000	US$3 million	For each school participating in annual cluster level meetings, disburse US$150. Disbursements cannot be made against achievement of DLR for the same school more than once in an academic year.	IVA reports achievement using data from tablet-based monitoring system and verifies in a sample of clusters based on the minutes of cluster meetings.

Stretch Indicator 3 (DLI 5): Improved equity in the distribution of KG and primary trained teachers in targeted schools

10. **Background and Rationale.** Under the current Education Strategic Plan (ESP), the target PTTR for Ghana through 2030 is 35 pupils for every trained teacher (35:1). While the PTTR in targeted KG and primary schools is roughly 39:1 and 37:1 respectively, which is not far from the ESP target, these figures mask important inequities among and within regions and districts. There are large regional disparities in PTRs and weak correlation at the district level between the number of students and teachers, especially at the KG level. PTRs vary substantially across the country, with districts mostly in the north of Ghana having a shortage of teachers, while districts in the south of Ghana have a surplus of teachers. High PTRs are present in both urban and rural schools, with high PTRs in urban schools driven by large class sizes and in rural schools by multi-grade or multi-class teaching.[68] Approximately 25 percent of targeted schools have PTTR above 50:1. Guidelines for the deployment of teachers are not finalized and drafts not clearly disseminated; deployment decisions are largely not driven by data. In addition, teacher turnover is high and variable, with a national average of 12 percent and 18 percent for KG and primary, respectively.

11. Sub-component 3.3 will support teacher policy reforms for efficient education sector human resource management, administrative and leadership practices, thereby improving equity in the distribution of trained teachers. These will include teacher recruitment, deployment, transfer and incentive policies, merit-based selection of head teachers, review of teacher norms, review of teacher establishment and vacancies at the school level, and introduction of dedicated time for professional development in the instructional calendar among others.

12. **Indicator description.** This indicator measures the share of KG and primary schools that have PTTR above 50:1, which will allow for targeted interventions in 25 percent of the worst-off among GALOP targeted schools. Review and implementation of the teacher recruitment, deployment, transfer and incentive policies will allow for data driven reallocation of existing teachers and deployment of new teachers.

[68] USAID, 2019. Teacher Rationalization, Retention and Language Study: Final Report.

13. **Compliance with GPE requirements for stretch indicators**. Increasing the percentage of primary and KG schools with PTTR below 50:1 qualifies as a stretch indicator for the equity dimension of the GPE variable part funding. The MoE recognizes the dividends of rationalizing teacher deployment, providing specialized training for KG teachers, and introducing merit-based school leadership but is aware of the political challenges and substantive risks involved in implementation, which has led to the inequitable teacher allocation in the past. This will also impact learning outcomes by reducing class sizes, boosting teacher morale and motivation in rural schools and increasing opportunities for teachers to engage in professional development. The baseline values for the indicator for KG and primary are roughly 50 percent. The target for this indicator will be to increase the percentage of KG and primary schools with PTTR below 50:1 to 90 percent, which represents a 'stretch' as it focuses on the allocating teachers to schools that have insufficient trained teachers or that have struggled to retain trained teachers. Further, by disaggregating at the KG level, the DLR focuses on improving quality at the early childhood education level, which is equity enhancing.

Table 3.4. GPE Equity Dimension Stretch Indicator

Stretch Indicator	End Target (2024)	GPE Allocation	Disbursement Protocol	Verification Protocol
Percentage of targeted KG schools with PTTR below 50:1	90 percent	US$2 million	For every additional percentage point increase year on year in percentage of targeted KG schools with PTTR below 50:1, disburse US$250,000.	The MoE submits the percentage of targeted KG schools (counted individually) with PTTR below 50:1 using EMIS Annual School Census data. The IVA verifies PTTR (using enrollment and trained teacher data) in a sample of schools.
Percentage of targeted primary schools with PTTR below 50:1	90 percent	US$1 million	For every additional percentage point increase year on year in percentage of targeted primary schools with PTTR below 50:1, disburse US$200,000.	The MoE submits the percentage of targeted primary schools (counted individually) with PTTR below 50:1 using EMIS Annual School Census data. The IVA verifies PTTR (using enrollment and trained teacher data) in a sample of schools.

ANNEX 4: Results Chains for GALOP DLIs

Component 1: Strengthen teaching and learning through support and resources for teachers

DLI 1: Improved teaching practices in targeted schools

1. **Indicator description.** Improvements in the quality of teaching practices (as measured by lesson observations) is considered a good proxy for an increase in learning outcomes for basic education students. Improvements in the quality of teaching practices will be measured based on classroom observations from a sample of GALOP-targeted schools. The classroom observation tool will be developed, tested and finalized in year zero of the project. It will be based on a harmonized tool developed from best practices adopted in the NIB school inspection tool, the NTC lesson observation survey and international system diagnostic tools. The tool will measure teacher time on task, teacher attitudes and behavior, instruction, lesson facilitation, student assessment and feedback, and classroom management for improved learning. A summary score for each school will be aggregated across the sample to provide baseline and end line measures of quality of teaching practices in the classroom.

Table 4.1. Results Chain for DLI 1

Sub-components	Activities/ Inputs	Intermediate Outputs	Outcomes
1.1 Teacher capacity building and innovative delivery of in-service training	INSET and capacity building support for teachers: • Standards-based new curriculum • Targeted instruction and structured pedagogy • Inclusion, digital literacy, safe schools, and child protection • New assessment framework • Specialized training for KG teachers in play-based pedagogy Introduction of professional learning calendars and allocated time in the school time table	***Increased number of teachers trained in targeted instruction*** Improved teacher content and pedagogical knowledge Improved teacher time on task Improved disability and gender inclusiveness Improved classroom learning environment	***Percent of targeted schools with teaching practices meeting inspection standards***
1.2 School-based support and instructional leadership	Training for curriculum leads, circuit supervisors, district teacher support teams-DTSTs, and school heads to provide school-based support supervision and	Teachers improve instructional approach based on learnings from school-based	

	instructional leadership (coaching and mentoring)	inspection, mentoring and coaching Improved quality and targeting of INSET based on lesson observations	
1.3 Provision of teaching and learning materials (TLMs)	Provision of teacher guides for the new curriculum, and pupil books, readers and workbooks for targeted instruction Provision of TLMs for early childhood education and special education needs	Improved student and teacher engagement with reading materials and grade-appropriate and curriculum-aligned TLMs	

Component 2: Strengthen school support, management and resourcing

DLI 2: Strengthened school support for learning in targeted schools

2. **Indicator description.** This DLI measures the number of beneficiary schools that utilize at least 80 percent of the learning grant annually. The grant will include a base of approximately GHS3,000 given to all targeted schools and a per student grant of about GHS5. Schools will be given guidelines with a menu of activities designed to improve learning outcomes.

Table 4.2. Results Chain for DLI 2

Sub-components	Activities/ Inputs	Intermediate Outputs	Outcomes
2.1 Learning grants to support activities focused on learning	Development of guidelines for utilization of learning grants and templates for self-assessment and performance contracts Schools conduct self-assessments to develop SPIPs Development of SPIPs focused on improving learning outcomes Disbursement of learning grants to school accounts	School grant guidelines focused on improving learning outcomes ***Increased number of schools utilizing learning grants*** Improved resource allocation at the school level towards activities that improve learning	*Improved learning outcomes in schools*

		Improved efficiency in the disbursement of grants to schools	
2.2 Strengthening district education management capacity	Strengthening districts to support: (a) training on learning grant utilization; (b) development of 3-year learning-oriented SPIPs; (c) consolidation, supervision and monitoring of learning grant utilization; (d) operational costs for circuit supervisors to act as instructional coaches and facilitation teacher INSET; and (e) cluster-level meetings for heads of schools and SMC members	Improved resource levels at the district Improved school level supervision and monitoring Improved sharing of data on accountability dashboard Improved sharing of knowledge and best practices between school heads Improved community led accountability in schools	
2.3 Strengthening SMCs for enhanced citizen engagement	Training for SMC members on decentralized SBM Training for SMC members on FM of learning grants and resource mobilization	Improved community engagement in design of SPIPs and school monitoring Improved community engagement in resource mobilization Improved community led FM and accountability in schools	

Component 3: Strengthen accountability systems for learning

DLI 3: Improved accountability for learning in public basic schools

3. **Indicator description.** Circuit supervisors will organize cluster level meetings at least once a year to discuss accountability dashboard data and encourage best practices and knowledge exchange between schools. The key efficiency indicators from the dashboard to be discussed include teacher absenteeism,

student attendance, amount of capitation grant received and number of circuit supervisor visits. All meetings will be documented through minutes that will include a list of participants and actions taken/ school exchange visits organized.

