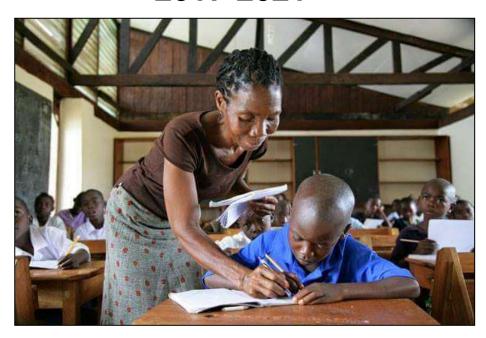


Ministry of Education

Republic of Liberia

Getting to Best Education Sector Plan 2017-2021



Full version

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Abbreviations

AfT Agenda for Transformation

AE Alternative Education

CEO County Education Officer

COTAE Coalition for Transparency and Accountability in Education

CPD Continuous Professional Development

CSA Civil Service Agency

CSB County School Board

CSE Comprehensive Sexuality Education

DEO District Education Officer

ECE Early Child Education

EDU Education Delivery Unit

EGLA Early Grade Literacy Assessment

EGMA Early Grade Mathematics Assessment

EGRA Early Grade Reading Assessment

EMIS Education Management Information System

ESA Education Sector Analysis

G2B-ESP Getting to Best Education Sector Plan

GDP Gross Domestic Product

GEEAP Gender-Equitable Education and Achievement Program

GOAL Girls' Opportunities to Access Learning

GoL Government of Liberia

GPE Global Partnership for Education

IMTTF Inter-Ministerial TVET Taskforce

LiTCOM Liberia TVET Commission

LNQF Liberia National Qualifications Framework

LJHSCE Liberia Junior High School Certificate Examination

LTTP Liberia Teacher Training Program

MoE Ministry of Education

MFDP Ministry of Finance and Development Planning

MYS Ministry of Youth and Sports

NTAL National Teachers' Association of Liberia

NCHE National Commission on Higher Education

NGO Non-governmental organization

PQTR Pupil-Qualified Teacher Ratio

PSL Partnership Schools for Liberia

PTA Parent Teacher Association

RTTI Rural Teacher Training Institute

SBM School-Based Management

SDG Sustainable Development Goal

SGBV Sexual and gender-based violence

SIP School Improvement Plan

SQA School Quality Assessments

STEM Science, technology, engineering and mathematics

TVET Technical and Vocational Education and Training

UNESCO United Nations Educational, Scientific and Cultural Organization

UNFPA United Nations Population Fund

UNICEF United Nations Children's Fund

USAID United States Agency for International Development

VPL Ventilated pit latrine

WAEC West African Examinations Council

WASSCE West African Senior Secondary Certificate Examination

WFP World Food Programme

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Gbovadeh Gbilia

Deputy Minister for Planning, Research and Development

Chair of the Education Sector Development Committee

President's Foreword

Our children and young people are the future we want for Liberia. Their education is the responsibility of all of us: parents, grandparents, communities and the Government.

We work towards a vision for education in Liberia where every child can go to school, where there is a quality teacher in every classroom, and where children achieve a good standard of learning. We have a vision of education for young people where they can access relevant quality education and training which improves their skills for livelihoods and work. We have this vision because education is the foundation of development.

Despite the many challenges we face, Liberia has made progress in improving education as we work towards the goal of education for all. In 2011, through the Education Reform Act, we enshrined compulsory free basic education (up to Grade 9). The national teacher verification exercise is removing the ghost teachers who have diverted resources from our children's education. We have led the world in innovations in improving early grade literacy and experimenting with partnership schools. Our education system has recovered from the scourge of the Ebola epidemic.

The new Getting to Best Education Sector Plan 2017-2021 continues these reforms, progress and innovation, delivering on the priorities identified by education stakeholders in consultations through the Joint Education Sector Review and Education Round Table. It will help us move towards the goals of the Agenda for Transformation and Sustainable Development Goal 4 to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all.' With this plan, we take steps to gradually removing fees for early childhood, begin to regularly inspect schools, train thousands of teachers and develop a new national curriculum for the 21st century.

I wish to thank the Ministry of Education, Ministry of Youth and Sport, Ministry of Finance and Development Planning, Civil Service Agency and the many education officers, teachers and educators who contributed to the G2B-ESP. I acknowledge the support of our many development partners and local and international non-government organizations who continue to support education in Liberia. I also thank the many faith-based partners and private schools who provide education for our children. Truly, it takes a country to educate a child.

The Government of Liberia is committed to the funding and delivery of the G2B-ESP and approves the plan for implementation.

President

Republic of Liberia

en Johnson Sirleat

Minister's Foreword

The Getting to Best Education Sector Plan 2017-21 is the culmination of 14 months of analysis, consultation and planning. It builds on the achievements and lessons of the last decade and the vision of our teachers, principals and education officers.

Since we started work on the Getting to Best agenda we have removed many ghost teachers from the payroll, started the Partnership Schools for Liberia, conducted the most successful annual school census, and provided school improvement grants to over 2,500 schools. In the last few years, with the help of our development partners, we have built new schools and hundreds of toilets and water systems. We have provided 340,000 reading books and over a million textbooks. The B certificate teacher training program has restarted. We have restructured and downsized the Ministry and recruited new District Education Officers. Every day over 400,000 children are fed.

But we face many challenges: limited resources, many schools still without decent water or toilets, many teachers without certificates, principals who need training, a TVET sector which doesn't prepare students for livelihoods and work, and large numbers of children who are too old for their grade or who drop out or never attend school. Despite our efforts, learning outcomes are poor.

The G2B-ESP will drive reforms right down to the school level as we try to tackle these many problems. What changes will you see in schools?

- Gradually, ECE fees will be reduced to ensure all children can attend kindergarten
- More trained teachers: 1,000 new C certificate graduates, 2,500 in-service Accelerated C teachers, 600 new B certificate teachers, 3,000 C ECE teachers and a clean, strong payroll
- Every school receiving at least one inspection visit per year
- New national curriculum syllabi for English and Math and national assessments for Grade 3 and 6
- Construction of hundreds of new toilets and water systems
- Special programs for overage and out-of-school children to get every child in school
- New national certificate for Agriculture and strengthening our TVET institutions and trainers
- Improved quality assurance in higher education with stronger connections to international universities

The Government will invest more in ECE and primary education, cutting inequitable subsidies and redirecting resources to the foundation grades of education. We will invest in teachers and the systems needed to monitor the performance of the education system. We will invest in the most disadvantaged areas first, and the most vulnerable children first.

We cannot make this journey alone. Our development partners have been closely involved in the development of the plan: their resources will be added to ours. I thank them for their commitment and support. I call on every education officer, every teacher, every principal, every parent and every student to do their part in implementing the G2B-ESP.

As per my authority under the Education Reform Act (2011), I approve this plan for implementation in all schools from July 1st 2017.

Georglademer

Hon. George Kronnisanyon Werner, Minister of Education, Republic of Liberia

Executive Summary

Introduction

Liberia's future depends on improving the quality and equity of our education system: to educate, inspire, train and develop our children and young people to continue the rebuilding of our country. We will invest in our teachers, schools and institutions to increase access to education and improve the quality of teaching and learning.

The Ministry of Education (MoE) has developed a four-year education sector plan (ESP) to address the most urgent challenges facing the education sector in Liberia: **Getting to Best Education Sector Plan** (G2B-ESP). The MoE will use the G2B-ESP to implement a series of strategic, evidence-based, and innovative programs to measurably improve the quality and relevance of teaching and learning for all students by June 2021.

The G2B-ESP is based on the priorities identified in the Getting to Best Roadmap and Priorities 2015-2017 (2015), uses the latest data available, and builds on the achievements and learning from the previous Education Sector Plan 2010-2020. It includes on-going or planned activities which align with the Getting to Best priorities and implements the national development priorities in the Agenda for Transformation (2015-2017) and Liberia Rising: Vision 2030.

Recent achievements

The MoE and its partners have launched a series of new laws, policies, programs and pilots to improve education access and quality in the last five years.

New Education Reform Act to drive reforms

In 2011, a new education law strengthened the right to quality education, restructured the MoE, introduced country school systems and set up the National Education Advisory Board to improve accountability and decision making.

Restructure of the Ministry of Education to improve efficiency

In 2015, the MoE central office was re-structured to align with the Education Reform Act (2011). This reduced the number of the central office employees from 936 to 425 staff.

• Implementation of teacher payroll verification to improve resource allocation

The on-going teacher payroll verification has identified 'ghost' teachers who can be removed from the payroll, saving money and improving the status of the profession.

Literacy and numeracy training and resources for primary teachers

Between 2010 and 2015, over 11,000 early grade teachers were trained through preservice, in-service and coaching modalities in early grade literacy and numeracy to improve the teaching of foundation skills. Teaching resources, such as scripted lessons and decodable readers, were included in the training packages. In addition, 1.4 million textbooks were distributed for G1-9 students.

Provision of annual school grants to primary schools

From 2011, all primary schools received an annual grant to support improvements in teaching and learning by replacing school fees.

• 'B' certificate teacher training program to increase supply of secondary teachers

To address the shortage of trained junior secondary teachers, MoE has established a 'B' certificate in-service teacher training program. Secondary student enrolment has continued to increase.

• Partnership Schools for Liberia (PSL) intervention to trial innovations to improve basic education

MoE has entered into public-private partnerships with non-government organizations and providers to manage 94 Government ECE and primary schools (approximately 25,000 students) for three years from the 2016/17 academic year. An evaluation of the PSL is expected to identify lessons which can be shared across the education sector.

 Development of the National Policy for Technical and Vocational Education and Training (TVET) to improve coordination and strategic direction

The President established an Inter-Ministerial TVET Taskforce (IMTTF) to drive improvement in the TVET sector in 2014. The IMTTF has completed the national policy and identified key priorities for action.

Challenges

The education sector faces a complex series of interrelated challenges, mostly related to the rebuilding and recovery from civil war, constrained national finances, poor infrastructure and, more recently, the Ebola epidemic. There is an increasing demand for education at all levels, particularly for quality livelihoods education for young women and men.

• Learning outcomes remain below MoE expectations. Pass rates among students taking the West African Examination Certificate (WAEC) Grade 9 and Grade 12 examinations in 2014 were 60% and 47% respectively, representing declines from previous years. In addition, the reading levels of students in early primary grades are

below MoE benchmarks. A literacy assessment conducted in 2014 found that Grade 3 students' oral reading fluency in English was below 20 correct words per minute, which is significantly lower than the MoE benchmark of 45 correct words. The quality of teaching and learning in all education sectors are a major concern.

- Overage enrolment is a critical issue affecting access to quality education in ECE classes and all primary and secondary grades. Over 74% of ECE students, 82% of primary students and 85% of secondary school students are over-aged for their grade (EMIS 2015). Each grade enrolls a wide-age range of students. For example, there are more 10, 11 and 12 years old students enrolled in Grade 2 than seven-year olds, which is the correct age group for this grade. Overage enrolment exacerbates drop-out rates, which in turn increases the need for alternative education programming (UNICEF 2012).
- There are large numbers of out-of-school children and children who do not attend school regularly. The main reasons for children not accessing basic education are: (i) school fees and expenses; (ii) unofficial grade entrance examinations; (iii) distance to school; and, (iv) poverty and rural status. Most children with disabilities do not attend school. School fees and indirect costs as the major barrier to access and cause of students dropping out.
- Girls and women are underrepresented at all educational levels and in the teaching force. Just 26% of teachers are female. In addition, several recent studies have found high prevalence of sexual and gender-based violence in Liberian schools.
- "Ghost" teachers and unskilled teachers are wasting scarce government resources, undermining MoE efforts to improve quality and negatively affecting staff morale and public trust in the teaching profession. Based on the on-going teacher verification exercise, the MoE estimates there may be around 2,250 ghost teachers on the payroll, as well as a large number of teachers with fake qualifications. A related problem is the number of teachers who are overpaid and underpaid due to a range of teacher management-related problems.²
- While the MoE is employing more qualified teachers than ever before, many teachers are unqualified. 50% of ECE staff and only 62% of primary school teachers are qualified, and less than 34% of junior and senior high school teachers hold

-

¹ Hobbs, J. and Davidson, M. (2015). Expanding EGRA: The Early Grade Literacy Assessment and its contribution to language instruction in Liberia. Presentation at UKFIET 2015. WAEC Presentation. Joint Education Sector Review 2015.

² Campbell, D. (2015). Teacher Verification Report: Montserrado, Bong, and Nimba counties. MoE/LTTP.

- minimum qualifications for their positions (EMIS 2015). In addition, Continuous Professional Development is irregular or non-existent in many areas.
- There are no national school quality standards in place for basic education schools in Liberia. This makes it difficult for country and district education officers, parents and community leaders to demand accountability from school principals and teachers.
- Capacity and resourcing at county and district levels requires significant improvement, especially in enabling sub-national officers to monitor education quality. A high turnover of staff, a lack of professional training, guidance and tools, and insufficient resourcing are collectively undermining the effectiveness of County and District education offices leaving schools, principals and teachers unsupported and unaccountable.³
- There are serious equity challenges facing the education sector in Liberia. There are major inequalities in education access, participation and learning outcomes by gender, urban-rural status, county of residence and household socio-economic status. In addition, disparities in the public resourcing of education and training is evident in major differences in key indicators by county and urban-rural status, such as pupil-qualified teacher ratio and student-classroom ratios. Education expenditure at the primary level, and the share of the national budget allocated to education, is low compared with international benchmarks.

³ Ministry of Education (MoE) (2016). Ministry of Education Annual Report 2015. Monrovia: MoE USAID. (2013).MID-TERM ASSESSMENT OF THE LIBERIA TEACHER TRAINING PROGRAM PHASE II. European Union. (2014). Ex-Post Evaluation of the EC support to Education in Liberia (ECSEL).

Strategic response

Following a comprehensive analysis of both high-level and sub-sector challenges, the MoE has identified interlinked strategies that will be implemented over the next four years (Table 0-1).

Table 0-1 Strategic response, programs and chapters

	Strategies	Program	Chapter
1	Establish an effective school quality improvement and accountability system	School Quality Program	5
2	Improve the efficiency and performance of education management system	Education Management & Accountability Program	6
3	Improve access to quality ECE	Early Childhood Education Program	7
4	Provide quality alternative and accelerated education pathways for overage and out-of-school children and young people	Overage and Out-of- School Program	8
5	Improve the efficiency, effectiveness and satisfaction of the teaching workforce	Teacher Education & Management Program	9
6	Ensure that teachers have access to quality instructional materials and assessment tasks	Curriculum & Assessment Program	10
7	Mainstream gender and school health across the education sector	Student Well-being Program	11
8	Improve the quality and relevance of technical and vocational education and training	Technical and Vocational Education and Training Program	12
9	Leverage regional and international partnerships and expertise, target market demand for critical skills and increase the efficiency of education expenditure	Higher Education Program	13

Programs

The MoE will prioritize and focus all available human and financial resources on the successful implementation of nine programs over the next four years to achieve strategic change. Each program consists of a number of components and activities whose delivery is the responsibility of specific MoE senior officers (Table 0-2).

Table 0-2 Program components and responsibilities

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
Strategy 1	Establish an effective school quality improvement and accountability system		
Program 1	School Quality Program	Deputy Minister for Administration	
Components	1. Establish School Quality Standards	Deputy Minister for Instruction Deputy Minister for Planning, Research and Development	Assistant Minister for Basic and Secondary Education Assistant Minister for Planning, Research and Development Director, Policy Formulation and Implementation Director, Planning, Monitoring and Evaluation
	2. School Improvement and Grants system	Assistant Minister for General Administration Deputy Minister for Planning, Research and Development	Assistant Minister for Planning, Research and Development Comptroller Budget Officer
	3. Principals' Leadership Program	Deputy Minister for Instruction Deputy Minister for Planning, Research and Development	Assistant Minister for Fiscal Affairs and Human Resource Development Director, Professional Development Director, Human

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
			Resources
	4. Increase the proportion of ECE, basic and secondary schools with toilets and safe water	Assistant Minister for General Administration	Director, Physical Environment Director, School Health and Physical Education
Strategy 2	Improve the efficiency and system	performance of education	on management
Program 2	Education Management & Accountability Program	Deputy Minister for Planning, Research and Development	
Components	1. Education Delivery Unit and education partnerships	Deputy Minister for Planning, Research and Development	Assistant Minister for Fiscal Affairs and Human Resource Development Director, Human Resources Donor Coordinator
	2. Workforce reform	Assistant Minister for Fiscal Affairs and Human Resource Development	Assistant Minister for Teacher Education Director, Professional Development Director, Human Resources
	3. School inspection	Deputy Minister for Planning, Research and Development	Assistant Minister, Planning, Research and Development Director, Research, EMIS, Statistics and Demographics
	4. Support and accountability at decentralized levels	Deputy Minister for Instruction	Assistant Minister for Fiscal Affairs and Human Resource Development Comptroller

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
	5. Sector planning, monitoring, budgeting and finance strengthening	Deputy Minister for Planning, Research and Development Deputy Minister for Administration	Assistant Minister for Planning, Research and Development Director, Research, EMIS, Statistics and Demographics Director, Planning, Monitoring and Evaluation Comptroller
Strategy 3	Improve access to quality E	ECE	
Program 3	Early Childhood Education Program	Deputy Minister for Instruction	
Components	1. ECE public awareness campaign and outreach to families and communities about the value of ECE and good parenting skills	Assistant Minister for Early Childhood Education	ECE Specialists Director, Communications Director, Parent and Community Engagement and National Dropout Prevention
	2. Roll out ECE certification and training for teachers through Rural Teacher Training Institutes, colleges and universities	Assistant Minister for Early Childhood Education Assistant Minister for Teacher Education	Director, Teacher Education Director, Professional Development ECE Specialists
	3. Build additional ECE school infrastructure in areas of greatest need	Assistant Minister for General Administration	Assistant Minister for Early Childhood Education Director, Physical Environment ECE Specialists
	4. Improve the quality of ECE provision for children aged 3- to 5-years-old	Assistant Minister for Early Childhood Education	Assistant Minister for Research, Planning and Development ECE Specialists

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
Strategy 4	Provide quality alternative and accelerated education pathways for overage and out-of-school children and young people		•
Program 4	Overage & Out-of-School Program	Deputy Minister for Instruction	
Components	Increase capacity to plan, budget and manage alternative education (AE)	Assistant Minister for Basic and Secondary Education	Director, Alternative Basic Education
			Comptroller
			Director, Human Resources
			Director, Planning, Monitoring and Evaluation
	2. Professional development for AE teachers, facilitators,	Assistant Minister for Teacher Education	Director, Alternative Education
	principals and administrators		Director, Professional Development
	Overage student program	Assistant Minister for Basic and Secondary Education	Director, Alternative Basic Education
		Assistant Minister for Planning, Research and Development	Director, Policy formulation and implementation
	4. Out-of-school children and young people program	Assistant Minister for Basic and Secondary Education	Director, Alternative Basic Education
			Assistant Minister for Student Personnel Services
			Director, Parent and Community Engagement and National Dropout Prevention
Strategy 5	Improve the efficiency, effectiveness and satisfaction of the teaching workforce		
Program 5	Teacher Education & Management Program	Deputy Minister for Instruction	

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
Components	Improve teacher registration, performance management and incentives	Assistant Minister for Teacher Education	Director, Teacher Education
		Assistant Minister for Fiscal Affairs and Human Resource Development	Director, Professional Development
			Director, Human Resources
	2. Increase the proportion of qualified and trained	Assistant Minister for Teacher Education	Director, Teacher Education
	teachers		Director, Professional Development
			Director, Human Resources
Strategy 6	Ensure that teachers have access to quality instructional materials and assessment tasks		
Program 6	Curriculum & Assessment Program	Deputy Minister for Instruction	
Components	New English and mathematics syllabuses and teacher guides	Executive Director, Curriculum Development and Textbooks Research	Assistant Minister for Basic and Secondary
	2. National literacy and numeracy assessment system for grades 3 & 6	Executive Director, Curriculum Development and Textbooks Research	Assistant Minister for Research, Planning and Development
			Director, Research, EMIS, Statistics and Demographics
Strategy 7	Mainstream gender and school health across the education sector		
Program 7	Student Well-being Program	Deputy Minister for Instruction	
Components	Implement National Policy on Girls' Education	Assistant Minister for Basic & Secondary Education	Director, Girls' Education
			Director, Policy Formulation and Implementation
			Director, Research, EMIS, Statistics

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
			and Demographics Director, Communications
	2. Counter school-related gender-based violence	Assistant Minister for Basic and Secondary Education	Director, Girls' Education Director, Communications Executive Director, Curriculum Development and Textbooks Research
	3. Strengthen school health and student wellbeing	Assistant Minister for Student Personnel Services	Director, Special and Inclusive Education Director, School Health and Physical Education Director, Guidance and Counselling Director, Physical Environment Supervisor, School Feeding
Strategy 8	Improve the quality and relevance of technical and vocational education and training		vocational education
Program 8	Technical and Vocational Education and Training Program	Deputy Minister for Instruction	
Components	1. Improve the TVET information base	Assistant Minister for Science, Technology, Vocational and Special Education	Director, Vocational and Technical Education Director, Research, EMIS, Statistics and Demographics
	2. Improve the quality of TVET delivery	Assistant Minister for Science, Technology, Vocational and Special Education	Director, Vocational and Technical Education Assistant Minister

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
			for Teacher Education
			Director, Alternative Basic Education
	3. Lay the foundation for a national qualification framework for agriculture	Assistant Minister for Science, Technology, Vocational and Special Education	Assistant Minister for Teacher Education
	and another area of high demand		Executive Director, Curriculum Development and Textbooks Research
			Director, Vocational and Technical Education
Strategy 9	Leverage regional and international partnerships and expertise, target market demand for critical skills and increase the efficiency of education expenditure		
Program 9	Higher Education Program	Director General, National Commission on Higher Education	
Components	Increase quality and relevance in Higher Education	Director General, National Commission on Higher Education	
	2. Improve equity and efficiency in higher education finance	Director General, National Commission on Higher Education	
	3. Higher Education Act	Director General, National Commission on Higher Education	

As the challenges faced by the education sector are complex, interrelated and persistent, many program components are interrelated:

 Inequalities at the school level are addressed, for example, by targeting resources such as school grants, building infrastructure, funding school supervision and inspection, piloting strategies to improve teacher deployment and ensuring teacher training is mostly at the district level. All major activities are targeted on the most disadvantaged areas and populations.

Gender inequity is addressed, for example, through specific cross-program
measures to reduce abuse of students coupled with female teacher incentives,
female principal training and improved toilets and water supply.

Development of the G2B-ESP

The MoE developed the G2B-ESP based on the national development priorities. The process included the following documents, analysis and consultation:

- 1. Constitution of the Republic of Liberia (1986)
- 2. Education Reform Act (2011)
- 3. Agenda for Transformation (2012)
- 4. Liberia Rising: Vision 2030
- 5. Getting to Best (G2B) Roadmap
- 6. Getting to Best Priorities 2015-2017
- 7. Education Sector Analysis (ESA) 2016
- 8. MoE Education Sector Plan 2010-2020
- 9. MoE Operational Plan 2014-16
- 10. Joint Education Sector Review (2015)
- 11. Education Sector Analysis (2016)
- 12. Education management information system (EMIS) data from 2014 and 2015
- 13. Consultations with development partners, representatives from non-government organizations and education stakeholders.
- 14. In-depth consultations with the Minister of Education, Deputy Ministers, Assistant Ministers, senior MoE officers and advisers
- 15. Comprehensive analysis of secondary data (reports, project/program documents, studies, etc.) from the last five years
- 16. Recent, relevant national and international reports and studies

Chapter 1 Country context

1.1 Introduction

The Ministry of Education (MoE) has developed a four-year strategic plan called the **Getting** to **Best Education Sector Plan** (G2B-ESP) to directly address the most urgent challenges currently facing the education sector and to deliver measurable results for all Liberian students.

The MoE intends to use the G2B-ESP to implement a series of evidence-based, aligned and innovative education sector reforms that have the potential to realize dramatic improvements in the quality of teaching and learning in schools across the country. The G2B-ESP is a catalyst for change that will mobilize, unite and coordinate education sector stakeholders: MoE staff, teachers, principals, students, parents, community leaders, faith-based and private education partners, civil society organizations and development partners.

Since the official end of the Ebola crisis, the Minister of Education has led a rapid and comprehensive education sector review followed by identification of reform priorities. Key achievements from this review include publication of documents that provide the strong evidence base for the G2B-ESP, namely: (i) Getting to Best Priorities 2015-2017; (ii) Getting to Best (G2B) Roadmap (2015); and, (iii) Education Sector Analysis (ESA) Report (2016).

Development of the G2B-ESP will enable the MoE to build on the previous long-term Education Sector Plan (ESP) for the period 2010-2020. The G2B-ESP replaces the 2010-2020 ESP. The G2B-ESP will enable the MoE to take into account key policy, legal and contextual changes impacting the sector, such as the Education Reform Act 2011, the establishment of county school system, the re-organization of the MoE and recent reform successes, such as cleaning the teacher payroll.

A four-year planning period for the G2B-ESP is more realistic in light of Liberia's social, economic and political vulnerabilities. Specifically, the Government of Liberia (GoL) faces a highly uncertain macroeconomic and budgetary environment due to the lingering effects of the Ebola epidemic and a downturn in global commodity prices. Furthermore, the population remains vulnerable to food insecurity, which could be exacerbated by extreme weather events (e.g. drought and flooding). In addition, the planned elections in late 2017 and subsequent transition to a new government could lead to moderate levels of political and security risk. Clearly it is important to have a widely-owned strategic plan that focuses on delivering measurable change in schools during this period.

The Getting-to-Best Education Sector Plan (G2B-ESP) is available in full or concise formats (Table 1-1). The following full G2B-ESP contains contextual analysis summary, program-level situational analysis, components, activities, results framework and indicative budget. Indepth analysis on the state of education (including a review of the achievements of the 2010-2010 ESP) is contained in the Education Sector Analysis (ESA). The MoE will develop Annual Operational Plans based on the G2B-ESP which will include programmatic budgets and detailed timelines (Annex 2). A summary of indicative budgets for each program and component can be found in Chapter 14.

Table 1-1 Education analysis and planning documents

Document	Publication	Contents
Education Sector Analysis	November 2016	In-depth analysis on the state of education in Liberia including national and international research, references and data
G2B-ESP full version	November 2016	Program-by-program analysis and background
		Program components, budgets and results framework
		Education sector background
		References
G2B-ESP concise version	November 2016	Program components, budgets and results framework
Annual Operational Plans	Annually	Operational plan, timeframe, interim targets and detailed budget for G2B-ESP activities

1.2 Timeframe

The G2B-ESP runs for four years between 1st July 2017 to 30th June 2021 (Table 1-2). There will be four Joint Education Sector Reviews during this period including a mid-term review in late 2019.

Table 1-2 Timeframe of G2B-ESP

Year 1	1 st July 2017 - 30 th June 2018
Year 2	1st July 2018 - 30th June 2019
Mid-term review	September-November 2019
Year 3	1 st July 2019 – 30 th June 2020
Year 4	1 st July 2020 – 30 th June 2021

1.3 Political geography

Liberia became independent on July 26, 1847 and is Africa's oldest republic. The country is organized into four regions, 15 counties and 90 administrative districts (Figure 1-1).

Figure 1-1 Regions and counties of Liberia



Source: World Bank (2012)

There are sixteen indigenous ethnic groups in Liberia. Although English is the official language, Liberia is a multilingual country where more than thirty languages are spoken⁴.

Liberia is a post-conflict country. In 1979, a coup d'état led to a long period of intermittent civil war. During this period, violence claimed an estimated 270,000 lives and lead to the displacement and migration of millions of Liberians. In 2003, Liberia transitioned to a state of peace and stability and, as families and communities rebuilt their lives, the Liberian government began the work of post-conflict reconstruction and stabilization. In 2013, the GoL outlined an Agenda for Transformation, which sought to build on ten years of stability and set the country on a course for inclusive growth.⁵

1.4 Demographic and social context

1.4.1 Demographic trends

Liberia had approximately 4.4 million people in 2014 with a relatively high population growth rate of 2.5%. It is a young country with around 40 percent of the population under age 15. The relatively high proportion of young people will remain fairly constant for the next decade and this puts significant pressure on the education system.