Table 4.3. Results Chain for DLI 3

Sub-components	Activities/ Inputs	Intermediate Outputs	Outcomes
3.1 Development and implementation of accountability for learning framework	Harmonization of all lesson observation tools aligned to meet the needs of schools, districts, regions, and ministry levels Digitization of EMIS annual school census tool with tablet-based collection to ensure more timely collection and analysis of data, including school mapping and student tracking Creation of an accountability dashboard Continuous and robust communication to stakeholders Regular monitoring and reporting on results from inspection findings and dashboard updates through circuit supervisor meetings	Data-driven decision making for the allocation, monitoring and management of education resources Improved data feedback to schools and communities Decreased teacher absenteeism Improved student attendance Improved management of school-based grants ***Increased number of schools using accountability dashboard data during cluster-level meetings*** Improved utilization of accountability for learning data	Improved accountability for learning at schools, district and the MoE/GES

DLI 4: Improved proficiency in P4 mathematics and English in targeted schools

4. **Indicator description.** Learning outcomes will be tracked through the duration of the project through the introduction of an assessment at the P4 level. The NEAU conducts a sample-based NEA at the

P4 level biennially, with the last assessment conducted in 2018. 'Proficiency' is defined as an (individual) test score with at least 55 percent of the items correct (19.25 items correct on the P4 tests). The project will support the assessment of all P4 pupils in at least a representative sample of targeted schools in 2021 and 2023. It is expected that while this P4 assessment will be modelled around the NEA P4 assessment, results from the 2018 NEA will not be comparable as it covers both public and private schools and the assessment tool is expected to be reviewed. As such, this DLI will measure changes in the percentage of P4 pupils with proficiency in mathematics and English over a period of two years.

Table 4.4. Results Chain for DLI 4

Sub-components	Activities/ Inputs (across all components)	Intermediate Outputs	Outcomes
3.2 Development and implementation of a national assessment strategy	Teachers trained on new curriculum, targeted instruction and structured pedagogy Schools resourced with appropriate TLMs Schools provided with enhanced supervision and instructional leadership (coaching and mentoring) Schools resourced with grants to improve learning SMCs strengthened to participate in the development of learning SPIPs and hold schools accountable for learning outcomes Improved reporting and access to data on key accountability indicators Dissemination of school level results on national assessment Improved allocation and deployment of teachers	Improved capacity of teachers to deliver new curriculum Improved resource levels at schools Improved capacity of school leadership and supervision Enhanced citizen engagement in school functions Improved utilization of data on accountability for learning Increased number of schools with appropriate number of trained teachers	***Increased percent of P4 pupils with proficiency in mathematics and English in targeted schools***

DLI 5: Improved equity in the distribution of KG and primary trained teachers in targeted schools

5. **Indicator description.** This indicator measures the share of KG and primary schools that have PTTR above 50:1, which will allow for targeted interventions in 25 percent of the worst-off among GALOP-targeted schools. Review and implementation of the teacher recruitment, deployment, transfer and incentive policies will allow for data-driven reallocation of existing teachers and deployment of new teachers.

Table 4.5. Results Chain for DLI 5

Sub-components	Activities/ Inputs	Intermediate Outputs	Outcomes
3.3 Policy reforms for efficient education sector human resource management, administrative and leadership practices	Teacher recruitment, deployment, transfer, and incentive policies Review of teacher establishment and vacancies for all public schools Merit-based selection of head teachers Introduction of an administrative fast track for teachers serving in rural schools Staffing and roles of GES and DEOs based on a functional analysis of what is required to improve learning outcomes Dedicated school leadership program and accompanying qualifications for head teachers Review of instructional calendar to include dedicated time for teacher professional development	Policy framework to increase transparency and accountability in teacher deployment, transfers and incentives Synchronization of teacher payroll and deployment within districts Improved use of data for teacher deployment and allocation Improved capacity of school leadership Improved incentives for teachers serving in rural schools Improved opportunities for professional development	***Increased percent of targeted KG and primary schools with PTTR below 50:1***

ANNEX 5: Projects in Basic Edu. Sector supported by Dev. Partners and CSOs

1. This annex provides details on projects in the basic education sector supported by DPs and CSOs, particularly the activities that are proposed to be scaled up under GALOP.

2. **USAID Partnership for Learning.** The project is focused on improving reading and mathematics performance in primary schools in Ghana in KG2 to P2 through structured pedagogical support and INSET, and targets 100 districts. It develops, prints and distributes TLMs in 11 local languages; builds capacity of trainers, teachers, head teachers and curriculum leads in the reading approach and use of TLMs; provides ongoing pedagogical support to teachers through coaching and school-based INSET; and monitors and ensures fidelity of implementation through data and feedback loops. The TLMs developed are being digitized and adapted to e-reader formats. These materials include scripted lessons for KG2 to P2, new pupil books with exercises, and supplementary materials such as teacher guides, conversation posters, alphabet strips, flashcards and take-home readers. Capacity building for NCT, DTST and CSs will be delivered through tablet-enabled live video-conferencing. The fidelity of implementation monitoring and feedback is enabled by a classroom observation tool and digital dashboard that was developed for the project. An ASER type assessment tool is also used to evaluate reading competencies in a sample of students in each of the targeted schools. Further, USAID is also supporting the digitization of the EMIS data collection through a pilot in 50 districts. The data system is supported on open source software with the aim of linking it to the mSRC.

3. **Strengthening Teacher Accountability to Reach all Students (STARS).** STARS is a targeted instruction program in basic numeracy and literacy for primary grades that focuses on teaching at the right level. Targeted instruction was piloted under the TCAI, which generated improvements in learning outcomes despite poor uptake of the program. The STARS program builds on lessons learned from this program by shifting focus from assistant-led to teacher-led targeted instruction. It further builds the capacity of school management in instructional leadership and support, and the capacity of supervisors in coaching and mentoring based on classroom lesson observations. In addition, the project is piloting enhanced management methods through a WhatsApp-based help desk page for circuit supervisors and head teachers, telephonic helplines and SMS reminders. It focuses on P4 to P6 pupils to complement interventions in targeted instruction supported by the USAID Partnership for Learning Project. Resources developed under this project include teacher guides for English and mathematics, activity booklets, readers, facilitator guides for teacher, circuit supervisors and head teacher training, NTC resource pack, monitoring tools, and an ASER type assessment.

4. **DFID support to national assessment TA and workforce reform.** DFID is planning to support the MoE to develop a national assessment framework to be delivered in September 2019 which can inform the development of national assessments at primary level under GALOP. DFID is also supporting a GES education workforce reform plan developed with support from the Education Commission Education Workforce Initiative, recommendations from which will be submitted in December 2019.

5. **JICA School for All.** This project builds the capacity of SMCs to support learning and other interventions at the school level. It provides training to SMC members to support the development of learning-oriented SPIPs, to monitor capitation grant utilization for improved accountability, to mobilize community resources and utilize them effectively, to provide school-based support and supervision, and

to improve the school environment. The project aims to functionalize SMCs to ensure participatory and decentralized SBM, and to strengthen the capacity for accountable and transparent FM. SMC training guides and implementation plans for the roll out of this project have been developed.