Liberia is experiencing growing urbanization: by 2016 it is projected that half the population will live in towns or cities. The bulk of the urban population is in the Monrovia - Montserrado area which has a population of over 1.4 million people. This poses particular issues for school expansion and provision of quality education in both dense urban areas and remote rural communities.

1.4.2 Socioeconomic factors

Many people in Liberia live in poverty. Nearly 70% of the population in Liberia lives on less than \$1.90 per day (20 percentage points higher than other developing countries in Sub-Saharan Africa). Although Gross National Income per capita in Liberia has nearly doubled since 2003, Liberia continues to have one of the lowest human development indices in the world, ranking 177 out of 188 countries in 2015 (UN Human Development Report 2015).

Several key health indicators have begun to improve since 2003. In particular, infant and under-five mortality rates have reduced significantly. However, diseases such as malaria are common. Many children are malnourished: 32 percent of under-fives are stunted and 15 percent are underweight (WHO, World Bank statistics 2013). Life expectancy is estimated at

⁴ https://www.ethnologue.com/country/LR

⁵ Ministry of Planning and Economic Affairs. (2013). Republic of Liberia Agenda for Transformation. Monrovia: MoPEA.

61 years and mortality rates, although improving, remain high. The recent Ebola Virus Disease (EVD) outbreak further damaged the health system and had a major impact on education through the closure of schools as an emergency measure.

Many Liberians work in vulnerable occupations such as smallholder or subsidence agriculture or informal employment. Due to economic insecurity, children and young people often have to work to support the household. Girls and young women are especially vulnerable, with particularly high levels of transactional sex. Low literacy and skill levels impact the opportunities to make a living and escape from poverty.

1.5 Fragility and vulnerability

1.5.1 Political and security uncertainties

Liberia enjoys a relatively stable and democratic government with presidential and legislative elections scheduled for October 2017. President Ellen Johnson Sirleaf will be completing her second and final six-year term so the transition to a new administration may result in political uncertainty, particularly within government ministries. As of July 1, 2016, the GoL has assumed responsibility for security from the UN Mission in Liberia (UNMIL). The transition was a significant milestone for Liberia but may contribute to some uncertainty in the security environment.

1.5.2 Inequality

Gender and income inequality are serious issues. Liberia ranks 146 out of 155 on the UN Gender Inequality Index and most sources point to relatively high levels of income inequality (UN Human Development Report 2015).⁶

The drivers for inequality include:

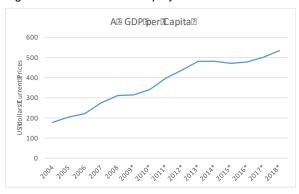
- Vulnerable employment;
- Displacement during the civil war and rapid urbanization;
- Geographical disadvantage due to remoteness;
- Poor education and health services; and,
- Marginalization of women and girls.

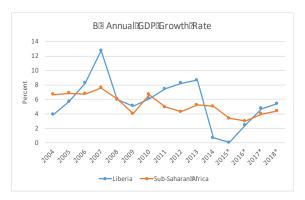
1.5.3 Macroeconomic context

Before the Ebola outbreak, Liberia experienced rapid economic growth, averaging 7% GDP annual growth between 2009 and 2013. However, the global decline in commodity prices, Ebola outbreak and reduced mining production have had major impact (Figure 1-2).

⁶ According to the 2015 Human Development Report, 83.8% of Liberians are below income poverty line; 35.4% are in severe poverty; 21.5% are near poverty.

Figure 1-2 GDP trends and projections





Source: IMF 2016

Liberia faces a severely constrained macro-economic and budgetary environment and weak growth prospects over the medium term, especially as the prices of major commodity exports (rubber, iron ore and oil palm) are likely to be depressed for some time.

Despite huge progress in the last decade, GDP per capita remains very low at around \$500, much lower than an average of US\$800 for African low-income countries.

1.5 Government finances

Government revenue had increased steadily as a share of GDP during 2004-13. Tax revenue increased and external debt had been significantly reduced thanks to substantial debt relief. Prudent fiscal policy and strengthened public financial management contributed to a near doubling of government revenue, resumption of direct budget support, and initiation of significant infrastructure development projects without accumulation of expenditure arrears.

Thanks to the strong support from the international community, the government maintained the fiscal deficit at a manageable size (8.1% of GDP in 2015 and 8.5% of GDP in 2016) even with the constrictions in economic output and additional expenditure during the Ebola outbreak. However, government finances remain highly vulnerable, especially in light of the demands of a growing population, much-needed investments and difficult macroeconomic environment. GDP in 2016 is now projected to contract by 0.5%, mainly due to continued weakness of commodity exports.

1.6 Development vision

The Government of Liberia has articulated the following developmental vision for Liberia: that Liberia move toward a more equal, just, secure and prosperous society. The Agenda for Transformation (AfT, 2012, the second Poverty Reduction Strategy) and Liberia Rising Vision 2030 (2015) are the overarching long-term and five-year medium-term development plans.

Consistent with the development vision of economic growth, a peaceful and inclusive political system, a diversified economy, stable institutions and healthy and productive citizens, the Agenda for Transformation's goal for the education sector is 'to ensure equal access to a high-quality free and compulsory basic education and to a variety of post-basic education and training opportunities that lead to an improved livelihood and/or tertiary education' (Ministry of Planning and Economic Affairs, 2012).

In recent policy documents, the MoE has reinforced its commitment to improving the quality of education and highlighted the important role that education can play in the development of a more just and inclusive Liberia. This commitment aligns with Sustainable Development Goal 4: to 'ensure inclusive and equitable quality education and promote lifelong learning opportunities for all' (UNESCO, 2015). SDG commitments are summarized in Annex 5 and included in relevant G2B-ESP programs and results frameworks.

Additional analysis of the country context can be found in the Education Sector Analysis (2016).

Chapter 2 Education sector context

2.1 Structure

During the civil wars, the formal education system was almost non-existent in Liberia. Since 2003, MoE has rebuilt the government formal and non-formal educational systems to meet the goal of providing equal access to education for all citizens regardless of age, disability and gender.

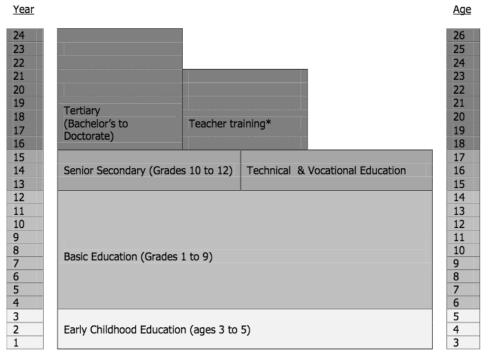
The formal education system (Figure 2-1) is structured as follows:

- Early Childhood Education, which is comprised of three years, for children ages 3, 4 and 5, and designated as KG1-3⁷,
- Basic (or Primary) Education, which is comprised of nine years, including six years of lower basic education (Grades 1-6) for children aged 6-11 and three years of upper basic education (Grades 7-9) for children aged 12-14, 8
- Senior Secondary Education, which is comprised of three years of either academic education or technical and vocational education and training, for young people aged 15-17 and designated as Grades 10-12, and
- Higher Education and Post-Secondary Training, which includes certificate, diploma, degree and post-graduate programs offered by teacher training institutes, colleges and universities.

⁷ The current school census form reports four ECE grades: Nursery I (2 year olds in "day care"), Nursery II (3 year olds, sometime knows as Beginner), Kindergarten I (4 year olds) and Kindergarten II (5 year olds). Terms can be used interchangeably at the school level (for example, Nursery II can be referred to as KG I. There are three official ECE grades: 3, 4 and 5 year olds.

⁸ Prior to the Education Reform Act (2011), Grades 1-6 were identified as primary education, Grade 7-9 as Junior High and KG1 and KG 2 as pre-primary.

Figure 2-1 Structure of the formal education system



^{*} As per the Education Reform Act 2011, the Grade C teaching certificate is for teaching primary school (grades 1-6) only and requires 1 year of training (two semesters). The Grade AA teaching certificate (equivalent to an associate's degree) is for teaching both primary and junior high secondary only (grades 6-9) and requires 2 years of training. The Grade B teaching certificate (equivalent to a bachelor's degree) is for teaching secondary school (grades 6-12) only and requires 2 years of training. The teaching certificate to teach in Colleges of Education requires 2 years of training in teaching and a Master's degree.

Source: EMIS 2014

At the end of Grades 9 and 12, students are required to pass a West African Examinations Council (WAEC) examination in order to be eligible to transition to the next level of education.

MoE offers Alternative Education (AE) programs and the sector includes service providers providing different forms of post-secondary and professional education and training services. Alternative Education programs include the Accelerated Learning Program, which allows overage children (8-13 year olds) to complete a basic education and transition to Grade 7 and Alternative Basic Education which allows young people and adult learners to complete basic education requirements and transition to Grade 7, apprenticeships or the workplace.

2.2 Government and non-government schools

Government schools consist of public and community schools. The latter were established by communities during the civil wars and reconstruction period. Around half the education sector is delivered by faith-based education systems, individual faith-based schools and private schools (Table 2-1). The majority of senior secondary students are educated in non-government schools.

Table 2-1 Number of schools, by ownership

	ECE	Primary	Jun. High	Sen. High	Physical Total
Public	2,425	2,494	549	144	2,611
Private	1,555	1,558	778	307	1,656
Faith-based	793	822	423	177	851
Community	307	304	82	12	320
Total	5,080	5,178	1,832	640	5,438

Source: EMIS 2015

Most non-government schools (private schools and faith-based schools) have entry examinations and fees which disadvantage poorer families and increase the strain on government schools. The majority of non-government schools are located in three counties: Montserrado, Nimba, and Margribi.

2.3 Governance

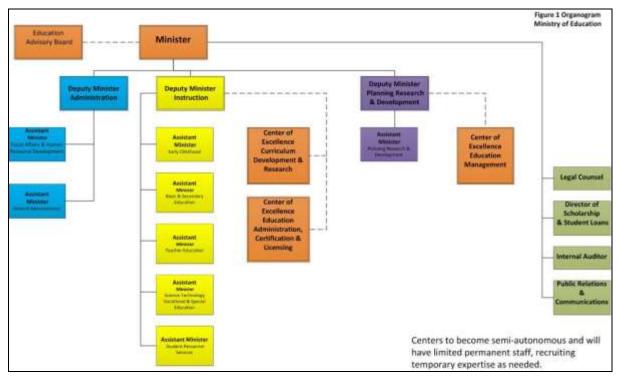
The MoE is responsible for oversight of the whole education sector including establishing the national curriculum, standards and policy for all schools and educational programs. It is the largest government department and has management offices and personnel at central, county and district levels, as well as over 20,000 staff (teachers and principals) working at the school level.

The education legislation is the Education Reform Act (2011) which restructured the MoE bureaus (Figure 2-2), reformed the student grade structure and laid out a pathway to decentralization through the establishment of county and district education boards. In 2015, the MoE reduced headquarter staffing from 926 to 425 persons.⁹

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⁹ Ministry of Education (MoE) (2016). Ministry of Education Annual Report 2015. Monrovia: MoE.

Figure 2-2 Ministry of Education organogram



Source: Education Reform Act 2011

Other bodies supporting education in Liberia include:

- Rural Teacher Training Institutes (RTTIs)
- Colleges and universities with education or technical and vocational education and training (TVET) courses
- Civil Service Authority (which handles payroll for teachers and MoE officers)
- Ministry of Youth and Sport (which is also mandated to support TVET)
- National Teachers' Association of Liberia
- West Africa Examinations Council
- National Commission on Higher Education
- Non-government school providers, including faith-based and private education systems such as the Association of Private School Operators
- Development partners and bilateral and multilateral donors
- Local and international non-government organizations and civil society organizations
- Private sector businesses including large agricultural and mining concessions

2.4 Public education expenditure

Education in Liberia is financed by multiple sources including the government, development partners and private out-of-pocket contributions by parents. The volume of public education expenditures has increased by 80% since 2009 but the share of the education sector as a proportion of overall government expenditure has averaged just 12% over the last six years. In 2014/15 the share was especially low at only 10.3%. The education budget (including salaries, higher education and subsidy transfers) has averaged USD 73,964,000 between 2012/13 and 2015/16.

The overall education budget is equivalent to 3.83% of Liberia's Gross Domestic Product (GDP) over the period of 2012/13-2015/16. In FY 15/16 the investment on education sector increased to 13.5 percent due to the Economic Stabilization and Recovery Plan (ESRP) which focused on health and education sectors and was designed to guide the economy back to the path before the Ebola epidemic. The actual spending is both below the government's own target in the Education Sector Plan 2010-20 and the Global Partnership for Education minimum benchmark (20%), and compares poorly with similar countries.

Liberia remains on the lower end in regards to the allocation of government resources to the education sector (Figure 2-3). The education sector is operating in a fragile budget context where external shocks or crisis can easily have negative influence on the available resources to education.

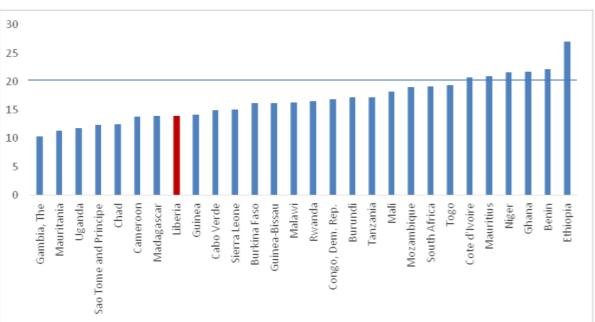


Figure 2-3 Share of education expenditure in overall expenditure in selected countries, latest available data

Source: Ministry of Finance & Development Planning and World Bank Edstats, 2016

The share of donor financing of the education sector is fairly high at over 50%. Most development funds are channeled outside the national budget system and go directly to implementing agencies. The share of higher education expenditure in the education sector budget is high: 32% of total education budget in 2014/15. Coupled with transfers to non-government institutions (known as subsidies), and the relatively low share of government spending, this presents substantial challenges to improving education.

In summary, the Ministry of Education, and the majority of schools, are underfunded and under-resourced. Significant and pervasive underfunding prevents the system from making progress toward quality basic and post-basic education.

2.5 Priorities and plans

The Education Sector Plan 2010-2020 and 2014-16 Operational Plan aimed to provide all Liberians with the opportunity to access and complete affordable education of a quality, relevance and appropriateness that meets their needs and that of the nation. This was reinforced by the Education Reform Act (2011) and AfT (2012). The achievements and performance of the previous ESP are summarized in the Education Sector Analysis.

Recently, MoE has undertaken consultation on priorities for the remaining years of the Education Sector Plan, leading to the G2B-ESP.

2.6 Achievements

The MoE has achieved substantial improvements in the last few years:

- Coverage at the primary level had increased steadily and structurally exceeded 100 percent in 2011¹⁰
- Secondary level enrollment has increased (Table 2-2)
- Implementation of the teacher payroll verification exercise has removed 1,100 "ghost" teachers
- Organizational restructuring at the MoE central office, reducing the number of central office staff
- Regular strengthening of the annual school census exercise and EMIS accuracy. In 2011–12, only public schools were covered. In 2012-13 and 2013–14, public, private,

¹⁰ Due to the Ebola outbreak, enrolment dropped sharply in 2014 and 2015. This is projected to recover.

mission and community schools were covered but responses from schools were limited and the team had to make projections to estimate the actual level of enrollment in the country. In 2013–14, alternative education programs were added. In 2015-16 a second wave of data collection has ensured that MoE has complete coverage (98.44%, with only 86 schools not responding to the forms sent to them). Moreover, a verification exercise conducted in July 2016 and additional error correction and verification protocols have ensured that 2015-16 has one of the most accurate assessment of education data to date¹¹.

- Implementation of a new 'B' certificate in-service training program to address the shortage of trained junior high school subject specialist teachers
- Provision of annual grants to basic education schools
- Distribution of over 1.4 million textbooks to schools for Grade 1-9 students
- Begun a trial of the largest public-private partnership education program in Africa:
 Partnership Schools for Liberia (

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¹¹ MoE (2016) LIBERIA EDUCATION STATISTICS REPORT 2015 – 16

Table 2-3).

Table 2-2 Gross enrolment ratio by education level (%)

	2008	2009	2011	2014	2015
Primary	93.3	99.6	102.4	57.7	86.7
Lower Secondary	42.7	46.4	49.4	31.5	52.7
Upper Secondary	-	-	40.3	30	39.4

Source: EMIS 2014, 2015

Partnership Schools for Liberia (PSL)

Between 2016 and 2019, the MoE will pilot and evaluate a large-scale public-private partnership to improve student learning outcomes. Non-government and private organizations ('school operators') will be contracted to manage 94 Government ECE and primary schools – the 'Partnership Schools'.

These 'Partnership Schools' will remain government-owned, fee- and selection free, and part of the public system of education provision.

The school operators will work with the existing teacher workforce, infrastructure and curriculum and within a budget of USD 100 per student per year. This per-student amount is made up of two components: a USD 50 per student grant made by third-party donors, and c.USD 50 contributed by the MoE through teacher salaries and maintenance costs. Within this framework, operators will have considerable scope for innovation in management practices, teacher training and performance management and curriculum delivery.

The program will be externally evaluated through an independent randomized control trial (RCT) which will measure the performance of the Partnership Schools, compared with a sample of schools under unchanged Government management.

PSL is funded by a consortium of foundations and philanthropies coordinated by the MoE. The selected school operators are:

- BRAC Liberia
- Bridge International Academies
- Liberian Youth Network
- More Than Me
- Omega Schools
- Rising Academies Liberia
- Stella Maris Polytechnic
- Street Child of Liberia

The MoE envisages PSL as one possible delivery mechanism for piloting G2B-ESP strategies and activities alongside, and complementary to, the programs outlined in this plan. For example, as a test bed for the development of school quality standards, school quality assessment tool and learning assessments.

Chapter 3 Challenges

3.1 Access

The education system faces a number of structurally persistent challenges to improving access to education. These are driven by the inequality, demographic and socioeconomic factors identified in Chapter 1 and 2.

3.1.1 Growing demand with limited resources

Due to demographic trends, the education system will continue to face significant, and increasing pressure to deliver education at all levels:

- Growing school-age population seeking access to ECE and basic education. For example, only 77% of children entering Grade 1 have attended ECE, and this varies across the country, falling as low as 66% of Grade 1 entrants in Margribi county
- Large numbers of young people and adults, many of whom never completed a basic education, who seek access to literacy, numeracy and other basic skills
- Increasing pressure on secondary education, TVET and tertiary sectors to deliver quality, support labor market entry, and help youth and adults find livelihoods and employment.

Despite the expansion in the non-government school sector, the government commitment to delivering free basic education is expected to place a significant burden on the limited GoL human and financial resources over at least the next two decades. It is currently unable to offer free ECE which reduces access for poor families. Additionally, there is the challenge to provide low-cost education in poorer, rural areas where private schools are less likely to operate. For poorer families, school fees and the indirect cost of education are the primary reasons children and young people do not go to school.

3.1.2 Out-of-school children and low completion rates

Liberia continues to have a large number of out-of-school children (Table 3-1). An estimated 15-20% of children between the ages of 6-14 are not enrolled in school (HIES 2014, EMIS 2015).

Table 3-1 Number of Out-of-School children

	2015
Children aged-6-11 who are not in school	121,598
Children aged 12-14 who are not in school	52,028
Children aged 15-17 who are not in school	26,905 ¹²

Source: EMIS 2015 & HIES 2014 in Education Sector Analysis, 2016

The main reasons for a child not accessing basic education appear to be (i) school fees and expenses, (ii) late enrolment, and (iii) distance to school driven by poverty and rural status (CWIQ 2007, CWIQ 2010, DHS 2013, UNICEF 2012). UNICEF (2012) also notes that issues related to low school quality (e.g., few learning materials, low teacher attendance, prevalence of corporal punishment) also negatively influence demand for schooling. Most children with disabilities do not attend school.

In addition, UNICEF (2012) and DHS (2013) suggest that a high proportion of children are 'at-risk' of dropping out of school. These are children who may not attend school regularly, who are over-age for their grade, or who are vulnerable because of coming from poor households or households in rural areas or marginalized communities. At least 73% of students drop out between primary and junior high, with another 62% dropping out between junior high and senior high schools. Only an estimated 20% of students that enrolled in Grade 1 are expected to enroll in Grade 12.

Female students are more likely to drop out of school or never attend school in the first place, which means that fewer girls and young women complete a basic or secondary education. This is a particular problem in rural areas.

3.1.3 Overage enrolment

The phenomenon of overage enrolment significantly influences the education landscape in Liberia (Figure 3-1). For example, in 2015,

• More than 80% of children are overage for their grade.

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¹² A large share of 15-17 year olds are enrolled in school, but the majority of students are enrolled in primary and JH levels.

- The majority of grade 2 learners are age 10 or older, even though the policy is that a grade 2 learner should be seven years old (Table 3-2Figure 3-1).
- Over 40% of children enrolled in primary school are age 12 or above (the ageappropriate range).
- There are more 18 year olds enrolled in Junior High than 12,13,14 year olds combined.
- Gender disparity increases greatly with age. The majority of girls do not have the chance to complete primary education prior to becoming adolescents.

Nearly 50% of children enrolled in ECE programs (over 250,000 children) are age 6 or above (EMIS 2015). These children should be enrolled in primary school, but for various reasons, are enrolled in ECE. While these children are not technically "out of school", neither are they enrolled in age-appropriate programs.

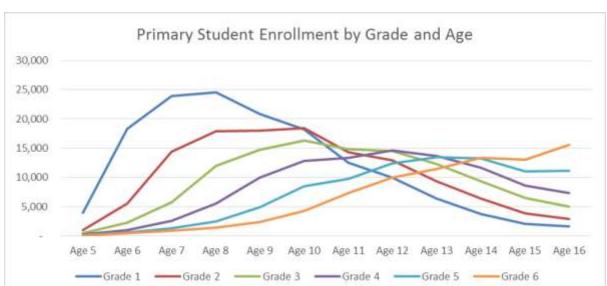


Figure 3-1 Age of primary school students, all primary schools, 2015

Source: EMIS 2015

Table 3-2 Grade 2 student enrolment and enrolment share by age, all primary schools 2015

	Age 6	Age 7	Age 8	Age 9	Age 10	Age 11	Age 12	Age 13	Age 14	Age 15
Grade 2 enrolment	5,568	14,411	17,895	17,988	18,401	14,288	12,895	9,300	6,344	3,792
Enrolment share	4.5%	11.6%	14.3%	14.4%	14.7%	11.5%	10.3%	7.5%	5.1%	3.0%

Source: EMIS 2015

The reasons for overage enrolment are thought to include: 1) Entrance examinations at non-government and government primary schools 2) High grade repetition due to poor academic

performance or school fee problems 3) Late entry into school in early grades 4) High dropout and re-entry rates caused by poverty, illness and high rates of teenage pregnancy (illness and high teenage pregnancies (31%, LDHS 2013). Although the average age of overage students is reducing steadily, the impact of the overage and out-of-school issue on quality and access is severe.

3.2 Quality and relevance

As a consequence of these persistent access challenges and capacity constraints, the quality of education in government schools is low and students do not achieve the intended learning outcomes.

Evidence suggests that student learning outcomes are poor. Mean scores from early grade literacy assessments found that the majority of early grade students are not literate. 35% of grade 2 students and 17% of grade 3 students could not read a single word in English (RTI 2008). A literacy assessment conducted in 2014 found that Grade 3 students' oral reading fluency was below 20 correct words per minute, which is significantly lower than the MoE benchmark of 45 correct words¹³. This has a serious impact on learning in other subject areas and grades. Students who do not have a strong foundation in reading and writing struggle to make meaningful progress in other subjects and perform poorly in examinations (in recent years, Grade 9 and 12 WAEC examination results have declined). It is also likely the low literacy levels increase the likelihood of grade repetition and dropping out of school entirely. Children of poorer, more rural families have lower literacy levels, enforcing a cycle of poverty and lack of opportunity.

Within the key education sub-sectors there are additional challenges to improving the quality education. These are explored in more detail in specific programs.

3.2.1 Teachers

(1) Managing the teacher payroll

The quality of teaching and learning is badly damaged by long-term teacher absenteeism,¹⁴ which primarily involves teachers who have secured employment and abandoned their post

¹³ Hobbs, J. and Davidson, M. (2015). Expanding EGRA: The Early Grade Literacy Assessment and its contribution to language instruction in Liberia. Presentation at UKFIET 2015.

¹⁴ Liberian Teacher Training Program (LTTP) Report 2015.

("ghost teachers"), teachers who misrepresented their qualifications to become a teacher, and those who not have the minimum education requirements to teach. The teacher payroll is the largest component of the MoE budget at approximately US\$35 million annually and estimates, based on evidence from teacher verification activities undertaken in three counties, indicates that the current payroll of over 19,000 teachers could include an estimated 2,250 ghost teachers (equal to 15% of the entire payroll) ¹⁵.

(2) Teacher qualifications

A large proportion of the existing basic education teaching force do not have the knowledge or skills required to be effective in the classroom. Hiring practices over the past decade have allowed teachers to be employed with insufficient qualifications and fake credentials. Many teachers who are considered 'qualified' may not have sufficient knowledge and skills due to previous 'emergency' certification programs.

There are severe inequity issues: rural counties and ECE schools have high pupil-qualified teacher ratios (Table 3-3). This disadvantages the poorest and most marginalized communities, and prevents good practice in ECE.

Table 3-3 Pupil-Qualified Teacher Ratio, all counties, all ECE, primary and secondary schools, 2015

COUNTY	ECE PQTR	Primary PQTR	JHS PQTR	SHS PQTR	Total PQTR
Sinoe	204	66	21	35	74
River Cess	179	54	15	22	72
Grand Bassa	135	52	22	30	61
Grand Cape Mount	122	52	21	14	60
Bomi	111	48	30	27	59
Gbarpolu	117	42	13	14	54
Grand Kru	127	53	12	16	51
Lofa	123	44	19	28	50
River Gee	103	38	24	41	48
Bong	102	39	17	35	46

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¹⁵ Estimates included in this section draw on Campbell (2015) which offers empirical data from three counties and 42% of the teaching force.

Maryland	92	42	21	24	43
Grand Gedeh	84	36	17	18	39
Nimba	82	29	15	21	35
Margibi	62	32	17	24	33
Montserrado	51	29	18	24	29
Total	77	34	18	24	37

Source: EMIS, 215

Lack of emphasis on institutional safeguards in teacher management, such as screening teacher training institute candidates, teacher registration and licensing and implementation of probation and teacher appraisal processes has led to appointment of large numbers of underqualified teachers. This having a serious negative impact on teaching and learning in classrooms across the country.

(3) Teacher professional development

While many teachers have valuable practical experience they lack foundational knowledge and skills in a wide range of teaching competencies, such as pedagogy, lesson planning, student assessment, engagement with parents, teaching children with disabilities and innovative use of teaching and learning materials among other areas.

For teachers who do have a recognized teaching qualification access to in-service Continuous Professional Development (CPD) opportunities are limited or non-existent. Many schools and district education offices do not have capacity or resources to conduct regular in-service training. Furthermore, the three Rural Teacher Training Institutes (TTIs) have limited capacity to provide in-service training.

3.2.2 Curriculum and assessment

(1) Curriculum and teacher support

The national curriculum syllabuses for literary and numeracy, published in 2011, is in need of revision. For example, the Language Arts (English) syllabus for Grade 1-6 does not provide enough detail on literacy learning outcomes, assessment and effective teaching strategies. The syllabus does not prescribe the progressive acquisition of phonological awareness and high frequency vocabulary. With little training themselves, the teachers are unable to use the syllabus to design and deliver effective language lessons. Effective teacher guides with daily

lesson plans for literacy and numeracy have been developed as part of the Liberia Teacher Training Program (LTTP) and these could be utilized and expanded to cover more grades.