6. **Interventions in Ed Tech.** World Reader has piloted the use of e-readers in 90 primary schools and communities in Ghana with over 45,000 books digitized. The cost per student is estimated at US$6.22. Material developed under the USAID Partnership for Learning Project and the STARS project will be adapted and uploaded to the e-readers. Multi-media video lessons on numeracy, literacy and foundational life skills have been developed by the Discovery Learning Alliance with support from the UKAID Girls Education Challenge. These materials can be distributed at a larger scale; however, the avenue for distribution needs to be explored given the limited IT facilities and support available in basic schools.

ANNEX 6: Economic and Financial Analysis

1. Annex 6 summarizes the results of the economic and financial analysis carried out to identify the challenges faced by the Government in the basic education subsector, the crucial role of public investment and the potential economic gains to the country that could be achieved through the project.

Country Education Sector Overview

2. **Ghana exceeds international benchmarks[69] on education expenditure as a percentage of total expenditure,** spending 28.9 percent of government expenditure on education in 2017 (MoE. 2018. Education Sector Progress Report). However, education expenditure as a share of GDP was at 5.2 percent in 2017, which is slightly lower than GPE recommendations. The share of expenditure on basic education (KG, primary, and JHS) has been consistently over 40 percent since 2013. Growth in expenditure in the SHS sub-sectors has been significant due to the roll out of free SHS in 2015.

Table 6.1. Trends in Education Expenditure by Level

Level	2013 (%)	2014 (%)	2015 (%)	2016		2017	
				Expenditure (GHS)	%	Expenditure (GHS)	%
Pre-school	6.4	7.6	5.6	503,657,295	6.6	669,211,118	6.4
Primary	24.4	22.0	16.0	1,439,804,230	19.0	2,187,505,450	20.8
JHS	16.9	16.1	21.3	1,108,435,386	14.6	1,787,939,466	17.0
SHS	20.2	22.4	21.6	1,676,521,301	22.1	2,780,734,965	26.4
TVET	1.8	3.7	2.3	433,319,517	5.7	211,015,432	2.0
SPED	0.5	0.4	0.4	24,130,682	0.3	40,829,123	0.4
NFED	0.7	0.5	0.2	111,631	0.0	1,190,236	0.01
Tertiary	19.4	16.2	23.3	1,959,500,000	25.8	2,367,393,030	22.5
Management and agencies	9.7	11.0	9.4	442,885,079	5.8	479,390,687	4.6
Total	**100.00**	**100.00**	**100.00**	**7,588,365,120**	**100.00**	**10,525,209,507**	**100.00**

Source: MoE Education Sector Performance Report 2016 and 2017.
Note: Internally Generated Funds (IGF) are included in these estimates; if these are removed, then, in 2016, education expenditure as a percentage of GDP was 5 percent and as a percentage of total government expenditure was 17 percent.

3. **Public investment in education has resulted in significant improvements in access to basic education; however, learning outcomes are low and stagnating, signaling inefficiencies in utilization of public funds.** The GERs at KG and primary grew from 60 percent and 78 percent respectively in 2010 to over 100 percent in 2018. Primary school enrolment is at 4,393,061, representing a 7 percent increase over the last 5 years. GER at the JHS level is at 86 percent and improving rapidly. Table 6.2 provides data on key education indicators based on the latest data available. However, EGRA in 2013 and 2015 have not registered improvements, indicating that 50 percent of pupils in primary grade 2 are unable to read at all,

[69] The GPE benchmarks for education expenditure is 6 percent of GDP and 20 percent of Government expenditure.

and only 2 percent could read with comprehension and fluency. EGMA results indicate that nearly 75 percent of pupils were unable to answer a single question correctly for some conceptual knowledge subtasks.[70] The NEA reinforces these results: in 2016, 30 percent and 50 percent of P4 pupils were below minimum proficiency in English and mathematics, respectively.[71] HCI measures of education show that while the average years of schooling in Ghana is 11.6 years, the number of quality adjusted learning years is only 5.7, implying that 6 years of schooling are lost to poor quality.

Table 6.2. Key Education Indicators, 2017/18

	KG		Primary		JHS		SHS	
	Number	%	Number	%	Number	%	Number	%
Schools	**24,418**		**24,626**		**16,850**		**916**	
Public	14,649	60	15,138	61	10,784	64	630	69
Private	9,769	40	9,488	39	6,066	36	286	31
Enrolment	**1,778,021**		**4,401,194**		**1,645,764**		**958,819**	
Male	899,932	51	2,232,295	51	836,642	51	486,649	51
Female	878,089	49	2,168,899	49	809,122	49	472,170	49
Public	1,250,144	70	3,175,338	72	1,288,425	78	892,015	93
Private	527,877	30	1,225,856	28	357,339	22	66,804	7
GER		**112**		**106**		**86**		**53**
NER		**75**		**89**		**48**		**28**
Gender Parity Index (enrolment)	**0.97**		**0.97**		**0.97**		**0.97**	
P6 to JHS1 Transition						**91**		
Male						**91**		
Female						**92**		
JHS3 to SHS1 Transition								**78**
Male								77
Female								80
Teachers	**61,714**		**161,475**		**122,994**		**44,105**	
Male	10,664	17	94,250	58	90,663	74	34,333	78
Female	51,050	83	67,225	42	32,331	26	9,772	22
Trained	33,671	55	97,545	60	89,957	73	38,902	88
Untrained	28,043	45	63,930	40	33,037	27	5,203	12
PTR (Public)	**29**		**29**		**14**		**23**	
PTTR (Public)	**39**		**35**		**15**		**25**	
PCR (Public)	**52**		**37**		**35**		**51**	
Textbook-pupil ratio	**0.2**		**1.2**		**1.3**		**2.3**	

Notes: GER = Gross Enrolment Rate; NER = Net Enrolment Rate; GPI = Gender Parity Index; PTR = Pupil Teacher Ratio; PTTR = Pupil Trained Teacher Ratio; PCR = Pupil Classroom Ratio.
Source: Calculated using 2017/18 Ghana EMIS data.

[70] USAID. 2016. *Ghana 2015 Early Grade Reading Assessment and Early Grade Mathematics Assessment: Report of Findings.*
[71] Ministry of Education. 2018. *Ghana 2018 National Education Assessment: Report of Findings.*

4. **Education financing is inefficient, preventing crucial investments in quality improvements.** In 2017, 95.4 percent of GoG expenditure on education was spent on teacher salaries and associated allowances. However, management of teachers (the largest expenditure item for the basic subsector) is inadequate. Recent analysis for the targeted instruction pilot in Ghana - the TCAI - found that on average teachers in the program were absent 30 percent of the time, and even when present in the school, time-on-task was low. PTRs vary substantially across the country, with districts mostly in the north of Ghana having a shortage of teachers, while districts in the south have a surplus of teachers. Non-salary expenditure is also inefficient with substantial delays in the disbursement of capitation grants. A 2015 report by the National Development Planning Commission[72] found that capitation funds arrived more than a year late, preventing timely execution of planned activities.