(2) National assessment system

Prior to Grade 9, there is no nationwide assessment of learning outcomes – the absence of which undermines efforts to track system quality and strengthen accountably. The MoE cannot target scarce resources at under-performing schools and districts and is not able to monitor the impact of interventions such as textbook distribution.

3.2.3 Education management

(1) Workforce reform and payroll administration

The MoE payroll includes nearly 1,100 staff who are eligible for retirement and who want to retire. However, these staff are not able to transition from MoE payroll to the CSA-operated pension fund because the pension fund does not have the resources need to provide a pension for these staff. As a result, the MoE continue to pay these staff, even though many are no longer able to carry out the responsibilities affiliated with their positions. This wastes precious resources.

(2) County and district level capacity development and resourcing for monitoring and improving school quality

MoE staff at the county and district levels do not have the professional education, jobrelevant training, MoE guidance and tools, or, critically, the operational resources needed to successfully execute the responsibilities of their positions. In the 2016/17 school year, nearly 50% of CEOs, DEOs, and CEO support staff (i.e., Monitoring and Evaluation Officer, Planning Officer, Personnel Analyst, Accountant, and Procurement Officer) will be new to their positions. At present, the MoE does not have a training program, official guidelines, or operational tools for these positions.

In addition, MoE CEO and DEO operations face a severe shortage of operational resources. Staff do not have the resources to travel to, or communicate with schools, to conduct school monitoring visits and quality assurance activities. Several recent evaluations highlight the limited resources at the CEO and DEO level, limited performance management, poor reporting, and the extent to which lack of petrol, difficulty in maintaining vehicles, communication challenges (e.g., airtime, or no access to a network) combined with the logistical challenges in much of the country (i.e., remote schools and roads which are

impassable during rainy season) restrict CEO and DEO execution of key job responsibilities.¹⁶

3.2.4 School quality improvement

(1) School quality standards

The MoE in Liberia currently does not have a school-based quality assurance system in place or a regular schedule of school inspections. There are two draft frameworks for defining, measuring, and monitoring school quality, ¹⁷ however, these frameworks are not comprehensive, or grounded in the latest national and international evidence. Furthermore, they have not been adapted and incorporated into quantitative tools, along with linked quidance, that can be used by district staff to undertake school quality assessments.

Lack of measurable quality standards undermines efforts by sub-national officers and school and community stakeholders to promote change in schools and hold principals and teachers to account for their performance.

(2) Principals

Principals are critical in improving access to, and quality of, education. The majority of school principals in Liberia do not have relevant training or official guidance in areas such as teacher performance management and community engagement. Furthermore, many lack degrees, diplomas, or certificates related to their field of work (Tuowol et al 2014, Norman 2012, MoE 2011, 2014 and 2015). The recruitment process for principals is not transparent, few are women and the salary structure is not commensurate with their responsibilities.

3.2.5 Access to quality early childhood education programs

ECE has disproportionally large benefits for a child's later learning outcomes. For many families, especially in poor and deprived communities, the costs of ECE are a barrier to education.

The aforementioned over-age enrolment in ECE is a major challenge inhibiting access to quality education. In 2015, of 539,660 children enrolled in ECE programs, 74% (403,000 children) were overage for their grade. There are several reasons for the persistence of

¹⁶ USAID. (2013).MID-TERM ASSESSMENT OF THE LIBERIA TEACHER TRAINING PROGRAM PHASE II. European Union. (2014). Ex-Post Evaluation of the EC support to Education in Liberia (ECSEL).

¹⁷ These are identified in the *Liberia Education Administrative Regulations (LEAR)* and the document *General Accreditation in Liberia*.

overage enrollment in ECE, including entrance exams, fees, cultural barriers and school distance from households (UNICEF 2012).

Many educators and communities in Liberia expect ECE classes to resemble those for older children in primary grades, rather than age-appropriate play-based learning. A majority overage student population shifts the balance in ECE classes away from programming that caters to younger students' needs, particularly in classes of large size (average pupil-teacher ratio is 53:1 in government ECE schools). An additional challenge is that ECE has the lowest proportion of qualified teachers of all the education sectors (49%) and there are no 'C' certificate specialisms in ECE.

3.2.6 Gender inequality

High dropout rates mean that many girls do not complete a basic or secondary education, especially in rural areas. Reasons include poverty, safety, and lack of girl-friendly infrastructure. A long-term impact is that there are fewer female teachers and principals in basic and secondary education.

Sexual and gender-based violence (SGBV) is a pernicious consequence of inequality, and is prevalent in Liberian schools. Though school-related gender based violence (SRGBV) is often assumed to affect only girls, boys and men are also victims. In one study, one in five students – both girls and boys – report experiencing SGBV from teachers or staff. 18 Concerns about safety, including the risk of SRGBV, are cited by families as a reason that children enroll late and drop out early from school.

In Liberian schools 'sex for grades', the rape of students by teachers engaging in transactional sex or threatening students with failure, is too often accepted as commonplace. 'Sex for grades' is often represented as a form of bribery, but the relationship of power that a teacher has over a student means that students, even if they are above the age of consent, cannot freely consent or withdraw consent.

Pregnancy interrupts the education of many Liberian young women. 38% of young women will have their first child before the age of 18 – a very significant proportion of the school-age population, especially as nearly all students are over-age for the grade in which they are enrolled. Though current policy does not require that girls or women leave school or attend night school when they are pregnant, in practice students are often directed or encouraged to do so while pregnant.

¹⁸ Postmus et al., 'Examining gender based violence and abuse among Liberian school students in four counties: An exploratory study', Child Abuse Neglect 44 (June 2015), 76-86. See also 'Passing the test - the real cost of being a student', IBIS, Concern, the Norwegian Refugee Council and Save the Children, 2014, available via http://ibisglobal.org/publications/passing-test-real-cost-being-student/.

3.2.7 Employability

An estimated 1/3 of young people aged 15 to 34 are classified as NEET (not in education, employment or training)¹⁹. The technical and vocational education and training sector is uncoordinated and not strongly linked to labor market demands. There is no national qualification framework and many training institutions are under-equipped with poorly trained and remunerated teachers and instructors.

In 2014/15 higher education in Liberia absorbed 32% of the education budget but the quality of higher education is considered poor. Many graduates are not prepared for the labor market or advanced studies. Quality assurance of courses is limited or non-existent and faculties are still rebuilding after the civil wars.

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¹⁹ Ministry of Education (2015) Getting to Best.

Chapter 4 Strategic response

4.1 Theory of change

To address these challenges, the MoE intends to implement an aligned and integrated set of strategies and linked programs over the next four years.

The theory of change includes:

- (a) the high level challenges and barriers to education
- (b) the desired future state of education in Liberia at the end of four years (Goal) and ten years (Vision) and the MoE's stated mission;
- (c) the approaches to drive and measure change, such as the strategies, programs and components that will collectively contribute to the achievement of the overall goal statement; and,
- (d) *the measures of change*, such as the G2B-ESP high level impact outcome, program outcomes and outputs

The priority remains improving equity and quality of ECE and basic education with complementary programs for TVET and higher education sectors. Figure 4-1 is a graphical representation of how learning outcomes in ECE and basic education will improve in Liberia through implementation of the G2B-ESP programs and program components.

The ultimate beneficiaries of the G2B-ESP will be children (3-18 years old) and young people (15-24 years old) in ECE, basic, secondary, alternative education, TVET and higher education institutions. Intermediate beneficiaries will include teachers and trainers, education officers and principals.

Figure 4-1 G2B-ESP theory of change diagram for improving learning outcomes in ECE and basic education

Challenges Problem Pathways to Strategies Impact Outcomes change No school quality Resources Improved assurance system Establish an effective targeted on G2B-Effective learning school quality Inadequate ESP programs management and outcomes improvement and education leadership from accountability Improved access management at principals & system to quality ECE central and local education officers 2. Improve the efficiency and levels Increased performance of Trained, qualified education monitoring of School fees and and resourced management system schools indirect costs teachers with Improve access to effective quality ECE Reduced overinstructional Many teachers do Provide quality age gap materials not have the correct alternative and Vision accelerated More out-ofqualifications nor Poor student **Engaged parents** education pathways school children receive CPD Every child can learning outcomes for overage and outwho can hold back in school of-school children access a nearby schools to account Poor literacy and and young people school, where Increased numeracy teaching 5. Improve the there is a quality Adequate proportion of efficiency, trained and teacher in every infrastructure and School based effectiveness and classroom, every qualified resources management is satisfaction of the school day, and teachers inadequate teaching workforce they achieve Safe and healthy 6. Ensure that teachers improved environment Large number of have access to Increased use of learning quality instructional overaged students quality teaching outcomes Students who are in materials and and out-of-school and learning the right grade and assessment tasks children materials Mainstream gender ready for school and school health Limited resources Increase number across the education Effective systems of girls in school sector and policies Poor student health & gender inequality Improved WASH

4.1.1 Driving educational change

The MoE identified four sequential management interventions to drive and sustain educational change in Liberia.

(a) Strategies

A strategy is a MoE statement of commitment to contribute to the achievement of the overall goal. A strategy addresses one or more of the challenges faced in improving access, quality and relevance.

(b) Programs

A program is a series of coordinated, holistic and strategic actions under the leadership of a Deputy Minister to achieve each strategy.

(c) Program components

A program component is a set of related, sequential activities which contribute to the achievement of an overall program. Under the G2B-ESP each program is made up of a number of program components each led by an Assistant Minister or Director.

4.1.2 Measuring educational change

The MOE has identified three measures of educational change. These are:

(i) High-level outcomes, indicators and targets

There are two high-level impact outcomes for the G2B-ESP, namely (i) improved student learning outcomes and (ii) young people have the necessary skills for livelihoods and employment. The outcomes target is a MoE commitment to achieve a quantifiable result by the end of G2B-ESP implementation.

(ii) Program-level outcomes, indicators and targets

A program outcome describes a measurable change that will take place in a target population by the end of 2021, directly as a result of a G2B-ESP program, e.g. increase in the proportion of trained teachers.

(iii) Outputs

An output is a quantitative result from activities undertaken to implement a program component. Outputs provide useful evidence of progress made by senior officials and managers to implement G2B-ESP programs and program components, e.g. number of officers trained.

Program outcomes and outputs are summarized in the Intermediate Results Framework (Annex 1).

4.2 Evidence base and consultations

The strategies, programs and activities that will be implemented under the G2B-ESP to achieve the vision and goal were identified following an in-depth analysis of the following information sources:

- 1. Constitution of the Republic of Liberia (1986)
- 2. Education Reform Act (2011)
- 3. Agenda for Transformation (2013)
- 4. Liberia Rising: Vision 2030 (2015)
- 5. Getting to Best Roadmap (2015)
- 6. Getting to Best Priorities 2015-2017
- 7. Education Sector Analysis (2016)
- 8. MoE Education Sector Plan 2010-2020
- 9. MoE Operational Plan 2014-16
- 10. Joint Education Sector Review (2015)
- 11. Education Sector Analysis (2016)
- 12. Education management information system (EMIS) data from 2014 and 2015
- 13. Consultations with development partners, representatives from non-government organizations and education stakeholders.
- 14. In-depth consultations with the Minister of Education, Deputy Ministers, Assistant Ministers, senior MoE officers and advisers
- 15. Comprehensive analysis of secondary data (reports, project/program documents, studies, etc.) from the last five years
- 16. Recent, relevant national and international reports and studies

During the development of the G2B-ESP, a wide range of stakeholders were consulted directly or via circulation of drafts (Table 4-1).

Table 4-1 Consultation schedule for G2B-ESP

Consultation	Dates	Stakeholders
Joint Education Sector Review	13 th -17 th July 2015	Development partners, non- government organizations, county and district officers
G2B-ESP Workshop 1	27 th -28 th January 2016	MoE officers
Education Roundtable	28 th -29 th April 2016	National-level stakeholders, other Ministries
G2B-ESP Workshop 2	2 nd -3 rd May 2016	MoE officers and ESDC members
G2B-ESP Program Work Sessions	29 th July, 3 rd August, 5 th August and 10 th August 2016	MoE officers, development partners, non-government organizations
G2B-ESP Workshop 3	26 th September 2016	MoE officers, development partners, non-government organizations, other Ministries

4.3 Vision, goal, impact and strategies

The **vision** for the G2B-ESP is:

A Liberia where: (a) every child can access a nearby school, where there is a quality teacher in every classroom, each school day, who achieves improved learning standards that are linked to an updated curriculum and assessed at each level; and,

- (b) young people can access relevant quality education and training which improves their livelihood and employability skills; and;
- (c) robust, accessible and efficient mechanisms are in place to hold school principals, teaching staff, county and district education officers and the boards of education institutions to account for achieving quality standards and improved learning outcomes and relevant skills.

The **goal** of the G2B-ESP is to measurably improve the equity, quality and relevance of teaching and student learning in early childhood education, basic education, secondary, alternative education, TVET and higher education through:

- (a) maximizing existing human resource capabilities from MoE Central Office, county and district education offices and schools;
- (b) harnessing external capacity through school communities (parents, community leaders and volunteers), non-government and private sector organizations and development partners;
- (c) more efficient and sustainable use of government, development partner and private sector financing;
- (d) more effective prioritization, integration and coordination of investments in the education sector;
- (e) greater emphasis on performance monitoring and evidence-based decision-making; and.
- (f) establishing transparent mechanisms across the national education system through which MoE officers at all levels and front-line service providers are held to account for their performance.
- (g) utilizing approaches to lifelong learning such as pathways for student transition between sectors and improved pedagogy for teaching and learning.

The measurable high-level **impact** outcomes are:

- 1. Improved student learning outcomes
- 2. Young people have the necessary skills for livelihoods and employment

There are nine interrelated **strategies** which describe how MoE will address the persistent access and quality challenges. Each strategy will be achieved through a **program** of activities. The G2B-ESP structure is summarized as follows (Table 4-2).

Table 4-2 G2B-ESP mission, vision, goal, impact and programs

Mission of Ministry of Education	To provide all Liberians with the complete affordable education meets their needs and those of	of quality and relevance that		
Vision ²⁰ of the G2B-ESP	(a) every child can access a nearby school, where there is a quality teacher in every classroom, each school day, who achieves improved learning standards that are linked to an updated curriculum and assessed at each level; and,			
	(b) young people can access r training which improves their li skills; and;			
	(c) robust, accessible and efficient mechanisms are in place to hold school principals, teaching staff, county and district education officers and the boards of education institutions to account for achieving quality standards and improved learning outcomes and relevant skills.			
Goal ²¹	Improve the equity, quality and relevance of teaching and student learning in early childhood education, basic education, secondary, alternative education, TVET and higher education			
Impact	Improved student learning out	comes		
	Young people have the necessemployment	sary skills for livelihoods and		
Strategies	Program	Responsible		
Establish an effective school quality improvement and accountability system	School Quality Program	Deputy Minister for Administration		
Improve the efficiency and performance of education management systems	Education Management & Deputy Minister for Planning, Research and Development			
Improve access to quality ECE	Early Childhood Education Deputy Minister for Instruction			
Provide quality alternative and accelerated education pathways for overage and out-of-school children and young people	Overage and Out-of-School Program	Deputy Minister for Instruction		

²⁰ Long term i.e. 10 years

²¹ Medium term i.e. 4 years

Improve the efficiency, effectiveness and satisfaction of the teaching workforce	Teacher Education & Management Program	Deputy Minister for Instruction
Ensure that teachers have access to quality instructional materials and assessment tasks	Curriculum & Assessment Program	Deputy Minister for Instruction
Mainstream gender and school health across the education sector	Student Well-being Program	Deputy Minister for Instruction
Improve the quality and relevance of technical and vocational education and training	Technical and Vocational Education and Training Program	Deputy Minister for Instruction
Leverage regional and international partnerships and expertise, target market demand for critical skills and increase the efficiency of education expenditure	Higher Education Program	Director General, National Commission on Higher Education

4.4 Program components

This section lists the nine national programs and components that the MoE will implement to achieve the nine strategies.

Table 4-3 Program components and responsibilities

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)			
Strategy 1	Establish an effective school system	Establish an effective school quality improvement and accountability system				
Program 1	School Quality Program	Deputy Minister for Administration				
Components	1. Establish School Quality Standards	Deputy Minister for Instruction Deputy Minister for Planning, Research and Development	Assistant Minister for Basic and Secondary Education Assistant Minister for Planning, Research and Development Director, Policy Formulation and Implementation Director, Planning, Monitoring and Evaluation			
	2. School Improvement and Grants system	Assistant Minister for General Administration Deputy Minister for Planning, Research and Development	Assistant Minister for Planning, Research and Development Comptroller Budget Officer			
	3. Principals' Leadership Program	Deputy Minister for Instruction Deputy Minister for Planning, Research and Development	Assistant Minister for Fiscal Affairs and Human Resource Development Director, Professional Development Director, Human Resources			

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
	4. Increase the proportion of ECE, basic and secondary schools with toilets and safe water	Assistant Minister for General Administration	Director, Physical Environment Director, School Health and Physical Education
Strategy 2	Improve the efficiency and system	performance of education	on management
Program 2	Education Management & Accountability Program	Deputy Minister for Planning, Research and Development	
Components	Education Delivery Unit and education partnerships	Deputy Minister for Planning, Research and Development	Assistant Minister for Fiscal Affairs and Human Resource Development Director, Human Resources Donor Coordinator
	2. Workforce reform	Assistant Minister for Fiscal Affairs and Human Resource Development	Assistant Minister for Teacher Education Director, Professional Development Director, Human Resources
	3. School inspection	Deputy Minister for Planning, Research and Development	Assistant Minister, Planning, Research and Development Director, Research, EMIS, Statistics and Demographics
	4. Support and accountability at decentralized levels	Deputy Minister for Instruction	Assistant Minister for Fiscal Affairs and Human Resource Development Comptroller

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
	5. Sector planning, monitoring, budgeting and finance strengthening	Deputy Minister for Planning, Research and Development Deputy Minister for Administration	Assistant Minister for Planning, Research and Development Director, Research, EMIS, Statistics and Demographics Director, Planning, Monitoring and Evaluation Comptroller
Strategy 3	Improve access to quality E	ECE	
Program 3	Early Childhood Education Program	Deputy Minister for Instruction	
Components	1. ECE public awareness campaign and outreach to families and communities about the value of ECE and good parenting skills	Assistant Minister for Early Childhood Education	ECE Specialists Director, Communications Director, Parent and Community Engagement and National Dropout Prevention
	2. Roll out ECE certification and training for teachers through Rural Teacher Training Institutes, colleges and universities	Assistant Minister for Early Childhood Education Assistant Minister for Teacher Education	Director, Teacher Education Director, Professional Development ECE Specialists
	3. Build additional ECE school infrastructure in areas of greatest need	Assistant Minister for General Administration	Assistant Minister for Early Childhood Education Director, Physical Environment ECE Specialists
	4. Improve the quality of ECE provision for children aged 3- to 5-years-old	Assistant Minister for Early Childhood Education	Assistant Minister for Research, Planning and Development ECE Specialists

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
Strategy 4	Provide quality alternative and accelerated education pathways for overage and out-of-school children and young people		
Program 4	Overage & Out-of-School Program	Deputy Minister for Instruction	
Components	Increase capacity to plan, budget and manage alternative education (AE)	Assistant Minister for Basic and Secondary Education	Director, Alternative Basic Education
			Comptroller
			Director, Human Resources
			Director, Planning, Monitoring and Evaluation
	2. Professional development for AE teachers, facilitators, principals and administrators	Assistant Minister for Teacher Education	Director, Alternative Education
			Director, Professional Development
	Overage student program	Assistant Minister for Basic and Secondary Education	Director, Alternative Basic Education
		Assistant Minister for Planning, Research and Development	Director, Policy formulation and implementation
	and young people Bas	Assistant Minister for Basic and Secondary Education	Director, Alternative Basic Education
			Assistant Minister for Student Personnel Services
			Director, Parent and Community Engagement and National Dropout Prevention
Strategy 5	Improve the efficiency, effectiveness and satisfaction of the teaching workforce		
Program 5	Teacher Education & Management Program	Deputy Minister for Instruction	

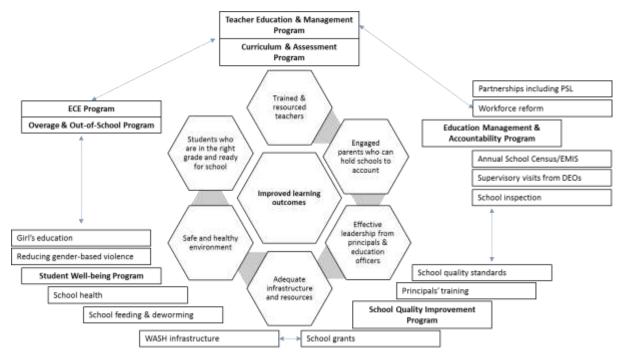
G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
Components	1. Improve teacher registration, performance management and incentives Assistant Minister for Teacher Education Assistant Minister for Fiscal Affairs and Human Resource	Director, Teacher Education	
		Fiscal Affairs and Human Resource	Director, Professional Development
		Development	Director, Human Resources
	2. Increase the proportion of qualified and trained	Assistant Minister for Teacher Education	Director, Teacher Education
	teachers	Director, Professional Development	
			Director, Human Resources
Strategy 6	Ensure that teachers have access to quality instructional materials and assessment tasks		
Program 6	Curriculum & Assessment Program	Deputy Minister for Instruction	
Components	New English and mathematics syllabuses and teacher guides	Executive Director, Curriculum Development and Textbooks Research	Assistant Minister for Basic and Secondary
	2. National literacy and numeracy assessment system for grades 3 & 6	Executive Director, Curriculum Development and Textbooks Research	Assistant Minister for Research, Planning and Development
			Director, Research, EMIS, Statistics and Demographics
Strategy 7	Mainstream gender and school health across the education sector		
Program 7	Student Well-being Program	Deputy Minister for Instruction	
Components	Implement National Policy on Girls' Education	Assistant Minister for Basic & Secondary Education	Director, Girls' Education
			Director, Policy Formulation and Implementation
			Director, Research, EMIS, Statistics

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
			and Demographics Director, Communications
	2. Counter school-related gender-based violence	Assistant Minister for Basic and Secondary Education	Director, Girls' Education Director, Communications Executive Director, Curriculum Development and Textbooks Research
	3. Strengthen school health and student wellbeing	Assistant Minister for Student Personnel Services	Director, Special and Inclusive Education Director, School Health and Physical Education Director, Guidance and Counselling Director, Physical Environment Supervisor, School Feeding
Strategy 8	Improve the quality and relevance of technical and vocational education and training		
Program 8	Technical and Vocational Education and Training Program	Deputy Minister for Instruction	
Components	1. Improve the TVET information base	Assistant Minister for Science, Technology, Vocational and Special Education	Director, Vocational and Technical Education Director, Research, EMIS, Statistics and Demographics
	2. Improve the quality of TVET delivery	Assistant Minister for Science, Technology, Vocational and Special Education	Director, Vocational and Technical Education Assistant Minister

G2B-ESP	Program and component	Lead officer(s)	Supporting officer(s)
			for Teacher Education
			Director, Alternative Basic Education
	3. Lay the foundation for a national qualification framework for agriculture	Assistant Minister for Science, Technology, Vocational and Special Education	Assistant Minister for Teacher Education
	and another area of high demand		Executive Director, Curriculum Development and Textbooks Research
			Director, Vocational and Technical Education
Strategy 9	Leverage regional and international partnerships and expertise, target market demand for critical skills and increase the efficiency of education expenditure		
Program 9	Higher Education Program	Director General, National Commission on Higher Education	
Components	Increase quality and relevance in Higher Education	Director General, National Commission on Higher Education	
	Improve equity and efficiency in higher education finance	Director General, National Commission on Higher Education	
	3. Higher Education Act	Director General, National Commission on Higher Education	

The G2B-ESP programs are interrelated: components and activities link with each other and activities are designed for maximum synergy across programs. Complex challenges require multiple interventions and delivering improved learning outcomes and skills require a holistic approach (For example, Figure 4-2).

Figure 4-2 Example program map for improving learning outcomes in ECE and basic education schools (selected components)



4.5 High-level and program outcomes

The following section presents the higher-level and program level results and indicators that the MoE commits to achieving after four years (Table 4-4). The intermediate results framework, including program outputs and cumulative targets, can be found in Annex 1.

Table 4-4 High-level and program outcomes

High-level impact	Outcome/s	Indicator
G2B-ESP	Improved student learning outcomes	Proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex, grade and location (SDG 4.1.1)
	Young people have the necessary skills for livelihoods and employment	Youth/adult educational attainment rates by age group, economic activity status, level of education and program orientation (SDG 4.4.3)
Program-level impact	Outcome/s	Indicators
School Quality Program	Improved water, sanitation and hygiene at ECE, basic and secondary schools (WASH)	Proportion of schools with access to: (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions), by location and type of school (SDG 4.a.1)
Education Management & Accountability Program	Resourcing targeted on G2B-ESP programs	% and \$ share of national budget and GDP % and \$ budget allocation to G2B-ESP programs and education levels Extent to which explicit formula-based policies reallocate education resources to disadvantaged populations (SDG 4.5.3) Education expenditure per student by level of education and source of funding

		(SDG 4.5.4)
	Increased monitoring of schools	# and % of schools monitored disaggregated by frequency, level and location
Early Childhood Education Program	Improved access to quality ECE	Net Enrolment Rate Participation rate in organized learning (one year before the official primary entry age), by sex and location (SDG 4.2.2)
	Reduced proportion of overage children in ECE	Percentage of children over-age for grade (pre-primary, primary education, lower secondary education), by sex and location (SDG 4.1.6)
	Increased proportion of trained and qualified teachers	Pupil-Qualified Teacher Ratio, by sex and location
Overage and Out- of-School Program	Reduced average over-age gap in targeted schools	Average overage gap per grade by sex and location Percentage of children over-age for grade (pre-primary, primary education, lower secondary education), by sex and location (SDG 4.1.6)
	Increased number of out-of-school children and young people returning to formal education	# and % of out-of-school children and young people in programs returning to formal education
Teacher Education & Management Program	Increased proportion of trained and qualified teachers	Proportion of teachers in: (a) pre-primary education; (b) primary education; (c) lower secondary education; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex, by sex and location (SDG 4.c.1)
		Pupil-trained teacher ratio by education level, by sex, type of school and location (SDG 4.c.2)

	Increased use of quality teaching	Pupil-qualified teacher ratio by education level, by sex, type of school and location (SDG 4.c.3) % of primary teachers using new English
Curriculum & Assessment Program	and learning materials	and mathematics materials, by location and type of school
Student Well-being Program	Increased number of girls in school	Gender Parity Index disaggregated by level and location
	Improved female student survival rate	Female student transition rates to secondary education, by location
		Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse, by sex and location (SDG 4.a.2)
Technical and Vocational Education and Training Program	Increased proportion of trained TVET teachers	Pupil-Qualified Teacher Ratio (TVET subsector) Participation rate in technical and vocational programmes (15- to 24-yearolds), by sex and location (SDG 4.3.3) Gross enrolment ratio for tertiary education by location and type of education (SDG 4.3.2)
Higher Education Program	Increased share of enrolment of students from low income households and for women	Share of higher education enrollment from the poorest 40% of the 25 to 35 year-old population by sex Gross enrolment ratio for tertiary education by location and type of education (SDG 4.3.2)

Chapter 5 School Quality Program

5.1 Summary

G2B impact	Improved student learning outcome	mes		
G2B priorities	School infrastructure meets the needs of children, improving enrollment and retention			
	MoE and schools are accountable	le for children's learning		
Challenges	Lack of a school quality assurance system			
	 Sustainability and utilizati 	ion of school grants		
	School leadership and so	chool level teacher management		
	needs strengthening			
	Many schools lack basic	toilets and water supplies		
SDG targets	4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes4.a Build and upgrade education facilities that are child, disability			
	and gender sensitive and provide safe, non-violent, inclusive and			
	effective learning environments for all			
Strategy	Establish an effective school quality improvement and accountability system			
Program name	School Quality Program			
Responsible officer	Deputy Minister for Administration	on		
Components	1. Establish School Quality Standards Deputy Minister for Instruction Deputy Minister for Planning, Research and Development			
	School Improvement and Grants system Assistant Minister for General Administration			
	Deputy Minister for Planning, Research and Development			
	3. Principals' Leadership Program	Deputy Minister for Instruction Deputy Minister for Planning, Research and Development		

4. Increase the proportion of ECE, basic and secondary schools with toilets and safe water	Assistant Minister for General Administration
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5.2 Introduction

Improving the quality of ECE, basic and secondary education requires interventions to:

- ensure students are in the correct grade for their age (Overage & Out-of-School Program, Chapter 8);
- improve the skills of teachers (Teacher Education & Management Program, Chapter 9):
- improve instructional materials, student time-on-task and assessment (Curriculum & Assessment Program, Chapter 10);
- ensure boys and girls have equal access to education and are well nourished (Student Well-being Program, Chapter 11);
- supervise and inspect schools regularly (Education Management & Accountability Program, Chapter 6);
- · improve infrastructure and resourcing;
- ensure the school environment is healthy and child-friendly; and,
- improve school management, teacher performance management and community engagement.

This chapter addresses the latter three elements of school quality across ECE, basic and secondary education.

5.2.1 Enrollment

In 2015, ECE²², basic education (grades 1 to 9) and secondary education (grades 10 to 12) schools have a total of 1,467,541 students (Table 5-1).

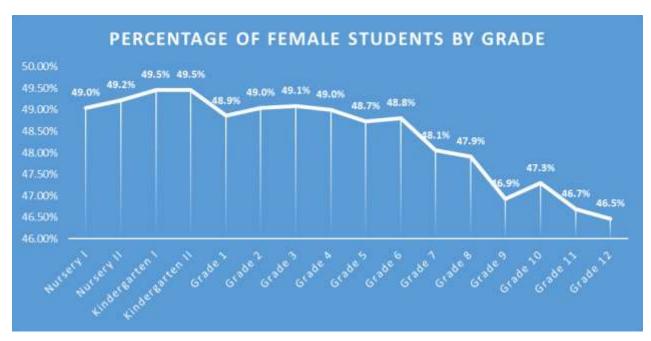
²² There are three grades at the ECE level in the 2015 school census form: 1) Beginner (Nursery II) for three-year-olds; 2) Kindergarten (Kindergarten I, KG I) for four-year-olds; and 3) Pre-first (Kindergarten II, KGII) for five-year-olds. Although not in the official categorization, day care services (Nursery I), which are designed to serve two-year-olds, can also be commonly found in Liberia and were reported in the school census. The G2B-ESP uses KI (3 year olds), KII (4 year olds) and KIII (5 year olds as the terminology for ECE grades.

Table 5-1 Student enrollment, grade and type of school in basic and secondary education, 2015

Ownership	Public	Private	Faith based	Community	Total
Nursery I	87,979	44,327	19,365	10,191	161,862
Nursery II	52,359	32,411	14,409	7,346	106,525
Kindergarten I	75,279	39,671	17,438	8,830	141,218
Kindergarten II	66,321	38,570	16,791	8,373	130,055
Grade 1	80,291	39,677	17,442	8,569	145,979
Grade 2	65,145	36,216	16,023	7,375	124,759
Grade 3	59,379	32,983	14,852	6,666	113,880
Grade 4	51,525	30,520	13,542	5,723	101,310
Grade 5	43,632	27,917	12,513	4,813	88,875
Grade 6	37,404	26,729	12,100	4,013	80,246
Grade 7	26,215	22,255	10,959	2,108	61,537
Grade 8	22,478	20,449	10,407	1,679	55,013
Grade 9	20,264	18,711	10,105	1,327	50,407
Grade 10	13,292	14,018	9,584	696	37,590
Grade 11	10,328	12,861	9,464	661	33,314
Grade 12	9,058	14,246	10,989	678	34,971
Total	720,949	451,561	215,983	79,048	1,467,541

Although the proportion of female students is increasing, they are still underrepresented, particularly in secondary schools (Figure 5-1). This issue is explored in detail in Chapter 11.

Figure 5-1 Percentage of female students by grade, 2015



The student population is particularly large in a number of counties, with remote areas having proportionally fewer female students (Table 5-2).

Table 5-2 Male and female student enrollment by county, 2015

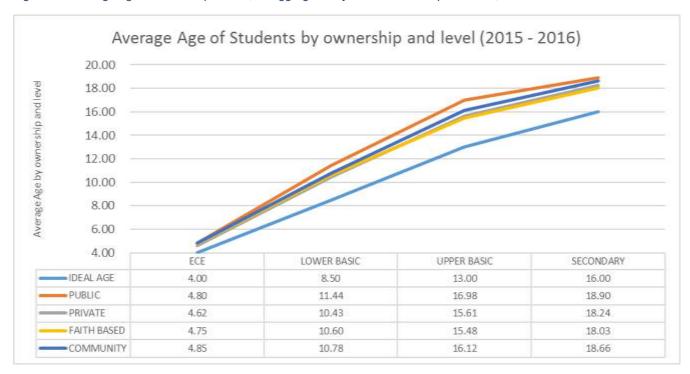
COUNTY	Total Male	Total Female	% female
River Cess	13,025	10,504	44.64%
Grand Kru	14,477	11,805	44.92%
Sinoe	19,218	15,811	45.14%
Gbarpolu	14,051	11,579	45.18%
River Gee	12,167	10,200	45.60%
Grand Bassa	40,485	35,243	46.54%
Bong	64,494	56,498	46.70%
Lofa	53,488	47,153	46.85%
Grand Gedeh	22,724	20,173	47.03%
Nimba	95,103	84,540	47.06%
Bomi	20,494	18,655	47.65%
Maryland	26,191	24,137	47.96%
Margibi	53,867	50,740	48.51%

Grand Cape Mount	22,429	21,211	48.60%
Montserrado	279,668	297,411	51.54%

Many students are too old for their grade level (Figure 5-2). Basic and secondary public school students are, on average, two years older than their grade level. This problem is evident in all types of schools but is more acute in public schools. However, there is evidence that the age gap has reduced since 2008 (

Figure 5-3). Overage enrollment is discussed further in Chapter 8.

Figure 5-2 Average age of students per level, disaggregated by school ownership and level, 2015



Average Age of Students in Basic Education (2008 - 2016) 19.00 AVERAGE AGE OF STUDENTS BY GRADE 17.00 15.00 13.00 11.00 9.00 7.00 5.00 Grade 1 Grade 2 Grade 3 Grade 4 Grade 5 Grade 6 Grade 7 Grade 8 Grade 9 2008 18.04 10.36 11.75 13.04 14.18 15.21 16.04 16.80 17.43 17.98 2013 10.02 11.10 12.14 12.98 13.67 14.26 16.51 17.24 10.05 16.85 2016 8.98 11.00 11.81 12.63 13.28 15.57 16.20 IDEAL 6.00 7.00 8.00 9.00 10.00 11.00 12.00 13.00 14.00

Figure 5-3 Average age per grade, all schools, 2008, 2012 and 2016

5.2.2 Infrastructure

Many schools lack infrastructure such as well constructed classrooms, water supplies or adequate toilets (Table 5-3). There are rarely enough toilets for the number of students. A recent nationwide survey found just 56% of toilets were functional and only a quarter (24.5% of toilets were for female students). Many schools have no access to clean water or handwashing facilities (an issue which impacts school feeding, deworming and transmission of disease). Student/ functioning toilet ratios are high at 100.3:1 with a number of counties having extremely high ratios (for example, Gbarpolu and Sinoe). Secondary schools report a lack of specialist classrooms and equipment.

Table 5-3 Percentage of schools with solid structures, water supply and functioning toilets, 2015

	Number	Percentage
Solid structures for schools	2,251	41.47%
Access to water	4,303	79.13% ²³
Handwashing stations	3,180	62%
Functioning toilets	2,618	48.14%
Solid structure schools, access to water and functioning toilets	1,168	21.48%

Source: EMIS, 2015, and UNICEF, 2016

5.2.3 School based management (SBM)

School principals in public schools are appointed by County Education Boards or MoE. These appointments should be merit-based but there are reports of problems in the process (Norman 2012)²⁴. The majority are male (Table 5-4) and most receive no induction or ongoing training. There have been efforts to improve principal training through short courses and projects. For example, a brief review of program reports show that school principals have participated short term training in the following areas: early grade reading and mathematics, school census surveys, the teachers' code of conduct, deworming, community participation and PTAs, child-friendly schools, Ebola response, gender equity, WASH, alternative basic education, and school feeding²⁵. However, there is currently no requirement for principals to have completed a nationally-recognized course which covers the wide range of their responsibilities. There is reportedly a high turnover of principals (JESR, 2015).

²³ A recent nationwide survey found just 58% of schools had reliable access to water (UNICEF, 2016).

Norman, Z.B. (2012). The Perceptions of Liberian Public School Principals about their Leadership Development Needs in Post-Conflict Liberia. Unpublished Dissertation. Northeastern University: Boston MA.

²⁵ Ministry of Education (MoE) (2016). Ministry of Education Annual Report 2015.

Table 5-4 School principals by sex and type of school, 2015

School Level	Female Principals	All Principals	Percentage
Private	392	1,662	24%
Community	58	315	18%
Faith-based	117	830	14%
Public	236	2,617	9%
Total	803	5,424	15%

Many schools have established a School Management Committee (SMC) and a Parent Teacher Association (PTA). Progress has reportedly been swift in establishing these bodies (Table 5-5) and a number of projects have targeted training towards them (for example, the Global Partnership for Education school grant program, GEEAP, GOAL Plus and WFP (MoE Annual Report 2015)).

Table 5-5 Schools reporting an operational SMC and PTA, by type of school, 2015

School Type	РТА	SMC
Public	95.9%	80.4%
Private	87.3%	60.0%
Faith Based	90.6%	66.0%
Community	93.4%	68.8%
Total	92.3%	71.3%

Source: EMIS, 2015

While parent and community participation in schools varies greatly by community, recent reviews argue that parental and community participation in school affairs and student learning will continue to need support (JESR, 2015). After more than 30 years of civil war and unrest many parents have been unable to access basic education themselves. Consequently, they do not have a good understanding of their roles and responsibilities in supporting and monitoring their school and their children's education.

While EMIS (2015) data shows that 92.3% of primary schools state they have a "functioning" Parent Teacher Association (PTA), there is a lack of data on the extent to which PTAs are active in demanding accountability from school principals and teachers for the delivery of quality education. Of concern is a finding from EMIS (2015) that in nearly 60% of primary schools the School Management Committee (SMC) is either 'not functioning' (28%) or meets three or fewer times per year.

5.2.4 School supervision

Supervision of schools falls under the responsibility of District Education Officers (DEOs) and Instructional Supervisors. These officers are supposed to visit schools to provide supervision, inspection, advice and support. Anecdotal evidence from the JESR and other reviews suggest that schools are rarely visited and that monitoring and reporting are rudimentary. There are no national school standards for basic and secondary education. The lack of guidelines for county and district education officers outlining their roles and reporting responsibilities in school supervision, combined with limited training and financial resources to visit schools has seriously affected external oversight of school performance. MoE has recognized these problems and efforts to improve the human capacity and resourcing of District Education Offices have begun. These are discussed in further detail in the Education Management & Accountability Program, Chapter 6.

5.2.5 School planning and resourcing

Between 2013 and 2015, the MoE in partnership with the Global Partnership for Education provided annual school grants to 2,558 basic education schools to replace school fees. The project encouraged the development of School Improvement Plans. Many schools established bank accounts to receive the grant which averaged around USD 1,000 per school per year. In recent years, schools have also received textbooks, supplementary materials and reading books through GPE and USAID. There have been investments in new classrooms (GPE), water supplies and toilets (Action Contre la Faim, Concern Worldwide, Oxfam, Plan Liberia, Save the Children, GPE and UNICEF) but the extent to which County Development Funds are used to support basic and secondary education is not known.

5.2.6 Partnerships

Private and faith-based schools provide education for 43% of primary and 67% of secondary education students. Non-government schools should register with MoE and be inspected prior to receiving a permit to operate. However, key officers report that this system does not function effectively. MoE does provide subsidies for a few non-government schools and has recently completed a draft Subsidy Policy.

In September 2016, MoE began the Partnership Schools for Liberia (PSL) pilot to explore public-private partnerships in the operation of ECE and primary schools. MoE also has a growing network of local and international non-government organizations that provide support to schools in a wide range of areas.

5.2.7 Interventions to improve school quality

There have been a number of national programs to improve school quality beyond teacher training and textbooks (Table 5-6).

Table 5-6 School quality interventions in Liberia

Project and donor	Intervention activities	Impact/output
EGRAPlus & EGRA USAID through LTTP and EGRAPlus projects	Provision of (i) CPD/ teacher training, (ii) intensive coaching, (iii) learning materials and instructional manuals, and (iv) regular assessment on early grade reading	Improvement in early grade literacy outcomes in schools with intensive interventions.
Basic Education Program GPE funded / MoE implemented	School improvement grants (USD \$2.58 million to 2,558schools)	Improve community participation in school planning, strengthened school based management and improved resourcing and monitoring of schools
	Textbook, supplementary reader instructional materials provision ²⁶	Reduction in pupil textbook ration and increased access to leveled readers in early grades
	Classroom construction (over 300 classrooms constructed)	Improved school safety, reduced student classroom ratio, increased access. (impact here is presumed)
Liberia Teacher Training	Initiate teacher verification	Removal of over 1,000
Program (LTTP) – Teacher	program and provision of	ghost teachers from payroll.
Verification and Biometric ID	biometric cards and	Impact in terms of reduction
program	scanners to schools in three	in teacher absenteeism not
(USAID)	counties with an expectation of reducing long term teacher absenteeism	yet clear as the intervention is ongoing

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²⁶ This included one-million supplementary readers (for grade 1-4 students); 340,000 levelled readers, one million textbooks in mathematics, science, social studies and language for Grade 5-9 students and 200,000 teachers' guides in these subjects. The procurement also provided over 1.4 million pieces of supplementary material related to language, social studies, and the sciences.

Gender-Equitable Education and Achievement Program (GEEAP) UNICEF Implementation in 40 schools of after school support in children in grade 7-9, PTA and SMC capacit building, life skills and girls club, CPD on child-centere instruction.	girls' club, training of 48 school and community
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There is international evidence and learning about improving school quality. For example, school grants can be effective if programs are designed to encourage expenditure according to local contexts and needs, and have a discretionary element (i.e, if they are contingent upon development of a school improvement plan). Factors that contribute to the effectiveness of school grants include the following:

- Predictability (UNESCO, 2009): i.e., that there are medium to long-term commitments to a conditional flow of funding to schools.
- Timeliness (UNESCO, 2009): grants should be aligned with school planning cycles, or with times of the year when other school funding is being disbursed.
- Scale: school grants that are too small add extra administrative burdens that outweigh any benefits to be gained from expenditure. They need to be large enough to cover the activities in a school's strategic plan (UNESCO, 2009).
- Targeting: spending must be carefully targeted (Glewwe and Kremer, 2006) and based on local contexts and needs.

The international literature also offers useful lessons on the design of effective SBM programs, emphasizing:

- the importance of adequately supporting SBM reforms at school leadership and government levels (UNESCO, 2009; Save the Children, 2015);
- the importance of local communities to have the skills and knowledge to effectively manage schools (Krishnaratne, White and Carpenter, 2013)
- the need to address the issue of voice and participation to ensure that SBM committees are not subject to elite capture, requiring "the design of governance structures that empower poor households" and enable their voluntary participation (UNESCO, 2009);
- the importance of an appropriate accountability system for school improvement, based on student outcomes;²⁷ and

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²⁷ While providing clear reporting to parents about their children's learning should help parents hold education providers accountable, Krishnaratne, White and Carpenter (2013) found this did not necessarily have any impact. Test scores can also be understood as an accountability device, and Hanushek and Woessmann (2011) found

the value of school networks or cluster systems (Barrera-Osorio et al., 2009.).

Successful decentralization of school decision-making relies on ensuring a continued level of government intervention "to ensure an adequate and equitable distribution of teacher resources throughout the country (OECD,2011)" and "a framework in which more poorly performing schools receive needed support to help them improve (Barrera-Osorio et al., 2009)." Parental participation in school management has also been found to reduce teacher absenteeism (Barrera-Osorio et al., 2009).

Finally, De Grauwe (2008) makes the following recommendations regarding external school supervision/quality assurance systems:

- Supervision services must have adequate human and financial resources and assets at their disposal to fulfil their mandate.
- Once a clear mandate has been assigned, it should inspire the organization and structure of the service; the profile of the staff; their recruitment, training and evaluation; and the definition of the actions they are expected to undertake.
- Successful supervision systems achieve the right balance between support and control, and this balance takes into account the strength and professionalism of principals and teachers.
- When supervision services are lacking in resources, it is crucial to combine their interventions with other inputs; for example, using school networks.²⁸

5.3 Legal and policy context

While nearly all MoE Departments and Bureaus are involved in supporting basic and secondary education, the Education Reform Act (2011) assigns key oversight and policy guidance responsibilities to the Bureau for Basic and Secondary Education, which operates under the Department of Instruction.

The Education Act states that "the Minister shall establish policy guidelines and criteria regarding the establishment of new education facilities for all categories of schools in the country" (MoE 2011:32). The Department of Administration, in consultation with the Department of Planning is responsible for supervising the construction, renovation, maintenance and expansion of schools. The Act states that basic education in Liberia "shall be free and compulsory" for all pupils within the public school system, and that basic

that this has improved learning outcomes in some contexts. While the matriculation exam already works this way in Myanmar, the current assessment system is not an accurate measure of student learning.

²⁸ The UNESCO school network provides an international example of this.

education is comprised of lower basic education (Grades 1-6) and upper basic education (Grades 7-9).

The Act also identifies the government, through the national budget, as the "primary financier of public education" in Liberia. However, the Act also emphasizes the possibility of securing additional financing and support though public-private partnerships and concession agreements. The MoE is responsible for establishing a school subsidy policy.

Policy guidance on school quality standards and establishment and registration of new schools have not yet been created, however, they are listed as responsibilities for the Center for Educational Accreditation and the MoE, respectively. While the Center for Educational Accreditation has not yet been established, the Act provides MoE the authority to develop quality standards and use these standards to guide education officer monitoring activities.

The Act does not provide guidance on the establishment and governance of school-level Parent Teacher Associations or School Management Committees. However, the Act is explicit that the chair of the National PTA of Liberia have a seat on the National Education Advisory Board (NEAB).

5.4 Achievements

• In 2015, the MoE led a nationwide rollout of its school grants program. The program provided grants worth a total of \$US 2.58m to 2,558 public primary schools for an average grant size of slightly over \$1,000 per school.

- Grants played an important role in helping schools procure teaching and learning materials. Following the Ebola epidemic, school principals identified teaching and learning materials procurement as one of the most important strategies to encourage children to return to school (Education Cluster 2015).²⁹
- The grants program strengthened community participation and school level planning, administration and financial management capacities.
- The MoE has developed school classification standards, in the Liberia Education
 Administration Regulations, and detailed accreditation standards, in General

 Accreditation in Liberia. Both documents provide frameworks which could be drawn
 on to develop school quality standards.

 $^{^{29}}$ In one MoE M & E report, the authors note: "grants help schools procured urgent items like chairs, instructional materials, sporting materials for the students." (MoE M & E Unit 2015).

- Over 93% of primary schools have a functioning PTA a steady increase over the last several years. 71% of PTAs meet four or more time per year (EMIS 2015).
- In 2015, the MoE reached 2,026 schools with PTA training, using the PTA
 Operational Manual. PTAs and other community groups have become increasingly
 recognized as playing an important role in promoting school quality improvement
 (MoE Annual Report 2015).
- The MoE has effectively leveraged partnerships with NGOs to progressively train PTAs across Liberia on critical social issues, including girls' education promotion, gender-based violence, the code of conduct, school feeding, psychosocial support and psychological first aid (MoE Annual Report 2015).
- Contracted school operators in the Partnership Schools for Liberia program to trial innovative strategies to improve school management and accountability in 94 ECE and primary schools.
 - Post-Ebola WASH improvements included 531 schools in 9 counties with improved water access (new boreholes/wells and rehabilitation) and planned support for 120 schools in 2017.

5.5 Challenges

5.5.1 Lack of a school quality standards system

Currently there are no national school quality standards in place for schools in Liberia. This makes it very difficult for county and district education officers, PTAs, parents, community leaders and MoE officers working in Monrovia to demand accountability from school principals and teachers for the provision of quality education. Lack of measurable school quality standards means that systems cannot be put in place to collect and report data on the extent to which schools are improving.

Lack of national quality standards also undermines school leadership and management as school principals and SMCs lack clear guidance as to their roles and responsibilities in delivering quality education. Schools and communities do not know about proven steps to improve education access and quality and they do not know how well they are performing compared to similar schools. Furthermore, CEOs and DEOs do not know which schools need additional support and resources.

School inspection and supervision is inadequate as few schools receive regular, structured visits from MoE officers. DEOs are unable to inspect schools due to a lack of travel budget,

difficult transport conditions and lack of human capacity. There is no functioning school inspectorate system.

Finally, the lack of a School Quality Standards Assessment System has meant that the MoE has been unable to use data from school quality standards assessments to target resource allocations in counties, districts and schools. In addition, civil society education stakeholders are unable to access quality data on how schools are performing within and between districts, and this has seriously undermined their oversight role.

5.5.2 Sustainability and utilization of school grant

While it is important to recognize recent MoE achievements in establishing a national school grants program, more work is needed to maximize the value-for-money from these resources through ensuring that they are used to achieve national school quality standards. Uncertainty about provision of grants and amounts is a challenge. It is not clear whether school grants will be sustained as there is not a current budget allocation in FY2016/17. These concerns were widely shared (JESR 2015). More work needs to be undertaken to sustain, fund, strengthen and expand the school grants program so that it functions as a key component of a national School Quality Improvement System.

5.5.3 Weak engagement of parents and PTAs in school affairs and their children's education

Barriers to parental involvement are many: the majority of Liberians have not completed basic education and nearly 33% of adults are illiterate (HIES, 2014). Many parents are intimidated by school principals and teachers, and they lack of good understanding of their role. Many parents are young and they lack experience in child development and their education needs. Currently PTAs are not involved in a structured program of monitoring their local school to support the provision of quality education. SMCs need to be strengthened.

5.5.4 Many schools lack basic facilities such as safe water and toilets

Schools across the education sector lack basic facilities. There is a continuing need to provide toilets and safe water in schools (either through direct construction or community mobilization). Improvements in data collection and a new targeting policy will allow provision of additional resources to the schools which are most in need. Toilets and water supply improvements will include ECE schools.

5.5.5 Principal recruitment, training and support needs strengthening

Principals have a vital role to play in improving access and quality. Currently, their recruitment and deployment is inadequate. There is no national qualification for school leadership and management and infrequent training for new principals (for example, in practical management strategies to improve teaching and learning and access). Anecdotally, the turnover of principals is high which harms long-term planning. Aspects of this issue are addressed in the draft Educator Management Policy (Chapter 9).

5.6 School Quality Program

Component 1: Establish school quality standards

Develop national school quality standards and quality assurance and inspection tools

- Establish a technical working group on school quality standards with a mandate to draw on existing MoE guidance, PSL learning and local and international learning to develop school quality standards.
- Based on those standards, develop a quality assurance tool for use by DEOs and School Inspectors. The standards will provide a framework for the school improvement planning, school grant process and school inspections and include specific WASH, school health and gender equality standards.
- 3. Conduct consultation meetings with education stakeholders to review and improve the draft MoE School Quality Assessment (SQA) tool.
- 4. Test the SQA tool in representative 100 schools.
- 5. Conduct a workshop to revise the SQA tool following testing. Draft management guidelines.
- 6. Disseminate the school standards to all education officers and schools via Minister's Circular.
- 7. Establish school inspectorate, train and resource DEOs and begin to inspect schools (Education Management & Accountability Program).

Component 2: School improvement grants

Update School Grant Guidelines and School Improvement Plan Guidelines

- 1. Workshop to review previous grant scheme and update the School Improvement Plan Guidelines, implementation plan, costs, compliance and sustainability strategy, SIP templates and School Quality Grant Guidelines. Ensure revised guidelines and templates are reinforce G2B strategic priorities (i.e., improving learning outcomes, special education, age-appropriate enrolment) and priorities highlighted in the School Report Card, the School Quality Standards, and the Teacher Code of Conduct.
- 2. Print Guidelines for 2,500 schools.

DEO support and school-community engagement

- Training for county and district officers on revised School Improvement Grants and Plans. The school improvement program will be facilitated by DEO and School Inspectors to school leadership, the PTA and SMC.
- 4. Training for principals on School Improvement Grant utilization (see Component 3).
- 5. Conduct public awareness activities using radio and SMS to raise awareness of grants and ensure transparency (so communities know when grants have been distributed to school bank accounts).
- 6. DEO and school inspectorate spot-checks on schools to check SIP and utilization of school grants.

Provide school grants and research impact of school fees

- 7. Update school grant distribution lists using 2016 Ministerial Briefing on Equitable Resource Allocation.
- 8. Provision of school grants, making use of mobile money to the extent possible, using the above policy to ensure the most disadvantaged schools receive additional resourcing.
- 9. Advocate for increased GoL contribution to school grant pool.
- 10. Conduct research on the impact of school fees.
- 11. Provide recommendations, including recommendations on school grants policy, based on research findings.

Component 3: Principals' leadership program

- Stakeholder consultation to develop draft profiles for school principals and vice
 principals, identify core competencies, and professional development priorities for
 school leaders. Build on recent experiences in principals' training and agree on
 content and a modality for an in-service professional development program for school
 principals.
- 2. Develop Principals' Training Program for ECE, basic and secondary school principals. Include:
 - a. Improving English and mathematics learning outcomes and assessment
 - b. School Improvement Plan, inspections and School Improvement Grants
 - c. Teacher Code of Conduct and teacher appraisal, discipline and performance management
 - d. Community engagement for school management and returning out-of-school children and young people to school, including children with disabilities
 - e. Improving girls' education and reducing gender-based violence including referral pathways and responsibilities
 - f. Strategies for improving learning for overage children

- g. Improving WASH, deworming and school feeding
- h. MoE policies
- 3. Print materials: Principals' Certification Preparation Manual (PCPM) and the Liberia School Leadership Training Manual (LSLT).
- 4. Identify provider to facilitate program implementation.
- 5. Conduct training for 2,500 principals. Training will follow a cluster-based and self-study in-service professional development model. Target the most disadvantaged areas first.
- 6. Establish partnership with COTAE and the NTAL for the recruitment of principals and administering of certification exams based on the School Leadership Handbook.
- 7. Recruit new principals from a list of existing qualified teachers and principals meeting minimum qualification and experience and extend recruitment of graduates from the University where applicable.
- 8. Conduct external training evaluations at the end year to strengthen and improve programs.
- 9. Link principals' certification to a higher pay grade and benefits as part of the civil service reform and in line with the Educator Management Policy.
- 10. Update principal recruitment and deployment processes to ensure transparency and merit-based selection.

Component 4: Increase the proportion of ECE, basic and secondary schools with toilets and safe water

- 1. Update standard designs and costings for classrooms to include water tanks and rainwater collection.
- 2. Update standard Ventilated Pit Latrine design and costings for ECE and post-ECE schools and institutions including accessibility and safety measures.
- 3. Ensure gender sensitive approaches for construction and allocation of WASH facilities. Ensure school grant guidelines encourage self-build.
- 4. Engage with communities and non-government organizations to fund and construct new toilets, handwashing stations and water supplies. Ensure school grant guidelines encourage self-build and supplies for toilets and handwashing.
- 5. Target construction at the schools most in need.