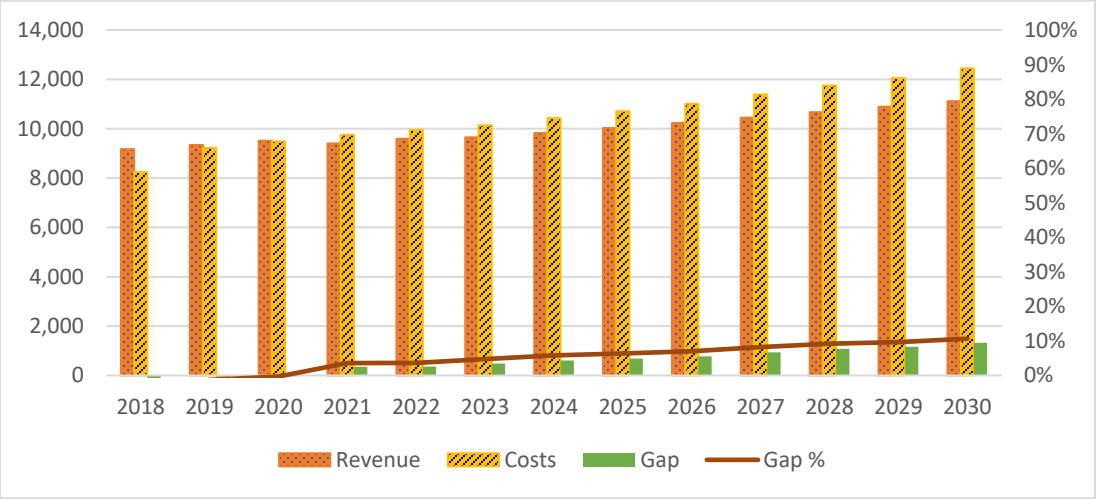
5. **Education financing is inequitable with rising unit costs by level of education and significant regional disparities.** Education expenditure data from 2015 showed that, with the exception of the TVET subsector that has the highest unit costs in 2015, unit costs increase substantially as the education level increases. Between 2014 and 2015, unit costs increased with increasing levels of education, but decreased for KG and primary; the ratio of per-student spending between primary and SHSs increased from 1:2.8 in 2014 to 1:3.5 in 2015. This ratio is likely to increase with the rollout of the free SHS program, as IGF contributions are replaced with government funding. Public spending on education accrues largely to richer income groups in Sub-Saharan Africa because the overwhelming majority of poor children do not go beyond primary education: data from GLSS7 indicate that in 2016/17, the JHS NER for those from the highest income quintile is more than three times higher than that of the lowest quintile (51.9 percent compared to 16.4 percent), and at the secondary level, this difference is approximately eight times higher (40.3 percent compared to 5.5 percent). Coupled with the fact that the Lorenz curve of public education expenditure finds that the richest 10 percent receive as much expenditure as the poorest 45 percent or 6.2 times the amount the poorest receive, there are substantial equity implications of current subsector allocations. Inequality in spending on primary and lower secondary education reinforces the bias.[73] In addition, per-student spending varies widely by region with the least amount spent on the Upper West, Greater Accra, Western, and Ashanti regions and the most spent on the Eastern and Central regions. This has strong correlations with regional distributions of poverty.

6. **The ESP financing model incorporates efficiency savings to reduce the long-term financing gap to between 6 and 7 percent.** It presents two costing projections: the 'status quo' projection includes the costs of reforms and new policies that have already been implemented to date – such as free SHS, refurbishment of schools in basic education, and increased capitation grants. The second cost projection adds to this the costing for reforms and policies in the ESP, including a number of efficiency savings.[74] Revenue estimates include donor funding that was already committed while the ESP was being drafted. In 2018, the gap between projects costs and revenue for the latter projection is less than 1 percent but increases rapidly to 9 percent and 11 percent in 2019 and 2021, respectively. As efficiency savings come

[72] National Development Planning Commission. 2015. *Citizens' Assessment Survey*.
[73] World Bank. 2018. *World Development Report 2018: Learning to Realize Education's Promise.* Washington, DC: World Bank.
[74] Efficiency saving strategies are detailed in the Education Sector Midterm Development Plan (ESMTDP) 2018-2022. Some of the key strategies include development and implementation of Early Grade Education Policy to ensure right age enrolment and reduce repetition; increasing the current Pupil Teacher Ratios in line with international standards to decrease the staff cost per pupil; rationalizing teacher deployment to meet local need, especially in low-enrolment schools; promotion of day and community SHS in order to reduce the proportion of boarding students with higher per-student and infrastructure cost.

into play, the funding gap falls and stabilizes between 6 percent and 7 percent from 2024 to 2030. However, large recurrent costs at the primary level leave little room for capital expenditure. In 2016, payment of salaries and related allowances accounted for 100 percent of the GoG's education expenditure for basic education. Capital expenditure for the subsector was funded from the Annual Budget Funding Amount (ABFA) and donor partners, with 21 percent and 42 percent of the funding going into basic education, respectively. There is a need to fund quality improvements and prioritized reforms that will trigger efficiency savings for the sector.

Figure 6.1. Revenue, Costs and Funding Gap – ESP Cost Projection Model



Source: MoE. 2018. Education Strategic Plan 2018- 2030.

Economic and Social Benefits of Investing in Improved Equity and Quality in Basic Education

7. **Ghana's returns to education (RoE) at the primary level is at 4.6 percent,** considerably lower than the global average of 11.5 percent or the average for Sub-Saharan Africa of 14.4 percent. This points towards a limited labor market, where wage employment opportunities for primary school graduates are lacking and RoE accumulates only at the secondary and tertiary education levels. In 2012, the RoE at the secondary and tertiary level was at 8.8 percent and 28.7 percent, respectively.[75] The RoE is likely to increase as Ghana has not reached the point of diminishing returns yet, with the RoE increasing from 2.7 percent in 2012 to 4.6 percent in 2016.

8. **Improvements in quality of basic education result in improved and equitable access to higher levels of education.** Evidence suggests that education quality at primary is directly linked to educational attainment. In Brazil, higher cognitive skills at primary school led to lower repetition rates and in Egypt lower-quality primary schools had higher dropout rates.[76] While access to basic education is fairly high with GER at primary over 100 percent and at JHS at 86 percent, access to secondary education remains challenging with GER at 53 percent. Further, completion rate at primary for the lowest income quintile is

[75] Montenegro, Claudio E., and Harry Anthony Patrinos. 2014. *Comparable Estimates of Returns to Schooling Around the World.* Washington, DC: World Bank.
[76] Hanushek, Eric A., and Ludger Woessman. 2007. *The Role of Education Policy for Economic Growth. Policy Research Working Paper, No. 4122.* Washington, DC: World Bank.

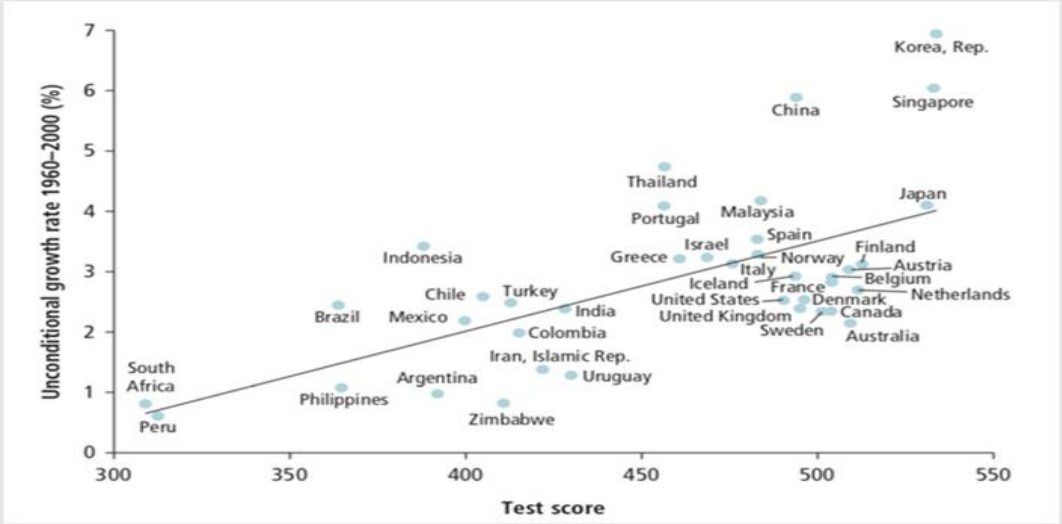
40 percent compared to a little over 80 percent for the richest income quintile, resulting in large inequities in access to secondary. Education cannot break the poverty cycle if private returns to education accrue at the secondary level and higher, but a majority of students in low income quintiles do not enroll at secondary. Quality improvements targeted at low-performing schools (that is, JHS schools with low BECE scores {that determine transition into secondary} and all KG and primary feeder schools) will lead to improved progression into secondary, resulting in more students benefiting from the larger wage premium associated with higher levels of education.