Chapter 6 Education Management and Accountability Program

6.1 Summary

G2B impact	Improved student learning outcome	mes		
G2B priorities	MoE and schools are accountable for children's learning			
Challenges	 Difficulty delivering strategic programs to improve education access and quality nationwide MoE staff at decentralized levels do not ensure critical quality improvement, school support and accountability functions A large cadre of retirement age and low performing staff who need to be removed from MoE payroll to create space for new workers Inadequate and unbalanced budget hampers investment in critical sectors such as ECE 			
Strategy	Improve the efficiency and performance of education management system			
Program name	Education Management and Accountability Program			
Responsible officer	Deputy Minister for Planning, Research and Development			
Components	Education Delivery Unit and education partnerships Deputy Minister for Planning, Research and Development			
	Workforce reform Assistant Minister for Fiscal Affairs and Human Resource Development			
	3. School inspection Deputy Minister for Planning, Research and Development			
		. ,		
	Support and accountability at decentralized levels	. ,		

6.2 Introduction

Improving learning outcomes in the classroom requires stronger management and accountability systems at the district, county and national level. Most importantly, many of the G2B-ESP programs require increased supervision, inspection and monitoring of schools. The Education Management & Accountability Program includes:

- Establishing a specific management unit to drive the implementation of G2B-ESP and ensure accountability
- Specific measures to strengthen the partnerships needed to implement the G2B-ESP successfully
- Increasing the quality and tempo of school supervision and inspection visits through the creation of a School Inspectorate and improving training and resourcing of subnational officers
- Continuing to build robust data collection and analysis systems to measure the outputs and impact of the G2B-ESP

The chapter also addresses the pressing issue of MoE payroll management including payroll verification, retirement and the impact of teacher training and transitions from supplementary payroll.

6.2.1 Education governance structures

The Education Reform Act (2011) outlines the MoE governance and accountability structures, management roles and responsibilities at all levels. National Education Policies (2011) and the Liberia Education Administration Regulations (2011) elaborate on the guidance provided by the Education Reform Act.

In addition to being responsible for 1.4m students, 19,000 teachers, education officers and support staff, and 2,500 schools in the public sector, the MoE is also responsible for policy and oversight of an equivalent number of private, faith-based and community schools. Given the country-wide reach and cross-cutting nature of MoE programming, the MoE liaises with the Civil Service Agency, the Ministry of Finance and Development Planning (MFDP) and other Ministries at the central level, as well as a large number of stakeholders at the county and district levels.

Deputy Ministers are responsible for the activities of the three Departments: Administration, Instruction and Planning, Research and Development. Assistant Ministers manage each Bureau, supported by Directors and senior staff.

The Education Reform Act (2011) called for the establishment of a National Education Advisory Board (NEAB), comprised of stakeholders representing different institutions engaged in education, to serve as an advisory body to the MoE. The President constituted the NEAB in April 2015.

6.2.2 Central office

In 2015, the MoE restructured the central office to increase efficiency and implement the management and accountability structure in the Education Reform Act (2011). This reduced the number of the central office employees from 936 to 425 staff. However, due to limited government resources, many of the employees removed in the restructure have yet to be retired or retrenched.

The Act also calls for the establishment of three Centers of Excellence in Accreditation and Certification, Curriculum and Research, and Education Management. The centers would be responsible for several important governance functions, including the development of the national curriculum, development of accreditation and quality assurance systems, licensing teachers, and strengthening school, district and county management systems. At the time of writing, these centers have not been established. There is, for example, no school quality assurance or inspection, the responsibility currently falls on district-based officers.

The Department of Planning, Research and Development takes the lead on data collection and analysis. This includes the management of the annual school census exercise. There is currently a draft Monitoring and Evaluation Policy.

6.2.3 County and district education offices

MoE offices at the county level are led by a County Education Officer (CEO). Each county has five decentralized staff: Monitoring and Evaluation Officer, Planning Officer, Personnel Analyst, Accountant, and Procurement Officer. In addition, there may be Alternative Education Supervisors, School Feeding Coordinators and Instructional Supervisors. MoE is moving to standardize staffing at the county level.

The CEO serves as a Ministry representative responsible for the "operations of the school system in the county, including the responsibility for the personnel in the system" (Education Act 2011:34). The CEO oversees District Education Officers (DEOs) based in district offices. DEOs oversee and address school-related matters, including personnel, school supplies,

relaying communications, school registration, checking school census data and providing oversight of non-government schools in the district. There are usually Instructional Supervisors based at the district offices who are responsible for in-service teacher training. The Act also outlines school principal roles and responsibilities, including DEO and principal roles in teacher support and management. To deal with offences and grievances, the Act offers guidelines for an Administrative Hearing and Review process which are elaborated on in the Code of Conduct for Teachers and School Administrators.

In September 2016, there were 15 CEOs (13, or 87% male) and 98 DEOs (90, or 92% male). During 2015-16, recruitment processes for two new CEOs and 35 new DEOs were begun, to replace officers due to retire and improve the caliber of the workforce. A number of development projects have included training for DEOs but concerns remain about capacity and ensuring that key positions are filled with people who have the right skills and commitment (JESR, 2015). Resourcing CEO and DEOs, especially for school visits, is a recurrent challenge.

6.2.4 Payroll

The MoE shares the teacher and education officer payroll responsibilities with the Civil Service Agency. The payroll absorbs the majority of the MoE annual budget and presents a number of challenges:

- Large number of irregularities such as 'ghost teachers', unqualified teachers,
 volunteer teachers and teachers who are not being paid correctly
- Over 6,000 teachers on a supplementary payroll (established as a temporary postwar measure) receiving a smaller salary than teachers on the main payroll
- Approximately 6,910 volunteer teachers who are not on payroll
- Approximately 1,100 staff who have retired and need to receive their pension
- 62 redundant central office staff who need their severance pay
- Bringing additional trained teachers onto the payroll promptly (for example, new graduates from the RTTIs or new graduates from university)

At the beginning of the budget cycle, MoE receives teacher lists including key information such as name, qualification and age from DEOs and CEOs, from which the calculation of teachers' salary costs are made. The estimated cost of teachers feeds into the draft MoE budget that is submitted to Ministry of Finance and Development Planning (MFDP). However due to the ongoing MoE payroll cleanup, the MFDP is reluctant to accept the teachers cost projection made by MoE. Instead, compensation of employees has maintained almost unchanged since 2013/14 and even decreased in 2015/16, and is expected to remain the

same until MoE completes the teacher vetting/ payroll cleanup exercise. New teacher recruitment has been halted for an extended period of time, wasting government resources in pre- and in-service teacher training program.

Currently the average teacher salary on regular payroll is \$151 per month, while average teacher salary on supplementary payroll is \$97 per month (Table 6-1).

Table 6-1 MoE regular and supplementary payroll, 2015/16

	REGULAR PAYROLL (USD)			SUP	PLEMENTAI	RY PAYROL	.L (USD)	
	Count	Share	Annual Total	Monthly Average	Count	Share	Annual Total	Monthly Average
Teacher	10,198	76%	18.4m	151	5,823	97.24%	6.8m	97
Admin.	3,155	24%	5.3m	141	165	2.76%	0.2m	103
TOTAL	13,353	100%	23.8m	148	5,988	100%	7.0m	97

Source: Liberia Civil Service Agency

6.2.5 Project delivery and partnerships

MoE has established and sustained the Education Sector Development Committee (ESDC) which includes development partners and non-government organizations. The ESDC is used as a consultative body (for example, for the G2B-ESP). As the education sector is heavily reliant on external donor funding, the MoE has to manage a number of critical partnerships. In addition, MoE manages relationships with a number of non-government organizations delivering education projects and the non-government school sectors. Coordination and resource allocation to GoL priorities are on-going challenge.

Recently, MoE has established the Partnership Schools for Liberia public-private partnership trial (Table 2-3) which involves developing more robust contract management and quality assurance processes. Finally, MoE has experience implementing a number of projects utilizing a number of mechanisms including embedded technical advisers, project delivery units and contract staff.

6.2.6 Financing

Most of the budget is allocated to compensation of employees, higher education transfers and various subsidies to non-government schools. Neither the wage nor the subsidy component allows the implementation of strategic education development activities. Funding for operations and investment (such as G2B-ESP priority activities) is very limited.

MoE share of total education budget

The share of MoE expenditure in the total government education budget has declined for the past three years, from 62% in 2012/13 to 52% in 2015/16. The rest of the education budget is allocated directly to institutions including higher education and TVET institutions, the Monrovia Consolidated School System, the West African Examination Council (WAEC) and Rural Teacher Training Institutes (RTTIs).

Share of education budget for each level

The government does not have a clear formula for allocating resources to different level of education, nor does it clearly track education expenditure by level. As a substantial amount of resources is allocated to compensation of employees, the number of teachers in each level of education is the best proxy for government investment. GoL allocates approximately³⁰ 40% of overall education expenditure to primary education (including preservice teacher training), and is on the lower end for secondary education (8% for junior secondary and 4% for senior secondary in 2014/15). In the meanwhile, the share of higher education is substantial (32% in 2014/15).

Table 6-2 Share of education budget for each level of education 2012-15

	2012/13	2013/14	2014/15
ECE	11%	11%	11%
Primary	40%	40%	40%
Junior Secondary	9%	9%	8%
Senior Secondary	4%	4%	4%
TVET	6%	5%	5%
Higher Education	29%	30%	32%

Source: Budget execution reports and budget documents, authors calculation

³⁰ The methodology for estimating the share of education and additional analysis can be found in the Education Sector Analysis, 2016.

Payroll and goods and services

Employee compensation accounts for a majority of MoE expenditures. Especially in 2014/15 when the overall budget to MoE remained low due to the Ebola crisis, 94% of funding was used for compensating employees. In 2015/16, the share of employee compensation decreased to 78%, the lowest level over the past three years. The share of goods and services declined from 7% to 3% between 2012/13 and 2014/15 and increased to 12% in 2015/16. The volatility of the budget is a major challenge to implementing development activities.

Unit costs

Based on estimation of teachers by level of education, spending per public primary school pupil is around USD 71 per year (Table 6-3). Junior and senior secondary school per student spending levels are higher at USD 79 and USD 90 per year. This is due mainly to the generous pupil-to-teacher ratio resulting from the use of specific subject teachers at the secondary level, the relatively high proportion of other staff, higher salaries based on a teacher's qualifications, and more expensive teaching and learning materials.

Many TVET institutions are not included in education budget as they are the responsibility of the Ministry of Youth and Sports. Combining the different sources of funding, TVET unit cost calculated is USD 1100 per year, more than 15 times that of the primary level.

Table 6-3 Unit cost by level of education

Level of Education	Unit Cost	As % of Primary Unit Cost
ECE	24	34%
Primary	72	100%
Junior Secondary	79	110%
Senior Secondary	90	125%
TVET	1100	1535%
Teacher Training	5709	7968%

Subsidies

Historically, there have been transfers of Government money and resources to support the operation of private and faith-based institutions. These are known as "subsidies" and have been allocated on an ad-hoc basis. There has never been an official policy or guidelines for the management of subsidies although a draft was developed in 2015-16. The process of subsidy allocation is uncoordinated and rarely transparent. Schools that get subsidy in a certain year might lose the funding in the next year due to the election and change of representative. Institutions can lobby directly with the legislature. As a result, even though subsidies are channeled through MoE and it has monitoring responsibilities, MoE does not have authority over the total amount of the subsidy expenditure. Almost 90% of institutions receiving subsidies from MoE are private or faith-based schools and institutions. Most reportedly charge student fees and impose entrance tests on students. Currently, the MoE spends between USD 43 – 69 per primary-age student in Government schools. For the few subsidy beneficiary schools that are captured in 2015 school census, per student subsidy is an average of USD 387 per student. Within the MoE budget, actual expenditure on subsidies remained around USD 2.5 million over the past three years except 2014/15 when the overall government revenue shrank due to Ebola.

Within the last three years, MoE has not made any investment on capital projects from GoL resources (such as school infrastructure): 100 percent of the funding was devoted to recurrent spending. Further analysis of financing can be found in the Education Sector Analysis (2016) and Chapter 14, Financing the G2B-ESP. Transfers to higher education institutions are analyzed in the Higher Education Program, Chapter 13.

6.3 Achievements

• In 2015, the MoE central office was re-structured to align with the organogram articulated in the Education Reform Act (2011).

 Teacher verification exercise has identified the presence of a large number of irregularities in the staff payroll and provided data critical to transitioning to a more efficient and effective payroll. As of October 2016, six counties had been completed and the verification exercise will continue in the remaining counties.

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³¹ To calculate the cost per student educated in government schools, EMIS 2015 and budget execution report is used. The cost per student is calculated as the total expenditure allocated to each level divided by the total number of students enrolled in public and community schools.

- The annual school census has progressively improved coverage and accuracy over the past four years and the MoE EMIS unit operational capacity has been significantly strengthened.
- The MoE conducted Joint Education Sector Reviews in 2013 and 2015, the latter securing participation from key education stakeholders and partners from all 15 counties.
- Public expenditure per student has increased from 10 dollars to more than 70 over the past ten years.
- A costed Operational Plan for the Education Sector Plan 2010 2020.
- Investments in textbooks, teacher training and curriculum development.
- Development and implementation of the Partnership Schools for Liberia (PSL) program. Beginning September 2016, MoE has engaged eight non-government school operators in Africa's largest trial of public-private partnerships in education to improve learning outcomes for over 15,000 children in 94 ECE and primary schools.
- Recruitment and deployment of 54 (out of total of 75) decentralized professional staff to strengthen county and district education offices.
- National Education Advisory Board (NEAB) established in April 2015.
- Introduction of a performance management system for education officers
- Work to improve communication with students, parents and teachers including weekly media summaries, user-friendly website, Facebook page and training from the Carter Center on freedom of information.

6.4 Challenges

Challenge 1: Managing partnerships and interventions

The MoE faces challenges in managing multiple stakeholders: non-government school operators, development partners, implementing organizations and concession corporations. The role of these stakeholders is critical: over the past five years, non-MoE education sector partners have spent more USD 40m annually to support education in Liberia.

In addition, private operators, faith-based organizations and corporations run schools which enroll over 350,000 children in basic education and employ over 15,000 teachers. MoE struggles to provide effective oversight of the private and faith-based school system.

Managing, coordinating and evaluating multiple interventions to improve the quality of education puts a strain on the MoE systems and human capacity. It is essential that MoE strengthen structures to improve partnership coordination and strategic program delivery.

Challenge 2: Workforce reform

The MoE workforce reform agenda includes five inter-related priorities to address five critical challenges: (i) verifying staff payroll and removing ghost names, (ii) testing teachers and removing 'untrainable' teachers, (iii) transitioning supplementary and volunteer teachers onto official payroll, (iv) retiring and retrenching eligible staff, and (v) training and certifying untrained teachers who meet minimum requirements. The aim is for a clean, stable payroll which is able to absorb newly qualified teachers.

The presence of an estimated 2,250 ghost teachers and staff on payroll costs the MoE millions of dollars annually. A major payroll verification exercise has begun which has removed 1,100 ghost names from 40% of the payroll saving approximately USD 2.3m annually. In addition, there are approximately 1,000 teachers who do not have the basic literacy levels or qualifications to be teachers (Teacher Education & Management Program).

The MoE also operates a 'supplementary' payroll of approximately 6,000 teachers and staff. Many teachers on the supplementary payroll are underpaid for their qualification. In addition, the maintenance of a 'supplementary' payroll increases the difficulty MoE faces in addressing long term absenteeism and streamlining human resource management processes between MoE, MFDP and CSA. In late 2016, MoE was transitioning these supplementary teachers to the main payroll.

Currently, there are over 6,000 volunteer teachers and 1,158 teachers who stand ready to transition onto payroll. Given high pupil teacher ratios (PTRs) in government schools, especially in ECE (where the PTR is over 50), there is also a critical need for more teachers. Cleaning payroll of ghosts and untrainable teachers will create space for these teachers.

Finally, the MoE payroll also includes over 1,000 staff of retirement age who want to retire, but who have not yet been able to transition to the CSA pension for lack of resources in the pension fund. The central office also includes over 62 staff whose positions have disappeared under the new MoE organogram. The presence of these staff costs an estimated USD 2m annually and detracts from the overall performance of the MoE workforce. Table 6-4 shows one-time and recurrent costs of workforce reform priorities (which cannot be fully covered by the estimated savings (~USD 4m) from removing ghost teachers). It is important to note the importance of regular modeling of teacher and civil servant workforce costs as the G2B-ESP is implemented.

Table 6-4 Cost of workforce reform priorities³²

One-time costs	
Redundancy packages for 1,000 unqualified/'untrainable' teachers	\$1.5m
Severance packages for 62 MoE central office staff	\$0.3m
Retire 1,100 staff onto pension	\$3.96m
Sub-total Sub-total	\$5.76m
Recurrent costs (per annum) ³³	
Transitioning 6,000 supplementary teachers onto payroll. Date for pay adjustment not yet set.	Underway in 2016/17
Transitioning 2,600 unqualified volunteer or regular teachers onto MoE payroll after Accelerated C certificate training	\$1.56m
Hiring 1,000 trained 'C' and 'B' certificate teachers from previous RTTI cohorts	Completed in 2016/17
Hiring 500 newly trained 'C' certificate teachers bi-annually from RTTIs	\$0.96m
Hiring 100 newly trained 'B' certificate teachers bi-annually from RTTIs ³⁴	\$0.22m
Transitioning 3,000 qualified volunteer teachers onto MoE payroll	\$5.44m
Sub-total Sub-total	\$8.18m
Savings (per annum)	

³² Based on MoE Workforce Reform Concept Note May 2016, MoE Presentation to Cabinet April 2016 and MoE estimates October 2016.

 $^{^{33}}$ The additional payroll costs of additional trained ECE and TVET teachers or pay increases for qualified principals are not yet projected. Modelling is included in the relevant components.

³⁴ MoE assumes that previous cohorts of newly qualified 'C' certificate teachers will be employed by end of 2016/17. In addition, the numbers of newly qualified degree or associate degree graduates entering the teaching workforce has not been modelled at the time of writing.

Sub-total	\$6m
Retired staff removed from payroll	\$2m
Removing ghost and unqualified teachers from payroll	\$4m

Challenge 3: Sector monitoring

Effective monitoring and review of the ESP 2010-20 and Operational Plan 2014-16 have been hampered by four critical challenges. Until 2014, the Education Management Information System (EMIS) did not provide sufficient system coverage and reliability to inform education sector policy and planning activities. While the completion of the 2015 EMIS successfully addresses the coverage and reliability concerns of the 2014 school census, there is a significant risk that without continued attention to EMIS function and capacity that successes realized in 2015 may not be maintained.

Joint Education Sector Reviews conducted in 2013 and 2015 did not track MoE progress against ESP and operational plan targets. In the absence of regular performance review, the MoE missed opportunities to ask 'why' or 'how' its programs were succeeding or struggling and identify areas for scale-up or mid-course correction.

Sector monitoring activities are not yet guided by a monitoring and evaluation (M&E) framework which identifies data needs, reporting timeframes and data flows at each level and between levels. In the absence of a holistic M&E framework, CEO, DEO and school level staff are frequently engaged in multiple and over-lapping data collection and reporting activities which takes time away from their other responsibilities.

Challenge 4: Strengthening county and district monitoring and accountability

In 2012, the MoE established County School Boards (CSB) in all 15 countries and trained board members on their roles and responsibilities. In 2015, the terms of existing board members expired and many CSBs do not appear to be operating at the capacity envisioned by the Act.³⁵ Additionally there has been a high turn-over of CEOs and DEOs.

In 2015/16, the MOE identified 45 EO staff (DEOs and CEOs) of retirement age and began a process of re-hiring for all 75 EO county-level support positions. Given these two issues, in 2016-17, nearly half of EO staff will be new to their positions. In addition to being new to their positions, the majority of CSB, CEO and DEO staff do not have professional training related

³⁵ Ministry of Education (MoE) (2015). Post JESR Stakeholder Engagement Report. Monrovia: MoE; Ministry of Education (MoE) (2016). Joint Education Sector Review Report (draft). Monrovia: MoE.

to their job descriptions and the MoE has not yet developed training programs or clear MoE guidance or tools to support the education officers.

County school systems also face a severe shortage of operational resources. Specifically, CEO and DEO staff do not have the resources to travel to, or communicate with schools, to conduct periodic school monitoring visits, inspections and quality assurance activities. In the 2015-16 budget, less than USD 200,000 was allocated to non-salary CEO and DEO activities. There are no independent school inspectors which limits accountability and reporting to parents and MoE.

Several recent evaluations highlight the limited resources at the CEO and DEO level and the extent to which lack of petrol, difficulty in maintaining vehicles, communication challenges (e.g., airtime, or no access to a network) combined with the logistical challenges in much of the country (i.e., remote schools and roads which are impassable during rainy season) restrict CEO and DEO execution of key job responsibilities.³⁷

Challenge 5: Inadequate and unbalanced budget hampers investment in critical sectors such as ECE

The MoE faces a number of fiscal challenges:

- Inadequate budget allocation with low levels of investment in development activities or operations
- Unbalanced budget allocation with disproportionate investment in high unit cost activities such as higher education
- Inequitable subsidies to non-government schools and institutions
- Disconnect between budget, planning and monitoring
- Inadequate chart of accounts which hampers tracking of expenditure against priority activities

The current budget framework does not reflect the MoE priorities and does not allow proper programmatic budgeting. There are no clear guidelines within MoE to mainstream strategic areas during the budget preparation. Investment to each level of education is not planned nor tracked at the central level and critical information such as unit cost is not calculated to inform funding requests.

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³⁶ Ministry of Education. (2016). Ministry of Education 2015-16 Ceiling.

³⁷ USAID. (2013).MID-TERM ASSESSMENT OF THE LIBERIA TEACHER TRAINING PROGRAM PHASE II. European Union. (2014). Ex-Post Evaluation of the EC support to Education in Liberia (ECSEL).

6.5 Education Management and Accountability Program

Component 1: Education Delivery Unit (EDU) and education partnerships

The MoE will establish an Education Delivery Unit (EDU) responsible for driving implementation of G2B-ESP priorities. The EDU will address some of the shortcomings identified regarding implementation of ESP 2010-2020 and Operational Plan 2014-2016. Namely, that these plans sought to address too many priorities, and in so doing, undermined funding of and momentum toward key strategic objectives and failed to empower high-potential staff toward improved performance.

The EDU will be structured to (i) focus on a small number of priority ESP programs, (ii) empower, and hold accountable, high potential staff, and (iii) report directly to the Minister of Education. While identification of priority programs will be finalized during the EDU development process, these may include (i) workforce reform, inclusive of teacher verification, (ii) school management and accountability, (iii) education partnerships and (iv) fundraising and resource mobilization. Given its focus on narrowly-defined priority initiatives, the EDU will not displace the core functions of MoE Departments or budget normally allocated to departmental activities. EDU staff selection will be competitive and may be open to MoE, other civil service and eligible non-civil service applicants. If EDU staff are seconded from existing MoE positions, a transition arrangement will be made to minimize disruption.

Operationalize Education Delivery Unit (EDU)

- 1. Finalize EDU implementation priorities and performance objectives and design organizational structure, staffing, workplan, performance indicators.
- 2. Note: several current activities, including payroll verification, teacher testing, and education partnerships, have secured external funding and have begun to operate in ways envisioned for the EDU.
- Communicate EDU role within MoE structures and ensure clear communication, relationships and roles and responsibilities with Departments and Bureaus from whom EDU staff are seconded.
- 4. Identify and secure EDU lead officers.
- 5. Design, fund and implement robust evaluation of EDU overseen activities, as exemplified by the randomized control trial of the PSL program.

Strengthen and build education partnerships and coordination

 Operational review of MoE partnership mechanisms to identify strengths and weaknesses of existing MoE partnership engagement, inclusive of MoE partnership contracting, management and oversight systems. 2. Develop MoE partnership engagement strategy, mechanism(s), and program and evaluation priorities. For example, the MoE may want to widen stakeholder participation in the ESDC, support CEOs in engaging in county-level partnerships, be more aggressive in seeking out international technical and financial resources, seek to better utilize and influence non-government schools, or re-visit existing concession agreements to orient them toward a quality agenda.

Partnership Schools for Liberia

- 1. Implement, monitor and evaluate the PSL.
- 2. Share learning and include successful, cost-effective innovations and practices in relevant G2B-ESP programs and future interventions. If successful, expand to 300 schools.

Component 2: Workforce reform

Remove 'ghost' teachers and identify unqualified teachers

- 1. Continue to identify and remove ghost teachers as part of the payroll verification exercise.
- 2. Work with the Teacher Education & Management Program to complete testing of all teachers.
- 3. Offer severance packages to redundant teachers.
- 4. Work closely with CSA and MFDP to ensure savings from payroll cleanup are used for G2B-ESP priorities (such as pay for supplementary and volunteer teachers or priority activities).

Gradually transition supplementary, voluntary and newly qualified teachers onto the regular MoE payroll

- 5. Plan and budget for the transition of underpaid supplementary teachers to the regular MoE payroll. Target the most disadvantaged areas first.
- 6. Plan and budget for the transition of trained volunteer teachers to the regular MoE payroll. Target the most disadvantaged areas first.
- 7. In coordination with the Teacher Education & Management Program, plan, model and budget for the additional payroll requirements for teachers completing the Accelerated 'C' certificate, pre-service 'C' certificate, in-service 'B' certificate, ECE, degree and associate degree graduates and TVET certificates over the lifetime of the G2B-ESP.

Offer retirement packages for eligible staff

8. Support the Civil Service Agency to mobilize resources to offer retirement pensions to identified 1,100 eligible MoE staff.

- 9. Secure funding to provide severance packages as a fair compensation to staff who will leave the Civil Service as required by law.
- 10. Secure approval for the revised MoE organogram including district and county offices.

Component 3: School inspection

Operationalize Ministry Inspectorate of Schools

- 1. Create a rapid, small-scale 'Inspectorate of Schools' to be overseen by the MoE Planning Department and led by two key personnel (Chief Inspector and Technical Advisor). The program will start small with the expectation that initiation of inspection activities in the field be rapid and that reports and recommendations from the Inspectorate go directly to the Deputy Minister level and to Parliament.
- 2. Complete terms of reference for the Ministry Inspectorate and for key staff inclusive of key priorities, responsibilities and reporting lines. Note: the Inspectorate is separate from the DEO structure. This is because the Inspectorate is expected to offer an independent report on key issues at decentralized levels.
- 3. Digitalize the School Quality Assessment tool designed and tested by the School Quality Program. Tool will draw on PSL quality assurance recommendations, as well as other local, regional and international experiences. Specifically, for each school visit, the Inspector will have key messages to share (from the MoE central office), key stakeholders to meet with, and key pieces of data to collect. It is envisioned that this information and data collection will be inputted through a tablet, regularly uploaded to, and stored in, the cloud and, collated and made available to MoE and the public. Materials will be developed to align with school quality standards. Reporting will be done through a 'School Report Card' model where in school progress toward priority indicators in communicated via an easy to understand report card.
- 4. Design Inspectorate training course and training materials and identify training provider.
- 5. Recruitment and induction training for 50 School Inspectors (50% female). Ten-day residential training including assessed school visits.
- 6. Provision of equipment and transport necessary for completing school inspections.
- 7. Raise MoE and public awareness of the role of the Inspectorate.
- 8. In 2016/17, pilot the inspection process, tool and Report Card (50 schools total, in five counties, with 10 schools/county). Finalize and test mobile app and back-up paper-based materials. Target the most disadvantaged areas first.

- 9. Conduct 'flash visits' (surprise inspections) to 1,250 schools in year 1 (with an equal share in each county) and 2,500 schools annually thereafter. Target the most disadvantaged areas first. Inspectors will be paid per inspection completed. Schools will receive at least one inspection per year.
- 10. For each inspection, the Inspector will invite the local DEO and instructional supervisor to join. The visit will include a school inspection (based on the school quality standards) and meeting with and listening to, students, teachers, principal, PTA members and SMC members.
- 11. Within a week of each visit, the write up from individual inspections will be transmitted to Ministry Central Office. Once per quarter the Inspectorate will complete a summary report for distribution the Deputy Ministers and Parliament.
- 12. Inspection activities could eventually be overseen by a Centre for Education Management once it is established and funded.

Component 4: Support and accountability at decentralized levels

Capacity development for district and county education officers

- 1. Conduct capacity assessment and training needs assessment of DEO and CEO staff.
- 2. Evaluate performance of DEO and CEO staff and identify CEO and DEO staff who need to be replaced for performance issues.
- 3. Develop detailed job description, including key performance indicators, qualifications and appropriate remuneration, for each position, building on the provision in the law of 2011. Include these in Educator Management Policy.
- 4. Design DEO and CEO certification course and assessment and training materials. The course is envisioned as a two-week 'short course' –implemented regionally.
- 5. The training course provides professional development on educational leadership and management and cover school quality improvement, G2B-ESP priorities, school grants implementation and monitoring, data collection and reporting (e.g. school census), effective teacher performance management, including absenteeism, gender-based violence and Code of Conduct issues, financial management, and County/District School Boards. These materials will be organized in a District Education and Supervisors Certification Preparation Manual (DESCPM) and a Supervision Framework and Training Modules.
- 6. Identify training implementer with a focus on rapid implementation, capacity to integrate experiential learning (field work) and sustainability. For this reason, a local college or university could be considered.

- 7. Identify and select candidates (based on minimum qualifications, experience, and interviews) to participate in the certification course: 40 DEO candidates and 15 CEO candidates. Repeat in year 2 to ensure all positions are filled with certified candidates. Aim for at least 50% female officers. Target the most disadvantaged areas first.
- 8. Deploy candidates who successfully pass the certification exam and selection process to the districts.
- 9. Conduct once-yearly refresher trainings for all DEOs.

Resourcing of DEO and CEO monitoring and school support activities

10. Provide sufficient material and financial resources for DEOs to visit all government schools in their district at least once per year. Visits should ensure oversight of school improvement and school grant monitoring, as well as addressing issues identified by the school community.

Component 5: Sector planning, budgeting, monitoring and financial strengthening Sector planning, budgeting and monitoring

- 1. Work with relevant program teams to create annual operational plans and program based budgets tied to MoE G2B-ESP priorities.
- 2. Conduct annual Joint Education Sector Reviews which monitor and analyze sector performance against G2B-ESP targets, SDG4 targets and annual operational plans.
- Conduct annual Joint Education Sector Reviews to bring stakeholders together to discuss and review past-year performance and progress towards G2B-ESP targets and international agendas and targets.
- 4. Annually review sector emergency preparedness plans.
- 5. Ensure all plans, EMIS data and reports are made available publicly under the Freedom of Information Act (for example, on the MoE website).

Sector monitoring, evaluation and research

- 1. Validate finalize and endorse the National Education Sector Monitoring and Evaluation Policy and Strategy in light of G2B-ESP and SDG4, complete with a implementation responsibilities at the central, county, district and school levels and detailed descriptors of all indicators. The framework will integrate M&E data collection priorities, identify data sources and collection schedules, identify roles and responsibilities and have a training manual.
- 2. Complete G2B-ESP Intermediate Results Framework and update quarterly.
- 3. Strategic review of priority monitoring and data collection needs, including human resource needs and data collection costs. The focus should be on data which

- originates from the school or district levels and is required central level actions and reporting nationally and internationally.
- 4. Develop a policy-relevant Research Program on an annual basis. The program should include 3-5 targeted studies from the G2B-ESP. The agenda should include cost-effectiveness analysis to strengthen the link between sector planning and budgeting activities.

Education Management Information System

- 1. Conduct a strategic review of the existing MoE EMIS and school census function, including (i) Review system in terms of value for money, accuracy and user-friendliness, (ii) identify new data collection needs from G2B-ESP indicators (e.g. children and young people with disabilities; school grants; learning), (iii) Identify opportunities to increase public access to data, (iv) Integration with national assessment system (Curriculum & Assessment Program), WAEC results and School Quality Assessment tool data (Education Management & Accountability Program), and, (v) international agendas and targets including SDG4-Education 2030
- 2. Revise the EMIS and school census system based on review. Explore electronic school census data collection.
- 3. Include all higher education and alternative education providers in the annual school census.
- 4. Establish ESDC sub-committee to improve independent verification of school census
- 5. Continuous professional development of MoE EMIS staff with relevant training (e.g., Microsoft Excel). No further training at the district or school levels (included in principal, DEO and CEO training packages).
- 6. Implement school census each year.

Develop and implement a communications strategy

- 1. With relevant programs, develop and implement annual and quarterly plans for communications, aligned with G2B-ESP priorities and programs (e.g. benefits of the G2B-ESP for children and teachers, awareness campaigns on school fees, alternative education and enrollment policies, workforce reform and subsidy reform). Identify objectives, target audiences, and messages, to aid planning.
- 2. Produce a simple information booklet for parents and teachers about the G2B-ESP.
- 3. Launch the G2B-ESP.
- 4. Using analysis done under the Liberia Teacher Training Program, evaluate communications needs for the G2B-ESP and current Ministry capacity. Take account

- of new partnerships with the Carter Center (on access to information) and Hampton Creek (on a user-friendly website).
- 5. Use multiple, accessible channels to communicate information. Make sure that radio, especially local radio, is used, and that simple English and local languages are used where appropriate.
- 6. Establish channels for public feedback and reporting, such as free SMS and anonymous channels. Ask the public to report misuse of resources or unprofessional behavior. Publicize information about how MoE responds. (See Student Well-being and Teacher Education and Management Programs.)
- 7. Undertake regular evaluations of communications.

Financing

- 1. Finalize and implement Subsidy Policy covering all sub-sectors to free up resources for public schools. Reduce subsidy to non-government schools by USD 2m.
- 2. Reform higher education transfers to improve efficiency and resourcing of foundational education sectors (Higher Education Program, Chapter 13).
- 3. New chart of accounts which reflects MoE program areas.
- 4. Establish task force on education financing to identify new and innovative sources of education finance and engage with Ministries and stakeholders to target resources to the G2B-ESP priority sectors.

Chapter 7 Early Childhood Education Program

7.1 Summary

G2B impact	Improved student learning outcomes			
G2B priority	Lay the foundations for children's learning with ECE			
Challenges	 Geographical and social disparities in access to quality ECE (e.g. school fees) Lack of awareness among parents and communities on the importance of ECE and school readiness programs Limited training for ECE teachers and early childhood professionals Massive number of over-age pupils Inadequate ECE facilities across the country to accommodate the growing number of ECE pupils. Lack of resources to effectively implement quality ECE programs- 			
SDG target	4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education			
Strategy	Improve access to quality ECE			
Program name	Early Childhood Education Program			
Responsible officer	Deputy Minister for Instruction			
Components	1. ECE public awareness campaign and outreach to families and communities about the value of ECE and good parenting skills Assistant Minister for Early Childhood Education			
	2. Roll out ECE certification and training for teachers through Rural Teacher Training Institutes, colleges and universities Assistant Minister for Early Childhood Education Assistant Minister for Teach Education Assistant Minister for General Education Assistant Minister for General Education	ner		
	3. Build additional ECE school infrastructure in areas of Administration	ral		

greatest need	
4. Improve the quality of ECE provision for children aged 3- to 5-years-old	Assistant Minister for Early Childhood Education

7.2 Introduction

Early childhood education (ECE) was recognized in the Education Reform Act (2011) although had existed previously as kindergarten classes. Since the establishment of the Bureau of Early Childhood Education within the Department of Instruction in 2011, there has been noticeable progress, including the development of a National Inter-Sectoral Policy on Early Childhood Development (2012).

7.2.1 Enrolment

Early childhood education (ECE) has expanded significantly in recent years and by 2015 over 500,000 students were enrolled (Table 7-1). Within the education sector, children are can attend Kindergarten I (age 3), Kindergarten (KG) II (age 4) and KG III (age 5) before transitioning to primary education grade 1 when they are six years old. Many ECE schools also have Nursery classes (age 2). Approximately 51% of students enrolled in ECE are male with the other 49% being female.

Table 7-1 ECE enrolment by grade and type of provider, 2015

School Ownership	N	KG1	KG2	KG3	TOTAL
Public	87,979	52,359	75,279	66,321	281,938
Private	44,327	32,411	39,671	38,570	154,979
Faith-based	19,365	14,409	17,438	16,791	68,003
Community	10,191	7,346	8,830	8,373	34,740
Total	161,862	106,525	141,218	130,055	539,660

Source: EMIS 2015

Most children in ECE are the incorrect age for their grade. The 2015 School Census found that 74.7% of ECE students are over-age for the level they are attending (Table 7-2) with remote areas generally worse affected. 48% of students enrolled in ECE programs (over 250,000 children) are 6 years of age or older and should be attending primary school.

Table 7-2 Number and % of early childhood education overage students by county and gender, 2015

	Total			Male			Female		
County	At age	Overage	Overage %	At age	Overage	Overage %	At age	Overage	Overage %
Bomi	4,929	13,204	72.8%	2,505	6,871	73.3%	2,424	6,333	72.3%
Bong	10,928	40,575	78.8%	5,683	21,256	78.9%	5,245	19,319	78.6%
Gbarpolu	2,392	11,350	82.6%	1,312	5,969	82.0%	1,080	5,381	83.3%
Grand Bassa	5,689	27,948	83.1%	3,035	14,682	82.9%	2,654	13,266	83.3%
Grand Cape Mount	5,420	15,453	74.0%	2,785	7,660	73.3%	2,635	7,793	74.7%
Grand Gedeh	4,244	12,071	74.0%	2,221	6,227	73.7%	2,023	5,844	74.3%
Grand Kru	3,287	7,477	69.5%	1,772	3,876	68.6%	1,515	3,601	70.4%
Lofa	11,088	27,875	71.5%	5,805	14,412	71.3%	5,283	13,463	71.8%
Margibi	6,876	29,506	81.1%	3,397	14,660	81.2%	3,479	14,846	81.0%
Maryland	5,160	12,217	70.3%	2,591	6,170	70.4%	2,569	6,047	70.2%
Montserrado	58,464	110,896	65.5%	28,229	53,681	65.5%	30,235	57,215	65.4%
Nimba	12,868	63,493	83.1%	6,648	32,994	83.2%	6,220	30,499	83.1%
River Cess	1,580	10,243	86.6%	836	5,430	86.7%	744	4,813	86.6%
River Gee	1,106	7,853	87.7%	556	4,151	88.2%	550	3,702	87.1%
Sinoe	2,518	12,950	83.7%	1,359	6,897	83.5%	1,159	6,053	83.9%
Total	136,549	403,111	74.7%	68,734	204,936	74.9%	67,815	198,175	74.5%

Source: EMIS 2015

The reasons for the overage phenomenon are not clearly understood but may include entry tests at grade 1, poor child development, distance to school and the incentive for schools to keep children in ECE as fees are a source of income. The impact of overage children in ECE is severe: limiting access and preventing age-appropriate education. Although the average age of students in ECE is reducing, this is a major challenge for the sector.

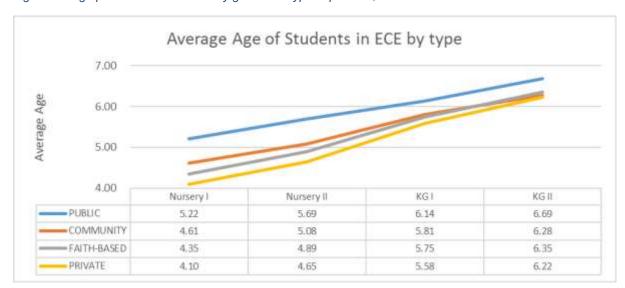


Figure 7-1 Age profile in ECE schools by grade and type of provider, 2015

Many ECE schools are established within existing primary schools which can improve transition and reduce management costs. However, this means ECE classrooms can be some distance from family homes in rural areas. Relatively few ECE schools are faith-based schools but there is a large private ECE sector (Table 7-3).

Table 7-3 ECE schools by type of provider, 2015

School type	Number of ECE schools
Public	2,425
Private	1,555
Faith-based	851
Community	307
Total	5,080

Source: EMIS 2015

7.2.2 Teaching workforce

The ECE teaching workforce has expanded rapidly. 57 percent of ECE teachers are women, with higher proportions of female ECE teachers in non-government schools (Table 7-4). It is important to note than many teachers work across multiple grades in the sites with combined ECE, primary and high schools.

Table 7-4 ECE teaching workforce by type of provider, 2015

	Male	%	Female	%	Total
Public	3,409	64%	1,899	36%	5,308
Private	1,615	28%	4,073	72%	5,688
Faith-based	746	30%	1,733	70%	2,479
Community	396	47%	440	53%	836
Total	6,166	43%	8,145	57%	14,311

Source: EMIS 2015

Teachers require a 'C' certificate to teach in ECE schools as there is currently no government-approved ECE teaching qualification. Existing 'C' certificate pre-service and inservice teacher training courses do not include substantial time on ECE teaching methodologies. Around half of ECE teachers do not meet the basic qualifications (some 10 percent of government ECE teachers do not even have a high school certificate) and Pupil/Qualified Teacher Ratios are high (Table 7-5).

Table 7-5 Qualified ECE teacher ratios, 2015

	Total ECE workforce	Qualified male teachers	Qualified female teachers	Total qualified	% qualified	PTR	PQTR
Public	5,308	1,624	1,083	2,707	50%	53	104
Private	5,688	831	2,084	2,915	51%	27	53
Faith-based	2,479	367	812	1,179	48%	27	58
Community	836	178	181	359	43%	42	97
Total	14,311	3,000	4,160	7,160	50%	38	73

Source: EMIS 2015

7.2.3 Resourcing

Funding for ECE schools is limited to parent and community contributions. Almost all charge fees (3,500 Liberian dollars per year (approximately USD 41) and there are additional costs for uniform and shoes so ECE is not free at point of use³⁸. Resourcing from GoL is limited although public and community school ECE teachers may be on the MoE payroll. There have been no major procurements of materials to ECE schools, no school grants and no national distribution of the ECE national curriculum or teaching resources. Teacher training courses, community awareness materials³⁹ and a national curriculum have been developed by MoE.

³⁸ PSL ECE classes will be free as part of the trial.

³⁹ Level 1: ECD Community Education and Awareness Program (ECDCEAP) is a 10-session workshop designed for parents, caregivers, teachers, community health workers, and other community stakeholders who have primary and secondary roles in improving the health, education and care of children from prenatal/birth to eight. It is a community/parent empowerment strategy and a mechanism to increase awareness of, and sensitization to, early childhood development in Liberia. Each workshop is approximately two hours long, and each one has four parts: 1. Parenting issues, 2. Early brain development, 3. Health nutrition and safety/protection, and 4. Adult-child interactive experiences.

7.3 Policy and legal context

Liberia formally recognized Early Childhood Education as a vital part of its educational system in the Education Reform Act (2011). This recognition led to establishing a Bureau for Early Childhood Education which is responsible for designing, developing, implementing, coordinating, monitoring and reviewing all early childhood education programs. It also supports the registration and quality assurance of all ECE programs and provides oversight to MoE ECE teachers.

The Bureau works in collaboration with the Ministries of Health and Social Welfare, Gender Development and Children Protection. It also works closely with international organizations including the Open Society Foundation (OSF), OSIWA, Save the Children, Plan International, Project Concern International, the World Bank and UNICEF.

The Education Reform Act (2011) does not specify that ECE is to be fee-free. The Act proposes the development of guidelines for "opening and operating" ECE institutions and for the standardization of ECE programs and curriculum. Many of the activities of the ECE Bureau are new and evolving, including curriculum development, establishment of teacher training programs, and ECE financing and oversight.

7.4 Achievements

Participatory development of a four level National Professional Development
 Framework⁴⁰ including pilot testing and production of final products.

- Level 1 ECDCEAP community mobilization and awareness Trainer's Manual and Photo Cards finalized (2012), launched and updated (2014). Five-day training for new cohort of ECDCEAP trainers (2013)
- Level 2 ECD Skills-Based Training and Education Program (ECDSTEP) is a
 pre-service package of teaching tools (Teacher Planners, mathematics and
 literacy supplementary materials etc.) for a range of individuals who are
 currently providing early childhood services, those moving from primary
 teaching, and those new to the teaching field. It is a 20-day course with

⁴⁰ Level 1: ECD Community Education and Awareness Program (ECDCEAP); level 2: ECD Skills-Based Training and Education Program (ECDSTEP); level 3: ECD Certificate Program; and Level 4: ECD University Programs (AA, BA, MA, PGCE, and PGDE)

follow-up training and consists of the ECDSTEP Curriculum and Training Manual for Master Trainers.

- Level 3: ECD Certificate Program development including co-writing Liberia ECD Certificate consisting of 120 clock hours of coursework and 480 hours of practice teaching. This will be equivalent to the current 'C' certificate qualification.
- Level 4: ECD Higher Education Programs currently in development through a working group.
- Publication of a cross-sectoral Early Childhood Development Policy.

7.5 Challenges

Despite the achievements mentioned above, ECE programs in Liberia still suffer numerous interrelated challenges.

7.5.1 Geographical and social disparities in access to quality ECE (e.g. school fees)

ECE school fees and expenses such as uniforms prevent poor children from accessing quality ECE. Rural areas also have fewer ECE classrooms and these may be some distance from the children's homes. Many ECE classrooms have very large pupil numbers which harms the quality of teaching. There are not enough ECE classrooms across the country to accommodate the growing number of ECE pupils.

7.5.2 Lack of awareness among parents and communities on the importance of ECE and school readiness programs

Parents and communities often do not know why ECE is so critical for a child's future learning. These is limited understanding of the importance of play-based learning, holistic child development and pre-literacy and pre-numeracy skills. Children are often enrolled into ECE at too late an age when they should be primary grades. This reduces access for correctly aged students and makes age-appropriate teaching more difficult.

7.5.3 Limited training for ECE teachers and early childhood professionals

Until recently there were no formal ECE teacher training courses. Many ECE teachers lack qualification or training in ECE. There is an urgent need for pre- and in-service teacher education and Continuing Professional Development.

7.5.4 Massive number of over-age pupils

The persistent challenge of overage children in ECE remains a major concern. The factors driving overage enrollment are not fully understood but could include school fees, concerns

about the quality of education, child development and growth, distance from home and cultural reasons. The impact on children's learning is severe: older children do not receive the right level of education and younger children cannot get a place or learn in a play-based environment. The overage enrolment issue in basic and secondary education is further addressed in Chapter 8.

7.5.5 Lack of resources to effectively implement quality ECE programs

Investment in ECE is widely considered to be an effective use of resources but the subsector is underfunded. Ensuring teachers have planners, teacher guides and curriculum and receive CPD requires additional resources. Many ECE centers have no toilets or child-appropriate equipment and toys. Although a small number of model ECE centers have been established, most teachers do not have the opportunity to observe and practice good quality ECE.

7.6 Early Childhood Education Program

Component 1: ECE public awareness campaign and outreach to families and communities about the value of ECE and good parenting skills

Public awareness campaigns to promote ECE

- 1. Disseminate information on the benefits of at-age enrollment, in partnership with other early childhood development programs on nutrition, health, and birth registration.
- 2. Develop programs to promote good parenting skills and introduce age-appropriate activities and stimulation suitable for the home setting.
- 3. Conduct and report a parental perception study.

Component 2: Roll out ECE certification and training for teachers through Rural Teacher Training Institutes, colleges and universities

ECE certification for teachers through Rural Teacher Training Institutes, colleges and universities

1. Work with institutions offering or planning ECE courses (such as WRTTI) and the Bureau of Teacher Education to ensure that there is a strong certificate program, and that teacher training course content on ECE meet the needs of the education sector (for example, including strategies for overage children, children with disabilities, preliteracy and pre-numeracy). Train 300 pre-service ECE teachers with user-pay model and use targeted scholarships to ensure participation women and students from disadvantaged areas. Update Educator Management Policy.

- 2. Work along with the Bureau of Fiscal Affairs and Human Resource Development to ensure that ECE teachers are included in payroll verification which is checking teachers' qualifications (Education Management and Accountability Program) and ensure that teachers who have qualifications in ECE are placed in ECE schools.
- 3. Review user-pay model regularly to ensure it is not reducing numbers of female teachers or those from remote areas.

Training (CPD) for existing teachers

- 4. In coordination with the Teacher Education & Management Program, use CPD material developed by the Bureau for ECE to train 3,000 unqualified ECE teachers. CPD to be delivered as part of school cluster CPD by Instructional Supervisors supported by ECE Master Trainers. Include early intervention module for special education. Target training at most disadvantaged schools first.
- Establish and resource 15 Model ECE Centers (one per county, starting with the most disadvantaged areas first) to be used as demonstration schools for the CPD inservice teacher training activities.
- Develop the capacity of CEOs, DEOs and School Inspectors to monitor the quality of ECE at schools and ensure ECE improvements are included in the School Improvement Plan (Education Management & Accountability Program).
- 7. Include strategies to improve the quality of ECE in school principal training (Education Management & Accountability Program).
- 8. Conduct and report a cost analysis for future ECE training (in-service and preservice).
- 9. Coordinate with NGOs to expand care-giver training for areas where there is no ECE provision.

Component 3: Build additional ECE school infrastructure in areas of greatest need ECE infrastructure construction

- Work with EMIS and Department of Administration to identify communities without basic quality ECE school infrastructure, complete needs assessment and update lowcost child-friendly ECE classroom standard designs.
- 2. Build child-friendly school infrastructure: 30 ECE classrooms, 100 ECE-specific ventilated pit latrines and 100 water systems in targeted locations. Use low-cost approaches to construction such as community mobilization, partnerships and grants. Coordinate with School Quality Improvement Program on toilet and water system construction. Target construction at most disadvantaged areas first.

Component 4: Improve the quality of ECE provision for children aged 3- to 5-years-old Research to understand demand and supply of ECE programs and the potential impact of tuition fee removal

- 1. Based on demographic projections, assess demand for ECE in all districts.
- 2. Assess the potential costs and impact of abolishing school fees, including increased enrolment, resources available to ECE schools, and possible community responses.
- 3. Assess supply of ECE programs, including school-based and community-based ECE institutions, teachers, trainers, ECE providers and financial resources, including unit-costs, payroll, central and local grants and transfers and fee payments.

Develop an ECE Policy

- 4. Develop and disseminate ECE Policy which covers the introduction of ageappropriate services, fair and transparent registration and admission system, roll-out of new curriculum, incentives for community-based services, training, and monitoring.
- 5. Clarify enforcement on policy for age-appropriate enrollment, to stipulate that, from the 2017-18 school year, children 6 years and older should not be enrolled in ECE schools but rather enroll at an accelerated learning program or into correct grade (Overage & Out-of-School Program). Train district education officers to monitor and enforce this (refer to School Quality Program).

Develop an ECE funding plan

 The funding projection shall include various options depending on the availability of domestic and external funding availability and also options for different scope of ECE services (daily duration of ECE programs, number of days ECE programs provide, class sizes, etc.).

Develop plan to accommodate the transition of overage students

7. Work with the Bureaus of Basic and Secondary Education and Alternative Education to implement plans to reduce overage enrolment in ECE and ensure that over-age students receive the appropriate level of teaching (refer to the Overage & Out-of-School Program).

ECE program implementation

8. Pilot new school-based and community-based programs in the most at need areas which improve ECE quality (for example, school grants, resource procurement, community-based ECE, additional teachers to speed transition of overage children,

- early intervention for children with disabilities etc.) and draw the lessons based on thorough evaluation.
- 9. Roll-out successful ECE quality improvement programs such as procuring and distributing locally-produced, locally-relevant materials to public ECE schools or school grants to reduce fees.
- 10. Quality and learning outcomes study to examine quality of teaching and learning in ECE schools.
- 11. Conduct a process evaluation of ECE provision in PSL schools.

Chapter 8 Overage and Out-of-School Program

8.1 Summary

	1					
G2B impact	Improved student learning outco	mes				
G2B priority	Reduce overage enrollment and increase access to education for out-of-school children and young people					
Challenges	 Many children are not in the correct grade and over-age children in ECE block correct aged children from attending school Large numbers of children and young people are out-of-school Alternative education programs need to be better coordinated and harmonized Donor dependent sub-sector with impending gaps in program funding 					
SDG targets	 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education 					
Strategy	Provide quality alternative and accelerated education pathways for overage and out-of-school children and young people					
Program name	Overage & Out-of-School Prog	gram				
Responsible officer	Deputy Minister for Instruction					
Components	1. Increase capacity to plan, budget and manage AE Assistant Minister for Basic and Secondary Education					
	2. Professional development for AE teachers, facilitators, principals and administrators	Assistant Minister for Teacher Education				
	3. Overage student program	Assistant Minister for Basic and Secondary Education Assistant Minister for Planning,				

	Research and Development
Out-of-school children and young people program	Assistant Minister for Basic and Secondary Education

8.2 Introduction

The education system continues to deal with significant challenges related to overaged and out-of-school children and young people. These challenges have been further compounded by high levels of school drop outs, starting at early grade levels and continuing through to post basic education. The MoE defines Alternative Education (AE) as comprising of three streams:

- Accelerated Learning Program (ALP): which seeks to provide accelerated grades 1-6, delivered in three years for out-of-school or overage children aged 7-13;
- Alternative Basic Education (ABE): which seeks to provide re-entry to education or work for out of school youth aged 13 – 35 with accelerated grades 1-6, life skills and job readiness training delivered over 3 years;
- Adult Education: This seeks to provide a primary (Grade 1-6) or secondary level (Grade 7-12) of education for adults wishing to complete either or both levels as well as basic literacy and numeracy skills. MoE will sustain coordination of adult education providers but this sector is not a strategic priority for investment during the G2B-ESP period.

8.2.1 Out-of-school children and young people

It is estimated over 170,000 children between the ages of 6-14 (nearly 15-20% of the school age population) are not enrolled in basic education (Table 8-1). The ESA offers background on how these estimates were made and provides information on 'zones of exclusion' - a policy-relevant way of looking at different populations of children and reasons which explain lack of access to school, dropout, and low learning outcomes.

Table 8-1 Out-of-school children and young people, 2015

	2015
Children aged-6-11 who are not in school	121,598
Children aged 12-14 who are not in school	52,028
Children aged 15-17 who are not in school	26,905 ⁴¹

Source: EMIS 2015 & HIES 2014 in Education Sector Analysis, 2016

The main reasons for a child not accessing basic education appear to be (i) school fees and expenses, (ii) late enrolment, (iii) distance to school and (iv) poverty and rural status (CWIQ 2007, CWIQ 2010, DHS 2013, UNICEF 2012). UNICEF (2012) also notes that issues related to low school quality (e.g., few learning materials, low teacher attendance, prevalence of corporal punishment) also negatively influence demand for schooling.

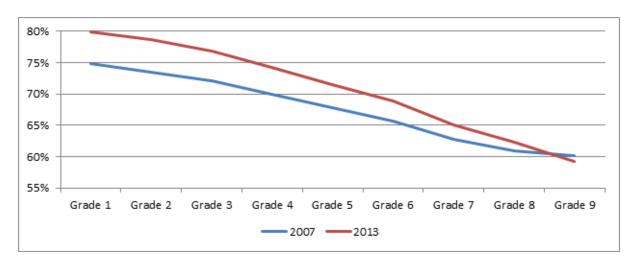
Most children with disabilities do not attend school. Current school census data about children with special educational needs is regarded as unreliable and only includes physical disability. There is one government school for the blind and a small number of non-government schools - which are subsidized by MoE - specifically for physically disabled children. However, student enrolment is small, unit costs are high and geographical coverage is limited. Most teachers and principals in regular schools do not have basic training on effective teaching strategies for children with disabilities (including early intervention in ECE and early grades). As Liberia has poor health outcomes, it is likely that there are significant numbers of children with disabilities who either never attend school, have to repeat grades, or drop out early.

8.2.2 Dropout rates and children at the risk of dropping out

Figure 8-1 shows the survival rate, by grade, from Grade 1-9 between 2007 and 2013. In 2013, 80% of children starting school completed Grade 1. These survival rates indicate that 40% of children entering grade 1 drop out prior to completing their basic education.

Figure 8-1 Grade survival in ratio: Grades 1-9, 2007 and 2013

⁴¹ A large share of 15-17 year olds are enrolled in school, but the majority of students are enrolled in primary and JH levels.



Source: DHS 2007, 2013

In addition, analysis from UNICEF (2012) found that, in addition to children who are "not enrolled" in basic education, there are over 500,000 children who are "at-risk" of dropping out of basic education. At-risk children include children who are significantly overage for their grade, who do not attend school regularly, and who come from poor households or otherwise marginalized backgrounds. Girls and young women are particularly affected (Chapter 11).