9. **In addition, the project's focus on early years is not only equity enhancing but also has long-term benefits in terms of readiness to learn and improved future learning outcomes.** Data from PISA found that after controlling for socioeconomic differences, for a cohort of 15-year-olds in school, those who attended preschool scored a year ahead of their peers.[77] A study in Kenya and Tanzania found that although those who attend preschool enroll in primary school late, once in school they progress faster and between the ages of 13 and 16 have completed one and a half month more than their peers who did not attend preschool while also scoring higher on cognitive tests.[78] There is substantial evidence from the United States[79] that students with higher test scores tend to go further in school. Higher scores at age 15 lead to significantly higher rates of post-secondary schooling of Canadian 19-year-olds.[80] Further, given the implications on distributional equity associated with high and increasing ratios of per-student spending between primary and tertiary (from 1:8.5 in 2014 to 1:11.6 in 2015) and much lower access to higher levels of education for those from low-income backgrounds, this project will be equity enhancing by ensuring increased investment at the early grade levels.

10. **Beyond access, it is increasingly evident that quality of learning is closely correlated with economic growth.** Basic education forms the cornerstone of economic development by building the foundation for knowledge capital development in progressively higher levels of education, which in turn can lead to a more productive labor force and increased economic growth. Conditional on initial GDP per capita and years of schooling, economic growth is vastly explained by the quality of education, measured by scores in tests of cognitive skills,[81] or the quality of education is substantially more important for economic growth than just the quantity of education.[82]

[77] World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific. World Bank East Asia and Pacific Regional Report*. Washington, DC: World Bank.
[78] Bietenbeck, Jan, Sanna Ericsson, and Fredrick M. Wamalwa. 2017. *Preschool Attendance, School Progression, and Cognitive Skills in East Africa.*
[79] Hanushek, Eric A., and Ludger Woessman. 2007. *The Role of Education Policy for Economic Growth. Policy Research Working Paper, No. 4122.* Washington, DC: World Bank.
[80] Knighton, Tamara, and Patrick Bussiere. 2006. *Educational outcomes at age 19 associated with reading ability at age 15.* Ottawa: Statistics Canada.
[81] Bashir, Sajitha, Marlaine Lockheed, Elizabeth Ninan, and Jee-Peng Tan. 2018. *Facing Forward: Schooling for Learning in Africa.* Africa Development Forum series. Washington, DC: World Bank.
[82] Hanushek, Eric A., and Ludger Woessman. 2007. *The Role of Educaiton Policy for Economic Growth. Policy Research Working Paper, No. 4122.* Washington, DC: World Bank.

Figure 6.2. Relationship between GDP Growth Rate (1960-2000) and Test Scores



Source: Hanushek, Eric A., and Ludger Woessman. 2007. The Role of Education Policy for Economic Growth. Policy Research Working Paper, No. 4122. Washington, DC: World Bank.

11. **Low learning outcomes in Ghana are affecting its economic productivity.** The HCI which gives an indication of potential economic productivity includes a measure on quality adjusted years of schooling which is calculated using average expected years of schooling and harmonized test scores. Ghana's expected years of schooling at 11.6 is higher than the LMIC average of 10.2 years and it outperforms Sub-Saharan African countries on all indicators except harmonized test scores (scoring 307 compared to 374 for Sub-Saharan African countries and 394 for LMICs). Ghana's HCI at 0.44 indicates that 56 percent of productivity is lost for a child born in Ghana today. Research indicates that a one standard deviation from the mean in cognitive skills (that is, learning outcomes), results in 0.17 to 0.22 proportional increases in wages.[83] In Ghana, with a one standard deviation increase in measured test scores, the proportional increase in wage in government employment is between 0.21 and 0.3.[84] This can subsequently spill over into economic growth and increased labor productivity. This implies that economic productivity will increase as a result of not just *more* schooling but *better* schooling.

12. **Benefits from improved learning outcomes will not only increase productivity levels, but individual returns as well**. Globally, it is estimated that the private average rate of return to one extra year of schooling is 9 percent a year, and social returns to schooling is above 10 percent at the secondary and higher education levels.[85] There are long-term poverty reduction benefits – according to GLSS7 data, 37 percent of households with household heads having no formal education live under the poverty line, compared to only 12.4 percent for households where household heads were at BECE level. Social returns

[83] Psacharopoulos, George, Harry Anthony Patrinos. 2018. *Returns to Investment in Education: A Decennial Review of the Global Literature. Policy Research Working Paper; No. 8402.* Washington, DC: World Bank.
[84] Glewwe, Paul, Nauman Ilias, and Michael Kremer. 2010. *Teacher incentives.* American Economic Journal: Applied Economics, 3: 205-27.
[85] Psacharopoulos, George, Harry Anthony Patrinos. 2018. *Returns to Investment in Education: A Decennial Review of the Global Literature. Policy Research Working Paper; No. 8402.* Washington, DC: World Bank.

to education, although difficult to quantify, are likely to exceed private returns due to the positive effect of education on crime, fertility, health, intergenerational mobility, improved citizen participation, and growth and productivity of the economy as a whole due to positive spillovers and complementarities between industries.[86]

Evidence in support of GALOP interventions

13. **The GALOP PDO is "*to improve the quality of education in low-performing basic education schools and strengthen education sector equity and accountability in Ghana.*"** The project includes four components: (a) Strengthen teaching and learning through support and resources for teachers; (b) Strengthen school support, management and resourcing; (c) Strengthen accountability systems for learning; and (d) Technical assistance, institutional strengthening, monitoring and research. The project will finance investments in quality improvements and accountability systems that are inadequately financed by public expenditure. The ESP costing model shows that the projected cumulative gap in revenue and costs during the project period (2019 – 2023) is approximately GHS 4,835 million or US$988 million. GALOP is expected to cover almost 18 percent of this funding gap.

14. **Teacher training is a key element of most education programming. Effective teachers collaborate with other teachers to improve their teaching, plan their lessons meticulously, identify misconceptions in student understanding of content, have high content knowledge, and use questioning techniques.** All these features were identified as key practices that high-performing teachers employ in East Asia, which has some of the highest educational outcomes in the world.[87] Low teacher content knowledge accounts for a large proportion of the learning gap in Africa; a unit increase in teacher's education increases student achievement by 3 percent, while in East Asia, collaboration and teamwork are essential elements of the system sometimes even affecting promotion.[88] However, teacher training is key to ensure that teachers are able to be effective. Successful interventions were often not stand-alone ones, they often provided supplementary materials in the form of textbooks.[89]

15. **Structured pedagogy interventions have the largest and most consistent positive effects on learning outcomes.** The most effective structured pedagogy interventions are generally multifaceted to address the various constraints to learning, and generally include matching teaching to the students' level and targeting training to the level of the teacher with continuous feedback and re-training. In Kenya, a structured pedagogy intervention to improve literacy instruction provided training workshops, semi-scripted lesson plans, and weekly text message support to teachers and improved literacy outcomes, with larger improvements for girls than for boys.[90]

[86] An overview of these relationships for countries in Sub-Saharan Africa can be found in: Majgaard, Kirsten, and Alain Mingat. 2012. *Education in Sub Saharan Africa: a comparative analysis.* Washington, DC: World Bank.
[87] World Bank. 2018. *Growing Smarter: Learning and Equitable Development in East Asia and Pacific. World Bank East Asia and Pacific Regional Report*. Washington, DC: World Bank.
[88] Bold, Tessa, Deon Filmer, Ezequiel Molina, and Jakob Svensson. 2017. *The Lost Human Capital: Teacher Knowledge and Student Achievement in Africa.* Unpublished paper.
[89] Popova, Anna, David Evans, Mary Breeding, and Viola Arancibia. 2017. *Global Landscape of In-service Teacher Professional Development Programs: The Gap Between Evidence and Practice.* PowerPoint Presentation, November 8, 2017.
[90] Matthew C. H. Jukes, Elizabeth L. Turner, Margaret M. Dubeck, Katherine E. Halliday, Hellen N. Inyega, Sharon Wolf, Stephanie Simmons Zuilkowski, and Simon J. Brooker. 2017. *Improving Literacy Instruction in Kenya Through Teacher Professional*