8.2.3 Overage enrolment

The challenge of overage enrolment significantly influences the quality of early childhood and basic education in Liberia. As discussed in Chapter 7, nearly 50% of children enrolled in ECE programs (over 250,000 children) are above the age of six (EMIS 2015). These children should be enrolled in primary school, but for various reasons, are enrolled in ECE. While these children are not technically "out of school", neither are they enrolled in age-appropriate programs.

Over-aged enrolments are recorded at all grade levels (Table 8-2). 42

⁴² At the secondary level the over age students out number at age enrolments by at least 6:1 accounting for 85.4% of total enrolment.

Table 8-2 Number and percentage of at age and overage children at primary school by county and gender, 2015

	Total			Male			Female		
County	At age	Overage	Overage %	At age	Overage	Overage %	At age	Overage	Overage %
Bomi	2,281	13,954	86.0%	1,194	7,336	86.0%	1,087	6,618	85.9%
Bong	7,036	47,337	87.1%	3,896	25,292	86.7%	3,140	22,045	87.5%
Gbarpolu	852	9,510	91.8%	497	5,343	91.5%	355	4,167	92.1%
Grand Bassa	3,176	30,609	90.6%	1,810	16,333	90.0%	1,366	14,276	91.3%
Grand Cape Mount	3,656	15,912	81.3%	1,984	8,238	80.6%	1,672	7,674	82.1%
Grand Gedeh	2,841	17,385	86.0%	1,478	9,163	86.1%	1,363	8,222	85.8%
Grand Kru	1,875	11,378	85.9%	1,078	6,325	85.4%	797	5,053	86.4%
Lofa	11,860	37,666	76.1%	6,460	19,568	75.2%	5,400	18,098	77.0%
Margibi	5,736	41,320	87.8%	2,859	20,962	88.0%	2,877	20,358	87.6%
Maryland	3,597	20,689	85.2%	1,897	10,636	84.9%	1,700	10,053	85.5%
Montserrado	61,175	189,092	75.6%	29,158	90,383	75.6%	32,017	98,709	75.5%
Nimba	10,767	67,623	86.3%	5,783	35,970	86.1%	4,984	31,653	86.4%
River Cess	946	9,723	91.1%	515	5,598	91.6%	431	4,125	90.5%
River Gee	277	10,835	97.5%	140	5,876	97.7%	137	4,959	97.3%
Sinoe	1,505	14,436	90.6%	842	7,922	90.4%	663	6,514	90.8%
Total	117,580	537,469	82.1%	59,591	274,945	82.2%	57,989	262,524	81.9%

Source: EMIS 2015

The average overage gap is reducing (Figure 8-2) but this remains a significant challenge for MoE.

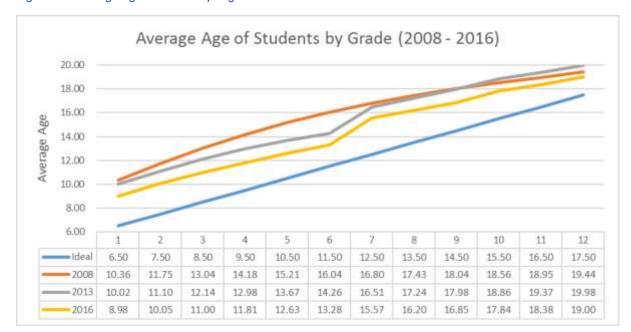


Figure 8-2 Average age of students per grade between 2008 and 2016

It is important to note that there are a number of issues related to late or no enrolment of children at the primary level, and which also contribute to the high rate of drop outs and the high number of adults and youth also not achieving a basic level of education. A joint assessment on out of school youth conducted by the MoE in conjunction with UNICEF and the EU in six⁴³ counties in the South East indicate that these challenges include but are not limited to:

- Financial problems: For example, uniform and other hidden education costs (copybooks, footwear)
- Child and youth labor: having to earn an income to support themselves and or their families at mines, plantations or farms
- Unfriendly and inaccessible learning environment with untrained or absent teachers
- Lack of enforcement of compulsory education policy by schools and communities
- Early marriage and teenage pregnancy
- The absence of continuity programs and motivational clubs in schools⁴⁴

⁴³ Grand Kru, Maryland, River Cess, River Gee, Sinoe, Grand Gedeh

⁴⁴ MoE, EU, UNICEF & GIZ South East Mission Briefing Notes, 2015

8.2.4 Young people

According to the Revised National Youth Policy (2012-2017) the definition of youth in Liberia is ages 15 to 35. At present, this age group accounts for roughly 50% of the present national population⁴⁵. Given the high rates of low enrolment and school dropout, it's not surprising that this group remains largely uneducated, with the 2014 Liberia Demographic and Health Survey reporting that 33% of women and 13% of men between the ages of 15 and 34 had never been to school.

With such a high illiteracy rate among youth, Liberia is at risk of not being able to achieve several objectives that have been laid out in various policies including but not limited to the Economic Stabilization and Recovery Plan (2015), or achieving the vision of Liberia as a middle income country as indicated in Liberia Vision 2030. Though the most recent Youth Fragility Assessment was conducted as far back as 2009, many of the challenges remain largely unchanged with youth still being faced with high levels of unemployment, low levels of education and skills training, lack of links to sustainable livelihoods and insufficient and/or inappropriate training for the actual Liberian job market. 46 Relevant training is addressed further in the TVET Program in Chapter 12.

8.2.5 Mode of delivery of alternative education

Accelerated learning program (ALP)

The MoE introduced the ALP in 1998 as a strategy to provide a basic level of education for over-aged and out-of-school children. Though by 2011, ALP was being offered in all 15 counties, however given the Ministry's announcement in 2009 that 2012 was to be the last year of implementation of ALP, the rate of implementation by donors was dramatically slowed with only 2,396 learners in 30 centers national wide reported in the 2015 EMIS data.

Catering for overage children and those returning to primary education between the ages of 7 and 13, the ALP model uses specially trained teachers facilitating after-school and night classes using a compressed curriculum. These teachers received a small stipend for their extra workload. The ALP ran between 1999 and 2012. Since the cessation of donor support for ALP in 2012, the numbers of children and young people accessing ALP has fallen to modest levels (Table 8-3).

⁴⁵ Education for All National 2015 Review, Ministry of Education (2015)

⁴⁶ Liberia Youth Fragility Assessment, USAID (2009)

Table 8-3 ALP and ABE enrolment, public schools, 2015

	Male	Female	Total
ALP 2015/16	627	763	1390
ABE 2015/16	2744	4266	7010

Source: EMIS, 2015

Alternative Basic Education (ABE)

ABE provides an alternative pathway into education in grades 1-6. Young people who have not completed a basic education, or have never been to school at all, can access after-school or evening classes led by facilitators (government school teachers with additional ABE training). There is an ABE curriculum consisting of three levels which are equivalent to a grade 1-6 education. ABE enrolment is relatively small (Table 8-3) (although this could be a consequence of service providers not being captured by the School Census) and the current large-scale ABE donor funded program (USAID's Advancing Youth Project, which supports 147 sites) is scheduled to finish in 2017.

Both ALP and ABE programs are based on the national curriculum and cover four core subjects: mathematics, science, English and social studies, with additional skills focusing on work readiness, life skills and leadership integrated into the ABE curriculum for older youth. Both programs use a compressed three-levelled curriculum to provide the equivalent of Grades 1-6 over a three-year period, with learners completing periodic assessments to determine if they have met the criteria for promotion to the next level.

Adult education

At present the MoE offers primary and secondary level classes for adult learners at night at selected government primary and secondary schools using an MoE-approved curriculum. Most learners enrolling in these programs have dropped out of the formal school system and are subsequently returning to complete either basic and or secondary education. However, adult education classes are not offered at all schools; the majority are offered in urban areas. Limited data is available on these adult education night schools and currently they are not covered under the School Census. In addition to Night School, Adult Education also comprises basic literacy and numeracy classes which are held at schools and community centers around the country. The curriculum is similar to the lower level ABE literacy and numeracy curriculum.

8.3 Legal and policy context

The ALP, ABE and adult education programs are managed under the Alternative Education (AE) Division ⁴⁷ within the Bureau of Basic and Secondary Education. Each program is managed by an Assigned Coordinator. Activities for ALP and ABE are guided by the Accelerated Learning Program Policy (2007) and the Alternative Basic Education Policy (2011) respectively. A draft harmonized policy is awaiting endorsement.

In the 2013 Joint Education Sector Review⁴⁸, several recommendations were adopted by the MoE and partners to: (i) address the provision of education for out of school youth; (ii) review and harmonize policies to ensure access and quality educational delivery for this target population; and, (iii) provide improved oversight and management of the sub-sector within the Ministry. These recommendations, which were later integrated and reflected in the MoE Operational Plan included, but were not limited to:

- Providing a broad based inclusive range of learning options, so that school dropouts and non-traditional learners could find a second chance to complete basic education equivalency;
- Providing a single, effective national system for the planning, implementation, monitoring and evaluation of AE services throughout the country, targeting out of school youths and adults who wish to learn;
- Improving access to AE service provisions at all levels (i.e. national, county and district);
- Developing annual milestones for strengthening capacity at the county and district levels, based on joint planning at the county and district level for AE to be aligned with the annual GoL/MoE budget allocation;
- Promoting and strengthening the monitoring and evaluation mechanisms for ABE service delivery;
- Promoting and expanding access to livelihoods opportunities for youth, determining the extent to which livelihoods opportunities impact on retention
- Improving quality of AE service provision; and,
- Improving the number and quality of AE facilitators.

⁴⁷ This follows the recommendations included as a part of the 2013 JESR; this change to the organizational structure was made in 2014.

⁴⁸ Joint Education Sector Review Report (2013), Ministry of Education, Liberia.

Additionally, it should be noted that there are several other sectoral policies and strategies that also seek to support out of school children and youth as well as international agreements to achieve universal primary education. Relevant GoL policies and plans include:

- National TVET Policy 2015 2020 (2015) which seeks to address issues relating to
 workforce development and human capital through technical and vocational
 opportunities for youth and marginalized groups (including women).
- The Economic Stabilization and Recovery Plan (2015) which includes a strategic intervention, called Strengthening Resilience and Reduce Vulnerability, to ensure equitable access to free basic education for all children.
- The National Policy on Girls Education (2013) that aims to address barriers to education access and quality for girls, while also addressing issues around enrolment, retention and completion.
- The National Gender Policy (2009) which seeks to ensure access to appropriate education and skills training for children with disabilities, especially girl children.

8.4 Achievements

MoE achievements include⁴⁹:

- Development of a draft harmonization policy to streamline program offerings for AE
- Tools for assessing the literacy skills of out of school youth
- Inclusion of data collection for AE in annual school census to inform decision making
- Development of nine Program Quality Standards (PQS) for ABE and beginning quality assurance visits to providers
- Conducting an Institutional Capacity Assessment (ICA) leading to development of annual workplans and budgets to support ABE activities at central and decentralized levels
- Appointment of Alternative Basic Education Supervisors in ten counties, on the payroll and integrated into the County Education Office structure
- Development of instructional materials facilitator manuals and learner workbooks to support three levels of AE, and aligned to the national primary curriculum
- Development of a three-credit, 60 hour Introductory Course for Alternative Basic Education in conjunction with Stella Maris Polytechnic

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⁴⁹ This includes achievements for both ALP and ABE programs which are currently operated as separate components.

- Facilitation of Technical Working Groups (TWGs) to ensure stakeholder involvement in critical areas, such as development of program quality standards, development and review of curricula and teacher professional development
- Training of master trainers, facilitators and administrators to support the delivery of ALP and ABE
- Piloting of teacher salary payments by mobile money in five counties⁵⁰.

8.5 Challenges

8.5.1 Many children and young people are not in the correct grade

The problem of overage students is impacting on the quality of education and access to early grades. With the closure of donor funding for the ALP, there is an urgent need to address this problem and the root causes which drive overage enrolment. The learning from the ALP program and other countries facing similar issues should be used to design cost-effective, large-scale programs to accelerate the learning of overage students, move them to the correct grade, and reduce the numbers of overage students enrolling into ECE and basic education.

8.5.2 Large numbers of children and young people are out-of-school

There is a large population of children and young people who have never attended school, dropped out early, or who are at risk of dropping out. This problem particularly affects girls and students from poor families, reinforcing the cycle of poverty. There is a need for coordinated programs which help children and young people to return to school, achieve a basic education, and transition to high school, employment or work-related training.

8.5.3 Alternative education programs need to be better coordinated and harmonized

Current policies do not specify the pathways for learners to ensure a smooth transition back into the formal education system (or the world of work in the case of older learners). Even at the site/school level children and or youth who register and complete ALP or ABE can still be denied entry into the same school system (e.g. entry into Grade 7), despite being taught by the same teachers. Young people who enroll and finish their ABE program face challenges in going to junior high school, as there is no policy direction for admittance into Grade 7.

Young people who also express an interest in continuing to vocational education are constrained as TVET institutions will only accept learners with a Grade 9 level of education. Currently, there is no policy directive and or framework within which districts and or counties

⁵⁰ 71% of schools report they have cell phone coverage (EMIS, 2015)

could be targeted for the provision of AE. Further consideration must be given to areas where there are high concentrations of out-of-school and overage children.

Work has begun to conduct quality assurance of ABE and ALP service providers and sites using new quality standards but the coordination and supervision of alternative education remains a challenge, especially at the county and district level. At the national level, the AE Division is constrained by lack of basic resources such as computers, printers and other resources. Basic skills such as planning, budgeting and managing AE activities still need support. Closer collaborations with the Teacher Education & Management Program, Student Wellbeing Program and Curriculum & Assessment Program will be necessary to reduce the isolation of AE activities.

Though Alternative Basic Education Supervisors have been included in the structure of some county offices⁵¹, remaining counties lack these positions. It is unrealistic to expect that one staff member can be responsible for overall monitoring at the district level. District Education Officers have limited understanding of ALP and ABE activities, preferring to focus instead on the more the formal education system. Even for existing ABE Supervisors, and interested DEOs, transportation to sites for regular monitoring is problematic due to a lack access to vehicles and general budgetary constraints to support supervisory visits. Close coordination with the Education Management & Accountability Program and School Quality Programs will be essential.

8.5.4 Lack of trained teachers to support implementation of AE

There is a lack of trained teachers to implement ALP and ABE programs. At present there is no pre-service training offered for either group, and the current offerings from RTTIs do not offer an opportunity to specialize in adult education or teaching ALP learners. Current approaches include in-service training for MoE teachers already on payroll who then deliver AE in addition to their regular classes for a small stipend paid by donors though projects. The sustainability of this approach has been questioned.

AE in-service trainings are usually delivered by partners (in a few instances by or with the MoE) and can be delivered over varying lengths of time, with no standardized model used by partners. Training usually takes place during the long vacation periods, but there are little or no opportunities for continuous professional development outside of these workshops. Site

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⁵¹ These positions have been filled in the counties where the USAID Advancing Youth Project currently operates – Bong, Grand Bassa, Lofa, Margibi, Monsterrado and Nimba

administrators/principals seldom receive specialized training in education management to enable them to better support on-site staff in the delivery of the AE curriculum.

8.5.5 Lack of supplemental instructional materials and insufficient distribution

Available materials do exist for ALP and AE – including materials targeted for teachers and learners. However, it is recognized that materials need to be revised to include more appropriate learning activities, low-literacy strategies and content for the target ages in line with the new national curriculum and student assessments planned in the Curriculum & Assessment Program.

In the case of ABE, a total of forty eight titles⁵², including learner workbooks and facilitator manuals have been developed. However, to date these materials have only been procured for and distributed to a limited number of sites. Wider distribution networks for both ALP and ABE materials is essential.

8.5.6 Donor dependent sub-sector

Historically, this is a sub-sector that has been donor funded and led which has sometimes led to fragmentation of approaches. It has also caused inequity in the provision to different counties. Little work has been done to engage private providers or large concessions to run AE programs and few private schools offer ALP or ABE. GoL contributions to AE have been limited with insufficient operational funds or development investment. ALP and ABE stipends for teachers have not been sustained by MoE after donor funding ceased. However, MoE and development partners have been encouraging more self-reliance for schools to see whether alternative local models of funding ALP and ABE emerge.

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⁵² Core areas include: literacy, numeracy, work readiness and life skills.

8.6 Overage & Out-of-School Program

Component 1: Increase capacity to plan, budget and manage AE

Finalize, approve and implement harmonized AE Policy and Guidelines

- Update, approve and implement the draft harmonized AE Policy and Guidelines in consultation with stakeholders. Include latest data, situational analysis, AE program quality standards and corresponding license/permit system procedures and secure, nationally recognized AE Student Report Card⁵³. Coordinate with School Quality, Education Management and Curriculum & Assessment Programs to ensure harmonization.
- 2. Produce and disseminate copies of harmonized AE Policy and Guidelines. Make freely available on MoE website.
- Develop and implement communication plan in partnership with Public Relations and Communication officers to change public and education personnel perceptions about AE.

Improve human capacity and systems to better manage AE

- Re-establish monthly coordination and networking meeting for partners (for example AE Technical Team) working in AE to share information, collaborate and plan.
 Expand invitation to new partners.
- 2. Establish quarterly high-level Inter-Ministerial Group on overage and out-of-school children and young people to address cross-sectorial issues and harmonized strategies to address the root causes of overage enrolment and out-of-school children. Include Ministry of Youth and Sports, Ministry of Labor, Ministry of Justice, development partners working in this area, and key MoE staff from TVET, Planning and Gender.
- 3. Conduct training needs analysis. Increase human capacity at MoE head office through Component 3 and 4 projects and professional development. For example, technical advice, targeted recruitment, international expert volunteers or study.
- 4. Expand registration, inspection visits and licensing/permit system for nongovernment AE providers. Coordinate with and utilize school inspectorate and DEOs.
- 5. Work with EMIS team to ensure integration of AE provider database with EMIS and inclusion of non-government providers in annual school census.

Alternative Education also provides education for adults and it is anticipated these activities will continue while the MoE focus on the priorities of out-of-school children and overage enrolment.

- 6. Refine the role, qualifications and skill set of AE Supervisors.
- 7. Recruit, induct and deploy five new AE Supervisors to be based at county education offices. Coordinate with Education Management Program.
- 8. Conduct quarterly coordination and refresher meetings for county-based AE Supervisors (for example, in updated AE curriculum and instructional materials). Ensure AE Supervisors attend School Inspector training in coordination with School Quality Program. Explore the possibility of using adapted School Quality Assessment tool adapted for AE provision.

Update AE national curricula for over-age children and out-of-school children and young people

- 1. In partnership with AE providers, review existing ALP and ABE curricula and instructional materials (including those currently offered by partners) in light of new primary English and mathematics syllabuses and teacher guides, and in close collaboration with the Curriculum & Assessment Program. Harmonize learning outcomes for three levels with regular school curriculum to ensure children and young people can re-enter successfully. Where necessary, update curricula and instructional materials for learners.
- 2. Upload to MoE website and share with partners.

Component 2: Professional development for AE teachers, facilitators, principals and administrators

CPD for district-based officers

Support AE Supervisors to visit districts at least once per year to conduct training
with district-based officers (such as DEOs, Instructional Supervisors and inspectors)
on AE quality standards, licensing, public messaging, new teacher training modules
etc. Target training at most disadvantaged areas first.

CPD for teachers, facilitators, principals and administrators

- Review, approve and disseminate in-service short courses for AE teachers, facilitators, principals and administrators in partnership with the Teacher Education & Management Program and AE providers. Ensure these are aligned with pre-service short courses (below).
- 3. Target training at most disadvantaged areas first.
- 4. Deliver in-service short courses as part of projects in component 3 and 4 and the Principals' Leadership Program (School Quality Program, Chapter 5).

Establish pre-service short course on AE

- 5. In coordination with the Teacher Education & Management Program, select 1-2 reputable institutions to develop, trial and implement a low-cost elective or standalone short course in AE for qualified teachers. This should be aligned with any MoE in-service modules and contain content on AE teaching, learning and management strategies, AE Policy, quality standards, curriculum and learning from programs.
- 6. Work with Teacher Education & Management Program and RTTIs to include AE module in pre-service 'C', 'B' and 'ECE' certificates and in the planned Accelerated 'C' certificate.
- 7. Conduct an analysis of the costs, salary implications and demand for a longer preservice AE specialism 'C' certificate (12-18 months) for future AE teachers and facilitators.

Component 3: Overage student program

- Conduct an analysis of the root causes of overage enrolment in collaboration with the Education Management and ECE Programs. Review available EMIS data and trends (for example, to enable prioritization of projects and target areas).
- 2. Conduct a rapid assessment of evidence and learning from ALP and other interventions locally and internationally on how to reduce overage enrolment.
- 3. Working with partners, design, fund, trial, evaluate and implement targeted and staged interventions to reduce the proportion of overage children and improve learning outcomes for overage students by targeting at least 100,000 overage students in the most disadvantaged areas. For example,
 - Measures to address root causes of overage enrolment such as policy enforcement, parental mobilization, incentives and sanctions to encourage atage enrollment
 - b. School readiness booster classes for overage students in ECE
 - c. Accelerated Learning Programs
 - d. Policy changes such as reducing ECE fees
- 4. Ensure clear messaging to schools, parents and communities on need for overage children to stay in school and receive appropriate accelerated education. Information campaign for correct age ECE and G1 enrollment needs to be launched at least two months prior to start of school year. Accelerated learning option needs to be available for start of academic year.
- 5. Continue to encourage, coordinate and share learning with non-government partners running over-age student programs.

Component 4: Out-of-school children and young people program

- Conduct a rapid assessment of evidence and learning from ABE, AYP and other interventions locally and internationally which reduced the proportion of out-of-school children and young people (8-15 years).
- Review available household and research data to define geographical areas and populations most at need. Coordinate with the Student Wellbeing and TVET Programs to ensure deep understanding of the root causes.
- 3. Working with stakeholders, design, fund, trial, evaluate and implement targeted projects to reduce the number of out-of-school children and young people and improve their learning and employment outcomes targeting 120,000 out-of-school children and young people in the most disadvantaged areas. For example,
 - a. Alternative Basic Education with pathways back into school or employment
 - b. Interventions to prevent children and young people dropping out of school
 - c. Measures to reduce the root causes of dropping out or never attending school
- 4. Continue to encourage, coordinate and share learning with non-government partners running over-age student programs.

Chapter 9 Teacher Education & Management Program

9.1 Summary

G2B impact	Improved student learning outcomes				
G2B priority	Qualified, motivated and supported teachers with the skills to improve learning outcomes				
Challenges	Many teachers do not have the correct qualifications or				
	foundation skills				
	 Most teachers do not receive regular Continuous 				
	Professional Development				
	Teacher performance management systems are				
	inadequate				
	Few teachers in remote or rural areas				
	Not enough female teachers				
SDG target	4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed				
	countries and small island developing States.				
Strategy	Improve the efficiency, effectiveness and satisfaction of the teaching workforce				
Program name	Teacher Education & Management Program				
Responsible officer	Deputy Minister for Instruction				
Components	Improve teacher registration,	Assistant Minister for Teacher Education			
	performance management and incentives	Assistant Minister for Fiscal Affairs and Human Resource Development			
	Increase the proportion of qualified and trained teachers	Assistant Minister for Teacher Education			

9.2 Introduction

9.1.1 Teaching workforce

The teacher workforce has increased rapidly in recent years from 44,297⁵⁴ in 2010/11 to approximately 55,000 teachers across ECE, primary and secondary in 2015⁵⁵. Fewer than 50% of teachers are in the public schools although the majority of junior high and senior high school teachers are in private or faith-based schools (Table 9-1).

Table 9-1 Teacher workforce by sector and type of school, all schools, unadjusted for multi-grade teachers 56

Sector	ECE	Primary	Junior High	Senior High	TVET & AE	Total
Public	5,308	12,215	3,880	1,608	676	23,687
Private	5,668	10,808	5,537	2,890	356	25,259
Faith-based	2,479	5,676	3,072	1,916	69	13,212
Community	836	1,739	494	135	67	3,271
Total	14,311	30,438	12,893	6,549	1,168	65,359

Source: EMIS 2015

Female teachers are significantly under-represented in the workforce across all sectors. 20 percent of primary school teachers are female and less than 10 percent of junior high and secondary school teachers are female (Table 9-2).

⁵⁴ Ministry of Education (2011) 2010-11 School Census Report

⁵⁵ Many teachers teach across grades which increases the total reported number of teachers in EMIS. Estimate based on combination of EMIS and payroll data.

⁵⁶ According to EMIS 2015, 10 648 teachers teach in multiple levels (i.e., ECE and Primary) and 44, 595 teach at only one level.

Table 9-2 Teacher workforce by gender and level of school, all schools

Sector	ECE	Primary	Junior High	Senior High	TVET &	All schools
Male	43%	79%	89%	93%	80%	74%
Female	57%	21%	11%	7%	20%	26%

Source: EMIS 2015

9.1.2 Volunteer, supplementary and 'ghost' teachers

Nearly 26 percent (6,910) of teachers at government and community schools (ECE to senior high) are volunteer or "household" teachers who are not formally remunerated for their work. These community schools were established in the reconstruction period or during the continuing expansion of ECE. There are also approximately 6,000 supplementary teachers who are due to transition to the full teacher salary scale if resources are available.

An estimated 15% of the teachers on the government payroll are "ghost" teachers who do not attend to their classes. Recent efforts (Chapter 6) to verify the payroll have been successful in identifying ghost teachers, those lacking the minimum qualifications and teachers who are being incorrectly paid⁵⁷.

9.1.3 Teaching qualifications

Approximately 51 percent of all teachers have the correct minimum qualification for the grade⁵⁸ they are teaching (Table 9-3), with approximately 4,200 teachers in government and community schools without any teaching qualification. Additionally, there are at least 700 teachers who do not have a high school certificate.

⁵⁷ Ministry of Education (2015) Teacher Verification Report for Montserrado, Bong and Nimba Counties

⁵⁸ Minimum teaching qualifications are: C' certificate for ECE and primary; 'B' certificate for junior high school; degree or equivalent for senior high school.

Table 9-3 Number and share of qualified teachers by level, all schools, 2015

Sector	ECE	Primary	Junior High	Senior High	Total
Qualified	7,048	18,975	4,295	2,219	32,537
Unqualified ⁵⁹	7,263	11,247	8,688	4,230	31,628
Total	14,311	30,438	12,983	6,549	64,281
% qualified	49.2%	62.3%	33.1%	33.9%	50.6%

Source: EMIS 2015

Liberia has been successful in increasing the teaching workforce but the large number of unqualified teachers has meant that the Pupil-Qualified Teacher Ratio (PQTR) in public primary schools is 40:1 (EMIS, 2015). However, this masks significant disparities in teacher deployment across counties (Figure 9-1). Nearly half of Liberia's teachers work in rural areas. These teachers face limited access to services (water, banks, health care etc.) and arduous and expensive travel. In addition, many teachers posted to rural areas are not familiar with local language, communities and customs.⁶⁰

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⁵⁹ Figure includes 'unknown'

⁶⁰ Ministry of Education (MoE) (2011c). Policies for Reform: Liberian Administrative and Management Policies Guide, Volume 5. Monrovia: MoE. Ministry of Education (MoE) (2015). Educator Management Policy (draft). Monrovia: MoE.

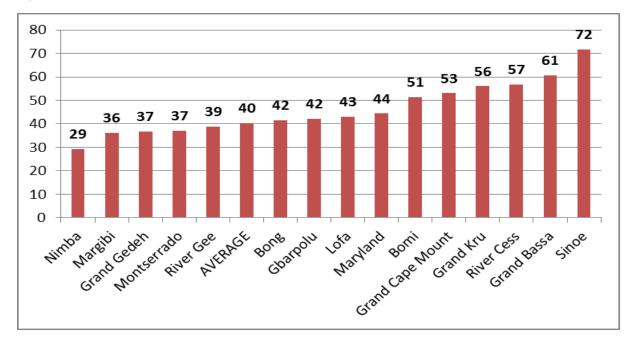


Figure 9-1 Pupil-Qualified Teacher Ratio (PQTR) in public primary schools, 2015

Source: EMIS 2015

Qualified teachers are also less likely to be willing to work in more disadvantaged districts, increasing the learning problems for children in those remote or poor communities (Figure 9-2).