16. **Whereas evidence on SBM interventions is mixed, programs with proposal-based school grants have shown positive effects on learning outcomes. Further, Ghana has implemented a school grants program at basic education with some success.** Devolving decision-making to the school level through SBM has had mixed impacts on learning outcomes in Sub-Saharan Africa[91]. Reasons for this include that these SBM interventions may have substituted time away from teaching as they placed a burden on school administrators; parents were not always able to hold stakeholders accountable; where resources were constrained, SBM may not have been enough to overcome structural inequalities; and often schools did not prioritize learning materials.[92] In Niger, a school grants program had negative impacts on test scores.[93] In The Gambia, an SBM program offered a training program for SMC members in addition to the school grants – while there was no overall impact on learning outcomes, the program reduced student and teacher absenteeism.[94] On the other hand, in Senegal, school grants that schools had to apply to through a call for proposals (schools decided on how to spend, but decisions were verified by a government evaluation committee and had to align with district and system priorities) resulted in an improvement in test scores especially for girls with high ability levels at baseline and only in grade 3; impact was also stronger in the south of the country.[95] School grants programs have shown considerable success in Ghana. A difference-in-difference analysis of a school grants program in basic education showed substantial improvements in gross enrolment between intervention and non-intervention districts. Learning outcomes in English and mathematics at the P3 level improved significantly by 29 percent and 44 percent respectively. EGRA/EGMA assessments confirm that there were statistically significant improvements in number identification, letter sounds in English, oral reading in English, and letter sounds for local languages in the GPEG-deprived districts.[96]

17. **Strong accountability systems use student assessments to target school resources, set performance targets for schools, and ensure appropriate incentives are in place.** This is essentially a decentralized model of RBF, while simultaneously providing resources to ensure that schools are able to meet results. For example, in Brazil, the state of Minas Gerais tracked the performance of each region, school, and student on a database and used this data to differentiate its approach to schools; it provided strong guidance and enforced tight accountability for schools with the largest target gaps while allowing greater autonomy to higher-performing schools as long as they continued to meet targets.[97] In the Mexican state of Colima, an intervention that targeted additional support to the lowest-performing schools in a national examination – in the form of technical advisers, development of improvement plans with clear goals and strategies, follow up / supervision, reinforcement of teachers' knowledge, and specifying of the

Development and Text Messages Support: A Cluster Randomized Trial. Journal of Research on Educational Effectiveness, 10:3, 449-481.

[91] Bashir et. al, 2018 provides a review of the evidence on school-based management programs in SSA.

[92] Snilstveit, Birte, Jennifer Stevenson, Radhika Menon, Daniel Phillips, Emma Gallagher, Maisie Geleen, Hannah Jobse, Tanja Schmidt, and Emmanuel Jimenez. 2016. *The impact of education programmes on learning and school participation in low-and middle-income countries.*

[93] Beasley, Elizabeth, and Elise Huillery. 2017. *Willing but Unable?: Short term experimental evidence on parent empowerment and school quality. Policy Research Working Paper No.8125.* Washington, DC: World Bank.

[94] Blimpo, Moussa P, David Evans, and Nathalie Lahire. 2015. *Parental human capital and effective school management: evidence from The Gambia*. *Policy Research Working Paper Series 723.* Washington, DC: World Bank.

[95] Carneiro, Pedro Manuel, Oswald Koussihouede, Nathalie Lahire, Costas Meghir, and Corina Mommaerts. 2015. *Decentralizing Education Resources: School Grants in Senegal*. NBER Working Paper No. w21063.

[96] World Bank. 2017. *GPEG Project Implementation Completion and Results Report.* Washington, DC: World Bank.

[97] McKinsey, Informe. 2010. *How the world's most improved school systems keep getting better.*

role of school directors – resulted in substantial increases in test scores only a few months after the program was launched.[98] In Peru and Chile, data collected on student assessments and the school is used to produce reports comparing performance at various disaggregated levels and offering monetary incentives when performance targets are met, while also influencing national policy and providing feedback to schools and targeting additional resources.

18. **Robust data processes and systems are required to support reforms in accountability systems.** Ghana collects a substantial amount of education data including administrative data on schools, students and teachers, circuit supervisor inspection reports, learning assessment data for national examinations, sample learning assessment data, and so on. However, each of these data systems exists independently or has not been scaled up nationally. As a result, they do not inform each other, preventing robust accountability systems that link inputs with teacher behavior and learning outcomes. In Ghana, the mSRC was piloted in about 20 districts and found to be effective in providing real-time school data. Plans to have this replace the traditional pen-and-paper SRCs are being explored but will require funding. The USAID Learning Project has developed a dashboard to present learning outcomes data, but this again has not been scaled and is not linked to the EMIS database.

19. **In recent years, studies on the impact of PPPs have been mixed.** In Uganda, PPPs were introduced soon after universal secondary education was rolled out with the aim of absorbing the increased student population in public schools without having an adverse impact on quality. The study only compares PPP schools with private schools and finds that there is an increase in both enrolment and learning outcomes.[99] However, it is unclear how PPP schools compare to the public sector and whether PPPs are effective at the basic level. In Liberia, the Partnership for Learning Schools improved mathematics and English learning outcomes in the first year, with students learning more and receiving more instruction and teachers more likely to be at school, on-task and engaged instruction. However, the program has not demonstrated that it can work in the average Liberian school with sustainable budgets and staffing levels as it was implemented in schools with better infrastructure and staffing. It was also important to ensure that the selection of contractors was competitive and based on performance as this was not always the case in Liberia.[100] Equatorial Guinea is currently employing a 10-year PPP by one private provider (FHI360) in two phases. Phase 1, which is complete, focused on improving teacher quality in primary schools by ensuring that every teacher achieves a basic set of competencies through INSET and pre-service training and strengthening institutional capacity but using data to inform decision making and strengthening the annual school census; this has demonstrated improvements in terms of student repetition, mastery of reading and changes in teacher practices and knowledge.[101] In light of the mixed evidence on PPPs and limited evidence from Ghana, PPPs should be piloted with a robust accountability system in place before being rolled out.

Expected Economic Benefits

[98] De Hoyos, Rafael, Vicente A. Garcia-Moreno, and Harry Anthony Patrinos. 2015. *The impact of an accountability intervention with diagnostic feedback: Evidence from Mexico*. Washington, DC: World Bank.

[99] Barrera-Osorio, Felipe, Pierre Gaspard De Galbert, James P. Habyarimana and Shwetlena Sabarwal. 2016. *Impact of Public-Private Partnerships on Private School Performance: Evidence from a Randomized Controlled Trial in Uganda. World Bank Policy Research Working Paper No. 7905.* Washington, DC: World Bank.

[100] Romero, Mauricio, Justin Sandefur, and Wayne Aaron Sandholtz. 2017. *Outsourcing Education in a Fragile State: Experimental Evidence from Liberia.*

[101] FHI360. 2012. PRODEGE, the First Five Years Final Program Report. Available at: https://www.fhi360.org/sites/default/files/media/documents/PRODEGE%20Phase%201%20Final%20Report.pdf. Accessed 23 November 2018.

20. **Economic benefits are expected from higher labor market returns to improved learning outcomes resulting from better education quality and a larger number of people benefiting from higher wage premiums due to improved education attainment.** The bulk of the economic benefits is expected to flow from the improvement in the quality of education. Interventions are targeted toward improving the quality of education and it is expected that this improved quality will directly translate into improvements in learning outcomes and in turn into improvements in the income of individuals who benefit from the project. Improvements in education quality are likely to persist due to the development of a strong accountability framework and improved monitoring and supervision. Smaller benefits will accrue from the differential increase in progression rates or educational attainment as a result of improved quality. This analysis is restricted to quantifiable economic impacts and benefits.

21. **The premium for quality of education is expected to be driven by key interventions focused on improving learning outcomes through targeted training and strengthened accountability.** Factors expected to lead to the improvement of education quality include the following:

(a) **INSET for teachers targeting poor-resourced districts**. The training will be aligned with the revised curriculum and new pedagogical approaches and is expected to improve student proficiency in numeracy and literacy. This will be done through targeted instruction, structured pedagogy, and specialized play-based and active learning pedagogy for early childhood education.

(b) **Emphasis on learning outcomes through demand-led provision of school grants.** Schools develop three-year SPIPs that are focused on improving learning and are awarded grants to operationalize these plans. After the first year, grants are disbursed based on utilization of previous funding, creating incentives at the school level to focus on activities that improve learning outcomes.

(c) **These improvements will be supported by an accountability for learning framework, as well as an assessment system, which will create feedback loops for the entire system.** GALOP will support the harmonization of accountability systems and create an accountability dashboard to ensure that results are made available in a more expedient manner. This will allow decentralized structures to allocate funds equitably considering geographic disparities in learning outcomes. Additionally, a cost-effective assessment system will be introduced that will act as a barometer of the sector's performance and tilt the focus from inputs to outcomes.

22. **As a result of the improvements in the quality of education, this analysis assumes that the wage differential increases for those who have been targeted by GALOP interventions.** It is assumed that the wage differential also increases between primary school and JHS completers because quality improvements persist due to increased accountability. The income differential between the annual wages of those who have completed primary schooling and those who have had no access to formal schooling is assumed to increase by 5 percent. Similarly, the income differential between the annual wages of those who have completed JHS and SHS is assumed to increase by 2 percent and 1 percent respectively because of the quality and accountability interventions. These assumptions are conservative given that the wage premiums for primary, JHS, and SHS completers are 27.5 percent, 50.9 percent, and 68.5 percent respectively (see figure 6.5), and the global estimate for private average rate of return to one extra year of schooling is 9 percent a year.[102]

[102] Psacharopoulos, George, Harry Anthony Patrinos. 2018. *Returns to Investment in Education: A Decennial Review of the Global Literature. Policy Research Working Paper; No. 8402.* Washington, DC: World Bank.

23. **The relative increase in wage income is used as net benefit when calculating the project's IRR.** The monthly wage income in Ghana generally increases with higher levels of education, but there are large variances within each group. The average monthly wage in Ghana is GHS 884.9. Table 6.3 shows that the coefficients on education-level dummies strictly increase monotonically for wage employment.[103] The Mincer equation estimations using GLSS7 data show that the wage premium for primary school level of education is 27.5 percent and that for JHS is 50.9 percent. This amounts to a wage premium of an average of US$343 per year for primary and US$635 per year for JHS, which will increase to US$406 and US$660 respectively, given the improvements in quality of education.

Table 6.3. Average Monthly Earnings of Labor Force, Disaggregated by Education Attainment

Level of Education	Mean (GHS)	Standard Deviation (GHS)
None	508.8	744.6
Primary	657.1	1,039.9
BECE/MLSC	718.5	816.3
WA(SSCE)/O/A Level	663.6	926.2
Tertiary	1,327.1	1,119.9
Total	884.9	1024.0

Source: Estimates from GLSS 7 data.

Table 6.4. Returns to Education, Controlling for Social and Economic Factors

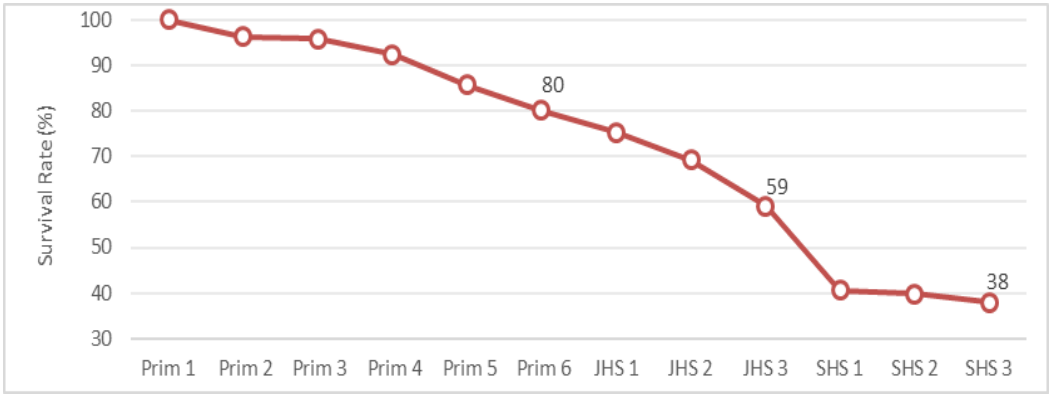
VARIABLES	Paid Employment	Public	Private
Primary	0.275***	-0.104	0.285***
BECE/MLSC	0.509***	0.579***	0.434***
WA(SSCE)/O/A Level	0.685***	0.858***	0.555***
Tertiary	1.407***	1.350***	1.199***
Age in years	0.0981***	0.0765***	0.106***
Age Squared	-0.000995***	-0.000704***	-0.00117***
Constant	4.047***	4.581***	4.089***

Source: Estimates from GLSS 7 data.
Note: *** implies significant at 1 percent confidence level.

24. **The second benefit stream arising from GALOP is attributable to increased education attainment because of improved learning outcomes arising from better quality education.** The education sector has high internal inefficiency as shown in figure 6.5. Currently, for every 100 children who enter P1, 75 enter JHS1, and only 59 remain in JHS3. The transition between JHS and SHS reduces enrolment numbers substantially, and of the original 100, only 41 enter SHS1, and 38 leave SHS3. Thus, only 38 percent of children who began P1 end up completing SHS3. The cost benefit analysis assumes that because of quality improvements, survival rates increase by 2 percent at P6 and by 1 percent at JHS and SHS for targeted populations.

[103] Private returns to education in Ghana were calculated following Kingdon and Söderbom (2008). This involves the fitting of a semi-log ordinary least square regression using the natural logarithm of earnings as the dependent variable, and then the dummy for levels of school completion, sex of the worker, age and its square as independent variables.

Figure 6.3. Progression Rates for Primary to SHS



Source : LeClercq, Francois, Erica Ananga, Sue Kageler and Michael Danquah.2017. "ESA on Equity in Ghana – Final Thematic Report." Accra: HEART.

25. **Externalities and other intangible benefits.** Notably, given the project's focus on improving the quality of education and system-wide changes, the benefit captured in this calculation is only a fraction of all benefits of the project, which includes social benefits and externalities that are difficult to measure in monetary terms.

26. **Costs associated with the program involve financing of teacher training, setting up accountability systems, funding the rollout of the curriculum and national assessment, supervision and monitoring costs, and provision of school grants.** The net cost mainly comprises the World Bank and GPE-funded investment. It assumes that the investments are allocated from 2019 to 2023 as shown in table 6.5.

Table 6.5. Assumptions on the Distribution of Loan during Project Period

Year	Loan Distribution (%)
2019	20
2020	25
2021	15
2022	15
2023	15
2024	10

27. **General assumptions for the cost benefit analysis:** (a) investments in improving quality of education result in improved learning outcomes which lead to increases in wage premium for primary, JHS and SHS graduates targeted under GALOP; (b) improvements in education quality lead to increases in educational attainment for students targeted under GALOP; (c) improvements in the quality of education persist for five years due to development of strong accountability and monitoring frameworks; (d) as a result, ten cohorts of students will benefit from the GALOP; (e) students graduate from basic education at the age of 15 and work till the age of 60; and (f) the long term rate of discount is 17 percent.

28. According to this Economic and Financial Analysis that internalizes the social benefit arising from this improved access to better quality education, the ***IRR of GALOP is expected to be 8.6 percent.***

29. A series of sensitivity tests were conducted to assess the variations in the IRR within a reasonable range of adjustments to the assumptions.

Table 6.6: Sensitivity Analysis

Assumptions	IRR (%)
Increase in the returns to primary education as a result of improved quality falls from 5 percent to 1 percent	4.4
Increase in the returns to primary education as a result of improved quality rises from 5 percent to 10 percent	11.6
There are no increases in survival rate at primary, JHS or SHS levels as a result of improved quality	8.2
Increase in survival rate at primary level as a result of improved quality rises from 2 percent to 5 percent	8.9
Benefits from improvements in quality do not persist after the project (that is, benefits accrue to five cohorts instead of ten)	7.1

Fiscal Sustainability Considerations

30. **This section reviews the financial sustainability considerations of the proposed school learning grants, accountability system and targeted support to teachers.** The sector analysis shows that while significant progress has been made in improving access to education, learning outcomes remain poor. Further, there is a need to improve the efficiency of public expenditure in education, in the allocation of teachers as well as the disbursement of school grants. Finally, equity considerations become important in the regional distribution of per-student government expenditure.

31. **Learning grants.** GALOP will target schools with low performance on the GALOP selection index (calculated based on BECE scores, average class size, percentage of trained teachers and district level poverty headcount) and any basic schools that feed into the selected JHS. This ensures efficient allocation of project funds as learning grants are targeted to schools with low learning outcomes. Performance contracts for the utilization of learning grants will be developed in collaboration with SMCs. These learning grants are expected to improve literacy and numeracy and increase equity, through a menu of activities from which the schools can choose. Previous pilots in school grants have resulted in improved distribution of funding, a more equitable allocation formula and a larger value of capitation grants. The learning grants are intended to increase efficiency in the use of non-salary public expenditure by aligning resources with outcomes instead of inputs.

32. Approximately 95 percent of GoG expenditure was allocated to salaries in 2017. Including all sources of public expenditure, the non-salary recurrent expenditure per student is US$6.62, US$5.38 and US$12.12 for KG, primary, and JHS respectively. Assuming about US$36 million will be allocated to learning grants in half of the basic schools in Ghana, the project will increase non-salary recurrent expenditure by approximately US$2.52 per student in targeted schools. This implies an increase of about 25 percent of the value of the capitation grant. These grants will be focused on improving learning at the targeted schools.

Table 6.7. Unit costs for Public Education

	GoG (US$)			All sources (GoG, Donor, IGF, GETFund) (US$)		
	Salary	Non-salary Recurrent	Total Recurrent	Salary	Non-salary Recurrent	Total Recurrent
KG	79.15	-	79.15	79.15	6.62	85.77
Primary	89.43	-	89.43	89.43	5.38	94.80
JHS	168.92	-	168.92	168.92	12.12	181.04

Source: Estimates based on expenditure data from MoE – Education Sector Performance Report, 2017 and 2016 and public enrollment from EMIS.
Note: Assuming an exchange rate of GHS 4.89 per US dollar.

33. After the project closes, the fiscal cost to the Government of continuing the learning grants in the targeted low-learning schools is US$9 million annually, representing less than 0.5 percent of total public expenditure on education. Given that GALOP will target half of the basic schools in Ghana, scaling the learning grants nationally will require a US$18 million annually, representing 1.15 percent of total public expenditure (or 2.3 percent of public expenditure on basic education). As documented earlier, the national average PTRs are low in basic education and so any additional fiscal space should be dedicated to non-salary expenditures aligned to improving learning outcomes.

34. **Strengthened accountability system.** GALOP will support the development of an accountability for learning framework, including harmonization and digitization of existing inspection tools and an integrated accountability dashboard for real time data access. These systems will build on existing tools and donor partner interventions such as the mSRC and the USAID Learning dashboard. Measurement of effective teaching and instructional leadership through classroom observation tools will build on lessons learned from diagnostic work undertaken by the World Bank through the TEACH pilot. Further, the accountability system will inform targeting of resources to underperforming schools increasing the efficiency of public expenditure in education. After the project closes, the fiscal cost to the Government will come from maintaining the number of inspection visits to schools. However, these visits are essential to improving the quality of education and should be prioritized in district education budgets.

35. **Targeted teacher training.** GALOP will support in-service teacher training on the revised curriculum, accountability framework, inclusiveness in education, and national assessment strategy. These trainings will build on existing material developed by donor partners and will be integrated at the school level through allocated periods in the time table, professional learning communities and development of head teacher instructional leadership skills. The trainings will also employ innovative and low-cost service delivery mechanisms like video-lessons, distance coaching and WhatsApp reminders. Further, they will be integrated through pre-service by working closely with other donors that are working toward this aim so teacher training costs will be minimal and fiscal sustainability can be achieved.

36. **Conclusion.** Fiscal sustainability considerations point toward a need to reorient education financing from inputs to learning outcomes, to build on existing systems and interventions, and to integrate pilots with mainstream programs. The cost benefit analysis of the GALOP shows an IRR of 8.6 percent with sensitivity test results ranging between 4.4 percent to 11.6 percent which shows that the economic returns to the beneficiaries supported by the project largely outweigh the project cost, an indication that the development impact of the project is significant.

ANNEX 7: MoE Reforms under the Purview of the Reform Secretariat

1. The Government has prioritized a number of reforms under the overarching Education Sector Strategy goal of delivering quality education at all levels of education. The reform priorities are directly aligned with the performance of key MoE management officials and are coordinated by the Reform Secretariat set up mainly to coordinate and account for key results achieved. The following are a list of reform priorities currently being implemented by the MoE:

(a) **Policy on Teacher Education Reforms through T-TEL**: Leads to the conversion of the CoEs into University Colleges and the rollout of a new Bachelor of Education teacher education curriculum to improve the quality of new teachers for the basic education sector.

(b) **Pre-Tertiary Curriculum Reform through NaCCA:** Leads to the design and implementation of a new pre-tertiary standards-based education curriculum replacing an objective-based curriculum. The new curriculum will have standards and assessment frameworks for teachers, school managers, and other stakeholders.

(c) **Legal, Institutional, and Regulatory Reforms**: Leads to the creation of a new agency that combines the functions of the National Accreditation Board (NAB) and the National Council for Tertiary Education (NCTE).

(d) **Tertiary Education Reform**: Leads to the conversion of the National Film and Television Institute (NAFTI) and the Ghana Institute of Journalism (GIJ) into two separate universities; and the consolidation of the Kumasi Campus of the University of Education Winneba and a few existing CoEs into a Technical Teacher Training University, in addition to other governance and regulatory reforms.

(e) **Technical, Vocational Education and Training (TVET) Reforms**: Realigns all Technical and Vocational Institutions (TVIs) under MoE and creates a Technical and Vocational Education Service (TVES) to govern them. There are also plans to set up 20 new fully equipped TVIs across the country.

(f) **Operationalization of Pre-Tertiary Teacher Professional and Management Development Framework through the NTC:** Leads to the establishment of a teacher licensing and registration system in Ghana, and a framework for teacher career progression based on the acquisition of skills and competencies.

(g) **Introduction of a new school supervision and inspection system through the NIB:** Leads to the establishment of a new inspection framework, inspection tools and revised inspection protocols, in partnership with the Education Development Trust and Office for Standards in Education (OFSTED).

(h) **Basic Education Decentralization Reform:** Leads to the devolution of Basic Education to District Assemblies, affecting the functions of the GES, NTC, NaCCA and NIB.

(i) **Public-Private Partnership Initiative for School Management**: Leads to the MoE and GES partnering with non-state actors to manage and deliver effective education service in public SHSs.

(j) **GES Institutional Reform: L**eads to the streamlining of the GES's operations to increase efficiency and reduce the redundancies resulting from basic education decentralization, and a comprehensive reform of HR systems.

(k) **ICT in Education Reforms**: Seeks to develop early desire and competences in children to use ICT, equip pre-tertiary learners with ICT skills, infuse ICTs into education management, and transform teacher development and tertiary education through technology-based training.

(l) **Secondary Education Reform (4 Pillars)**: With the Free SHS Program, the MoE seeks to absorb all fees paid at the SHS level, and additionally to expand physical infrastructure, improve quality, and promote skill development and equity.

ANNEX 8: Map of Ghana