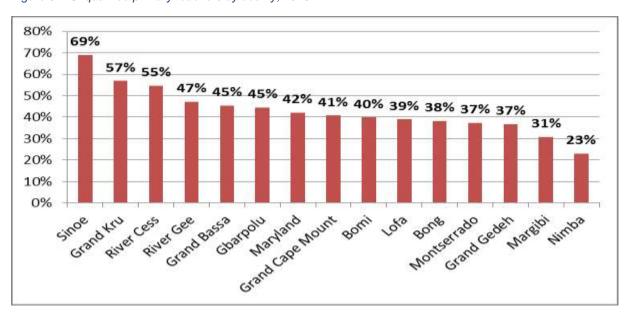


Figure 9-2 Unqualified primary teachers by county, 2015

Source: EMIS 2015

9.1.4 Teacher training

Pre-service 'C' teacher education is concentrated at three Rural Teacher Training Institutes (RTTI) which may also provide in-service professional development. Additional pre-service teacher education courses are run by public and private universities. The 'C' certificate is the minimum qualification for Grade 1-6 teachers. It was initially re-established as a 9 month-long pre-service course, currently run as a 12 month course. It will be extended to 18 months for 2017/2018 and future cohorts. Currently the MoE is trailing the new 'B' in-service certificate for junior high specialist teachers at one RTTI. A bachelor's degree or equivalent is the minimum qualification for senior high school teachers. There is no national certificate for ECE teachers (although around 50% of ECE teachers hold a 'C' certificate).

High unit costs at the RTTIs (Table 9-4) are due to the residential programs, relatively low enrollment of students, the recruitment of lecturers from the Liberian diaspora at relatively high salaries, and high running costs such as food and maintaining dormitories (World Bank, 2010). In Kakata Rural Teacher Training Institute (KRTTI), the "B Certificate" pilot program was launched in 2015/16 with a USD 400,000 one-off special allocation besides paying regular salaries for 100 in-service teachers.

Table 9-4 Unit cost for teacher training

Name	type	2015/16 Budget	Number of Students	Share of Female	Share of Male	Unit cost
Zorzor RTTI	Pre-service	740,250	198	16%	84%	3739
Webbo RTTI	Pre-service	742,933	106	16%	84%	7009
Kakata RTTI	Pre-service	1,381,972	224	23%	77%	6170
"B Certificate" Pilot Program at Kakata RTTI	In-service	592,000	100	24%	76%	5920
Total or average		3,457,155	628	20%	80%	5709

Source: Ministry of Education budget 2015/16

From 2008 to 2012/13, RTTIs and other programs graduated between 700-1,000 'C' certificate teachers annually for a total of 2,554 pre-service and 1,607 in-service graduates.

Of the over 4,000 new graduates, just 15% were female.⁶¹ Nearly 1,158 graduates from cohorts in 2011-12 and 2012-13 are not yet employed – in part because of a CSA hiring freeze which disallows the MoE from hiring new teachers. There is no statutory probation period for new teachers.

Continuing professional development has been supported by a number of projects (for example, in-service training as part of EGRA Plus⁶² and principal training⁶³) during the USAID-funded Liberia Teacher Training Project). However, as of 2016, there are no national-scale in-service activities. Additionally, the RTTIs did not train any 'C' certificate inservice teachers during 2016.

9.1.5 Partnership Schools for Liberia

The Partnership Schools for Liberia (PSL) partners will trial innovative solutions to the challenges of managing, training and supporting teachers at 94 ECE and primary schools between 2016 and 2019. School operators in the PSL trial have been encouraged to implement a range of different strategies for teacher in-service training and performance management within the overall direction of the ESP. The rigorous evaluation of the PSL will inform wider reforms around teacher education and management.

9.3 Legal and policy context

The MoE Bureau for Teacher Education oversees all pre-service and in-service teacher education in Liberia. This includes the activities of three RTTIs – which focus solely on teacher education as well as several semi-autonomous colleges and universities which offer teacher education and education administration programs.

Teacher minimum qualifications are established in the Education Act (2011) for each level of education aside from ECE. The Act also prescribes the MoE role in teacher recruitment, certification (licencing), registration and teacher policy. DEOs are responsible for recruiting teachers to vacant positions and ensuring the quality of education of schools in their district. County Education Officers are responsible for ensuring adequate payroll positions for their schools, although these are currently not assigned to a particular institution.

Currently the MoE classifies and pays teachers based only on the level of their professional qualification. The *Medium Term Pay and Benefits Reform*, a national civil service initiative is

⁶² King, Korda, Nordstrum & Edwards (2015). ENDLINE ASSESSMENT OF THE IMPACT OF EARLY GRADE READING AND MATHEMATICS INTERVENTIONS. Monrovia: USAID-Liberia Teacher Training Program.

⁶¹ Morris, E., Goyee, O., Hatch, R., Tuowal, D., and Ginsburg, M. (2014). Tracer Study of C-Certificate Program Graduates. Monrovia: USAID-Liberia Teacher Training Program.

⁶³ Tubman, Winnehl & Kpelewah, Joshua (2010). Principals Training Assessment & PTA Training Assessment: Final Report. Monrovia: USAID-Liberia Teacher Training Program.

expected to replace the current salary scale with one based on promotion (over a series of grades) and performance (along a series of steps). Currently, teachers interested in career advancement or promotion seek to improve their formal qualifications which allows them to receive higher pay and become more competitive for senior positions. The MoE has drafted an Educator Management Policy⁶⁴ which is expected to guide reform in this area. This includes policy direction on:

- Qualifications and eligibility for each level and type of teacher and education administrator
- Standards for teacher education courses (i.e. 'C', 'B', 'A' and degree level)
- Licensing and certification procedures
- Remuneration, deployment and continuing professional development

The school principal is directly responsible for the oversight and support of teachers. This support includes providing annual performance reviews of teachers, supporting staff professional development and helping teachers address issues in the classroom. In most schools, a Vice-Principal for Instruction (VPI) plays a key supporting role in this activity.

In addition to the Act, there is a Code of Conduct 65 to guide procedures in cases of misconduct or abuse. The Act outlines procedures to be used in conducting hearings and refers to the Civil Service Act and Penal law for discussion on the discipline of MoE staff. However, disciplining teachers for misconduct is difficult and there is little support available for principals.

The National Teachers Association of Liberia is a body which represents the interests of teachers. At the school level, teachers participate in school governance through the PTA.

9.4 Achievements

MoE achievements in Teacher Education and Management include:

 Substantial increase in the number of 'C' certificate teacher numbers (reaching 22,563 in 2015, an increase in the percentage of trained teachers from 51.78% in 2008 to 62.15% in 2015)

⁶⁴ Ministry of Education (MoE) (2015). Educator Management Policy (draft). Monrovia: MoE

⁶⁵ Ministry of Education (MoE) (2014) Code of Conduct for Teachers and School Administrators in Liberia. Monrovia: MoE

- Operation of three semi-autonomous RTTIs which graduate around 528 pre-service
 'C' certificate primary teachers annually and plan to graduate 100 'B' certificate inservice teachers in 2018
- Standardized 'C' certificate teacher training materials used across all three RTTIs
- Planned extension of 'C' certificate pre-service course to 18 months and drafting of revised extended curriculum
- Re-establishment of 'B' certificate teacher training at one RTTI
- Development of CPD curriculum
- Educator Management Policy⁶⁶ drafted including proposed teacher job descriptions
- Published the Code of Conduct for Teachers and School Administrators in Liberia (2014)
- Teacher payroll verification in six counties (Chapter 6)
- Commencement of teacher testing process to target unqualified teachers for professional development or retrenchment
- MoE, UNESCO and CEFIT (China Education Fund in Trust) ICT integration into 'C' certificate curriculum
- Begun standardization of private teacher training institutions
- Pilot of teachers' salary payment by mobile phone in two counties

9.5 Challenges

9.5.1 Teacher payroll has large numbers of missing, unqualified and incorrectly paid teachers

The MoE payroll is the largest component of the MoE budget at approximately \$35 million (USD) annually – an average of 80% of MoE's total expenditure. There are significant problems with the payroll including:

- Slow registration of replacement or newly qualified teachers on the payroll
- Ghost teachers who receive a salary but do not turn up for work
- Errors in teacher records leading to over and under-payment of salaries
- Large numbers of unqualified supplementary teachers recruited during the early postwar reconstruction period
- Incorrect qualifications or fake qualifications
- Difficulties aligning payroll lists and responsibilities between CSA, MoE and MFDP

⁶⁶ Ministry of Education (2015) Educator Management Policy for the Republic of Liberia (draft)

Problems in payroll management have a serious negative ripple effect though-out the system including:

- Waste of scarce resources
- Difficulties with planning and budgeting
- Low morale amongst teachers who do turn up to work, leading to teachers quitting
- Lack of accountability in the teacher workforce

These challenges are addressed in detail in the Education Management and Accountability Program.

9.5.2 Many teachers do not have the correct qualifications and foundation skills

Prior to 2011, many teachers who entered the workforce did not complete a basic teaching qualification. Some of these teachers lack foundational skills in literacy and numeracy themselves and may not have completed high school. Other teachers are teaching at high school and ECE with just the 'C' certificate qualification.

Problems with teacher qualifications have a significant impact on student learning. Unqualified teachers do not have the skills or knowledge to teach children effectively. MoE salaries are allocated to unqualified teachers, preventing new, qualified teachers from entering the workforce and wasting teacher training investment. Removing or upskilling unqualified teachers is essential to improve the quality of the workforce and children's learning outcomes. Additionally, it is important to continue to model projections of workforce requirements (for example, quantifying the numbers of university graduates entering teaching).

9.5.3 Most teachers do not receive structured and scheduled Continuous Professional Development

For teachers who do have a teaching qualification, access to Continuous Professional Development (CPD) is limited or non-existent. There is anecdotal evidence that many schools and district education offices do not have capacity or resources to conduct regular in-service. The three RTTIs have limited capacity to provide in-service and upgrading. Priority areas for additional training are special education and literacy across the curriculum. The on-going teacher testing will inform CPD planning, vetting and curriculum reform.

There is also a pressing need to re-train unqualified teachers to reach the minimum 'C' certificate standard in a cost-effective way. Improving CPD systems, modules and resourcing will improve teacher morale, build the human capacity of the workforce and target improved teaching at children's learning outcomes.

9.5.4. Teacher performance management systems are inadequate

Effective teacher performance management is constrained by three key issues: the absence of agreed on teacher performance metrics and measurement tools, an employment system does not link salary and promotion to teacher performance, and difficulties in upholding professional standards. Particular problems include:

- No probation period or appraisal for newly qualified teachers
- Limited of training and tools for principals to assess and report teacher performance
- No link between CPD and professional aptitude and salary
- Irregular school supervisory visits
- Inefficient processes for removing poorly performing, abusive or absent teachers from payroll

Absent and incompetent teachers have a major impact on student learning outcomes and waste resources. If schools do not deal immediately with abusive teachers, there are serious consequences for the children in their care. A salary system linked solely to level of qualification encourages ambitious teachers to leave for additional studies and drains the brightest teachers from early grades into high school.

9.5.5 Lack of incentives to attract teachers to work in remote schools

Schools in poor, rural and remote areas are less likely than those in urban areas to have a sufficient number of qualified teachers. To add to the difficulty facing rural and remote districts, these same areas also face great difficulties in attracting newly qualified teachers, who may not want to return to their counties. Rural areas' limited access to basic services and amenities and limited opportunities for economic and career advancement also act as a disincentive to teachers. Snyder et al, notes (2011) "in many rural settings there is no housing. Some schools have shut down because of inadequate housing to attract qualified teachers. This is particularly acute for female teachers, who need safe and secure dwellings near their schools" (p. 21).⁶⁷

Currently, once every month, a large number of teachers miss several days of school and pay transport, lodging, and food costs (related to travel) in order to access their monthly salary. The current situation exacerbates teacher absenteeism, disrupts student learning, and reduces teacher take home pay. At present, there is no policy in place which

⁶⁷ Snyder, C.W., Hailesalassie, A. M., Chelleh, M., and Odharo, J. (2011). Females Teaching in Liberia: Motivating, Recruiting, and Retaining Female Teachers in Basic Education. Monrovia: USAID-Liberia Teacher Training Program.

incentivizes teachers to work in rural and remote areas or reduces the burden facing teachers posted to rural and remote areas.

9.5.6 There are not enough female teachers

Women make up less than 30% of the teaching profession (in both the public and private sectors). The largest proportion of women can be found in early childhood education, with very few in high schools. There are particular shortages of women teachers in science, technology and mathematics. A significant number of women have been trained as teachers but are not working in schools and female enrollment at the RTTIs was 20% in 2015/16 Women teachers report experiencing sexual harassment, and facing difficulties when being assigned to schools in rural areas.⁶⁸

This issue impacts education in a number of ways:

- Waste of talent for potential teachers and principals
- Fewer female role models, especially in high school
- Waste of investment in training if female teachers do not teach.

9.6 Teacher Education & Management Program

Component 1: Improve teacher registration, performance management and incentives Teacher appointment, suspension and dismissal policy

- Approve and implement the Educator Management Policy for the training, appointment, certification, licensing, suspension, and dismissal of teachers. Consult with TVET, alternative education, ECE and school principal training programs to ensure planned teacher and principal training and certification changes have been included in the Policy.
- 2. Implement biometric teacher registration and unique codes for all new pre-service teachers. Ensure secure integration with EMIS.
- 3. Conduct a teacher deployment, efficiency and utilization study to inform design of pilot activities.
- 4. In coordination with the Student Well-being program, strengthen referral pathways for teacher offences and establish a list of teachers dismissed from position due to breaching Code of Conduct or criminal offences such as sexual abuse of students.

⁶⁸ Stromquist et al., 'Women teachers in Liberia: Social and institutional forces accounting for their underrepresentation', International Journal of Educational Development 33:5 (September 2013), pp 521–530.

5. In coordination with the Education Management & Accountability Program, ECE Program and TVET Program, regularly review and model teacher workforce data and projections.

Training and tools for principals and DEOs in teacher performance management

- 6. Train DEOs in teacher performance management (Education Management & Accountability Program, Chapter 6).
- 7. Train principals in teacher performance management (School Quality Program, Chapter 5).

Pilot strategies to improve teacher attendance

- 8. Expand mobile money to 50% of the teaching workforce and 90% of new teachers to reduce time away from school collecting salary checks.
- 9. In partnership with the Education Management & Accountability Program, develop, and pilot one intervention to improve teacher attendance (for example, free phone lines for reporting absenteeism, public reporting of absent teachers etc.). Base development of pilots on learning from PSL trial and interventions in similar contexts.

Pilot and policy for attracting teachers to work in rural areas

- 10. Develop and pilot one teacher incentive strategy for remote rural areas (for example, remote location allowances).
- 11. Review and update newly qualified teacher deployment policy in Educator Management Policy (for example, to include mandatory service for teachers whose pre-service training is paid for by GoL).

Incentives to attract more women into teaching

12. Conduct one pilot to increase the number of young women to join the workforce (for example, financial incentives, scholarships, additional training and mentoring). Prioritize female teacher enrollment in science and mathematics 'B' grade certificate courses.

National dissemination of the teacher Code of Conduct to teachers, parents and students

- 13. Publish and widely disseminate the Code of Conduct through pre- and in-service teacher training.
- 14. Produce and disseminate a child-friendly version of the teacher Code of Conduct for parents and students.

Component 2: Increase the proportion of qualified and trained teachers

Sustain and expand 'C' and 'B' certificate teacher training for unqualified teachers

1. Expand 'B' certificate in-service (600 graduates over four years) and sustain 'C' preservice (1,000 graduates) program at RTTIs. Ensure that newly qualified teachers

- are bonded with a written agreement and conditions (for example, to serve in remote areas for a certain number of years) if MoE is funding their training. Conduct regular tracer studies of newly qualified teachers to inform policy. Explore recruitment of recent graduates and National Volunteer Service volunteers to address gaps.
- 2. Explore options for gradually introducing user-pay for residential pre-service programs being mindful of risks of excluding women and teachers from remote areas.
- 3. Develop an Accelerated 'C' certificate in-service program for counties too remote from RTTIs. Ensure both 'C' programs include substantial instructional modules on literacy, numeracy, health (including comprehensive sexuality education), AE and special education and are based on the new English and mathematics syllabuses and instructional materials.
- 4. Pilot the Accelerated 'C' certificate in-service program (up to six weeks residential plus CPD and self-study).
- 5. Scale up program to disadvantaged counties first. Target teachers identified in previous teacher testing.
- 6. Ensure sufficient budget for additional payroll costs from certifying supplementary or unqualified teachers. Refer to Education Management & Accountability Program.
- 7. Coordinate with ECE, TVET and AE on certification and teacher training.

In-service CPD teacher training program for qualified basic education teachers

- Review existing in-service training modules from Liberia and overseas. Work in conjunction with the Curriculum and Assessment Program and ECE Program to design an in-service CPD teacher training program with modules that focus on teaching English, mathematics, school health and special education for primary teachers.
- 2. Coordinate with ECE, TVET and AE programs to ensure coherence with their planned teacher training activities.
- 3. Add mandatory CPD days to school calendar.
- 4. Arrange schools into CPD clusters (6-7 schools per cluster) based on geography.
- 5. Train 20 Instructional Supervisors at the county and district level for one week annually (total of 300 Instructional Supervisors).
- 6. Conduct one week of cluster-based in-service training for 12,000 lower basic teachers annually on English and mathematics. Target training at most disadvantaged schools first.

- 7. Ensure that the CPD teacher training program includes a government approved CPD Certificate for teachers that successfully complete their CPD course. Ideally this should be worth credit points at respected institutions.
- 8. Pilot CPD program, including learning from the PSL trial and other evaluations and studies in the region, review and scale up CPD teacher training, initially targeting districts with the greatest need.

Chapter 10 Curriculum & Assessment Program

10.1 Summary

G2B impact	Improved student learning outcomes			
•				
G2B priority	Schools and teachers have the r	esources to improve learning		
	Early grade assessment nationa	l roll-out		
Challenges	Student learning outcome	es are low, especially in literacy		
	Curriculum documents do	o not provide enough support and		
	guidance for teachers			
	MoE and teachers do not	t have strong systems for		
	assessing primary studer	nt progress		
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SDG target	4.1 By 2030, ensure that all girls and boys complete free,			
	equitable and quality primary and secondary education leading to			
	relevant and effective learning outcomes			
Strategy	Ensure that teachers have access to quality instructional materials and assessment tasks			
Program name	Curriculum & Assessment Program			
Responsible officer	Deputy Minister for Instruction			
Components	1. New English and mathematics syllabuses and teacher guides Executive Director, Curricu Development and Textbook Research			
	2. National literacy and numeracy assessment system for grades 3 & 6 Executive Director, Curriculum Development and Textbooks Research			

10.2 Introduction

10.2.1 Curriculum

The national curriculum is compulsory for all schools and widely used (Table 10-1). At higher grades, schools also use the West African Examination Council (WAEC) syllabus in preparation for the WAEC examinations (Table 10-2). There is a new ECE curriculum which MoE plans to integrate into the national curriculum. AE and TVET curriculum have historically been developed independently, although the ALP curriculum has been revised to harmonize with the 2011 national curriculum. AE and TVET curricular are discussed in their relevant chapters.

Table 10-1 Percentage of primary and high schools using the national curriculum, 2015

	Using the national curriculum (%)	Mean copies of the national curriculum per school
Primary schools	93.6	8.0
High schools	87.3	10.2

Source: EMIS, 2015

Table 10-2 Percentage of SH schools using the WAEC syllabus, 2015

School Ownership	Using WAEC syllabus (%)	
Public	63.9%	
Private	79.8%	
Faith-based	80.2%	
Community	58.3%	
Total	75.9%	

Source: EMIS, 2015

The national curriculum was approved in 2011 (Table 10-3) and consists of subject syllabus documents ⁶⁹ supported by various supplementary material. WAEC publishes syllabuses annually for the end of Grade 9 and 12 examinations in a wide range of subjects.

Table 10-3 National curriculum & WAEC curriculum, by grade, subject and date revised

Grades	Subjects	Last revised	
	1. Language Arts English		
	2. Mathematics		
	3. Science		
1-6	4. Social Studies	Feb 2011	
	5. Physical Education		
	6. Music & Culture		
	Moral and religious education		
Grades	Subjects	Last revised	
	1. Language Arts		
	2. Mathematics		
	3. General Science		
7-9	4. French	Feb 2011	
7-9	5. Social Studies	Feb 2011	
	6. Physical Education		
	7. Music & Culture		
	Moral and religious education		
WAEC Grade 9 examination	Mathematics, General Science, Language Arts and Social Studies	Liberia Junior High School Certificate Examination (LJHCE)	

⁶⁹ Syllabuses for grades 1-12 (2011) can be accessed at: http://liberiaunitedmethodistchurch.org/ministries/generaleducationandministry/liberia-national-curriculum/]

10-12	 English Language Literature in English Mathematics Biology Chemistry Physics History Geography 	Feb 2011
	9. Economics	
WAEC Grade 12 examination	Various examinations	West African Senior Secondary Certificate (WAESSC)

10.2.2 Contact hours

The school day is 5 hours divided into 45 minute periods. The school year is a minimum of 200 days divided into two semesters and six marking periods (a total of 900 hours annually). Some schools operate double shifts and others provide alternative education night classes. The 2015/16 education calendar states that schools should prioritize reading and literacy practice. However, minimum contact hours per week for primary numeracy and literacy are approximately three hours and 45 minutes per week which is low by international standards⁷⁰.

10.2.3 Teacher support materials

Instructional materials for teachers were developed for early grade reading and mathematics for the EGRA Plus interventions between 2009 and 2015. EGRA Plus was based on a randomized control trial⁷¹ (60 treatment primary schools) of a comprehensive intervention designed to improve student literacy in early grades. It consisted of a package of scripted

⁷⁰ For example, international recommendations are for at least one hour of reading instruction daily (USAID (2009) First Principles for Early Grades Reading Programs in Developing Countries)

⁷¹ Piper & Korda (2010). EGRA Plus: Liberia Program Evaluation Report. Monrovia: USAID

lesson plans (110 lessons per grade), teacher guides, levelled and decodable reading materials, student workbooks, regular training for Grade 1-3 teachers, and instructional coaching organized around core components of early reading and mathematics acquisition ⁷².

Between 2011 and 2015, the Liberia Teacher Training Program (LTTP) project continued the EGRA Plus intervention in around 1,200 schools in five counties (Bong, Lofa, Margibi, Montserrado, and Nimba) which continued to have a positive impact on the reading and numeracy skills of grade 2 and grade 3 students⁷³. There are no other recent, widespread Government-developed instructional materials or teacher guides for G1-12 but commercial teacher guides for grade 5-9 were included in last supplementary material distribution.

10.2.4 Textbooks and readers

In 2015-16 there was a major procurement of school textbooks for primary and junior high schools by the Ministry of Education and Global Partnership of Education. This included one-million supplementary readers (for grade 1-4 students); 340,000 levelled readers, one million textbooks in mathematics, science, social studies and language for Grade 5-9 students and 200,000 teachers' guides in these subjects. The procurement also provided over 1.4 million pieces of supplementary material related to language, social studies, and the sciences. The distribution reached 2,489 schools and benefited 373,845 students. As a consequence, the current textbook to student ratios are closer to MoE standards (Table 10-4) but still not ideal.

⁷² RTI. (2011). EGRA Plus: Liberia. Understanding the Causal Mechanisms: EGRA Plus's Effectiveness. Note, the full treatment intervention was implemented in 60 schools in 15 districts across 7 counties.

⁷³ King, Korda, Nordstrum & Edwards (2015). ENDLINE ASSESSMENT OF THE IMPACT OF EARLY GRADE READING AND MATHEMATICS INTERVENTIONS. Monrovia: USAID-Liberia Teacher Training Program.

Table 10-4 Student/textbook ratio in primary and secondary schools, Language Arts and Mathematics, 2015

Level and type of school	Mean student/textbook ratio	Mean student/textbook ratio		
	Language Arts	Mathematics		
Primary (all)				
Government	2.1	3.0		
Faith-based	4.3	4.7		
Private	4.2	6.3		
Secondary school (all)				
Government	2.3	2.4		
Faith-based	5.3	5.2		
Private	5.4	7.1		

Source: EMIS 2015

10.2.5 Assessment

Students are supposed to be tested at the end of every marking period, semester and school year. Most curriculum statements do not offer explicit guidance on best practices associated with such tests. Additionally, many schools reportedly set entrance examinations⁷⁴, despite this practice being prohibited at grade 1 for all Government schools. This excludes many students and has a major impact on grade repetition and overage enrolment, particularly in early childhood classrooms.

National examinations are selective and occur at grade 9 and 12. A pass on the Grade 9 West African Examinations Council (WAEC) Liberia Junior High School Certificate Examination (LJHSCE) is a pre-requisite for promotion to grade 10. High school students pay approximately USD 20 and USD 28 for grade 9 and 12 examination registration respectively with MoE contributing to the administration of the examination.

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⁷⁴ UNICEF. (2012). Liberia Country Study. Profiles of Children out of school. UNICEF Liberia.

In 2014, around 33,000 grade 9 and 28,000 grade 12 students sat the LJHSCE and senior high school examinations (LSHSCE) respectively. Due to Ebola there were no examinations in 2015. However, examination results are poor (pass rates of 60% in grade 9 and 47% in grade 12 in 2014⁷⁵) and there are wide variations in performance across schools and counties (Figure 10-1and Figure 10-2). Pass rates have seen significant declines. In 2007, over 95% of examinees passed the exam compared to 84% in 2012 and 60% in 2014. The reason for the decline in scores is unclear. Female students generally underperform and public schools perform worse, on average, than private schools.

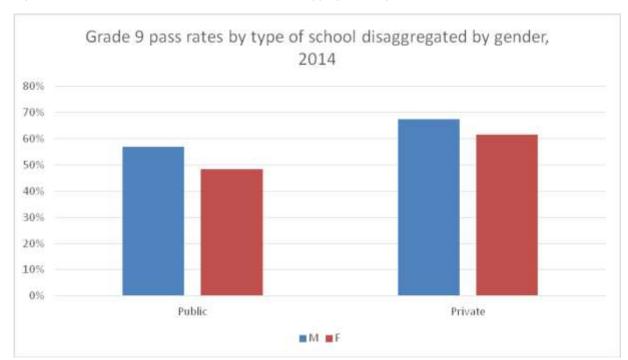


Figure 10-1 Grade 9 pass rates by type of provider, disaggregated by gender, 2014

Source: WAEC, 2014

⁷⁵ WAEC (2014) Presentation on the West African Examinations Council, July 16, 2015

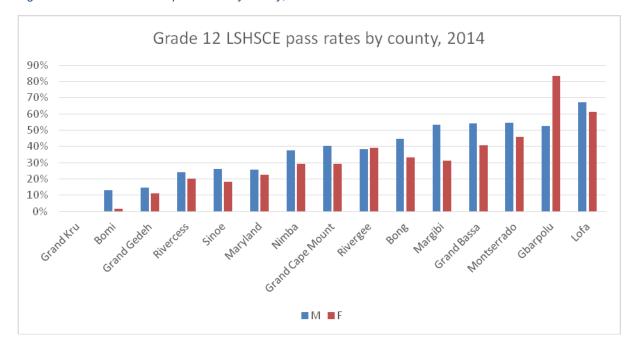


Figure 10-2 WAEC LSHSCE pass rates by county, 2014

Source: WAEC, 2014

There is currently no system-wide learning assessment in Grades 1-6 so the MoE lacks a diagnostic tool to identify literacy and numeracy performance at a nationally representative scale where results can be disaggregated by gender, county, urban- rural status, school ownership, etc. There are no standardized tests for diagnostic use in schools although EGRA and EGMA assessments are developed for Liberia. Two literacy diagnostic baselines in 2008⁷⁶ and 2014⁷⁷ found significant weaknesses in the reading proficiency among grade 2 and 3 students.

5.1.6 Partnership Schools for Liberia

As part of the PSL trial, school operators will use different support strategies for improving children's performance. All PSL schools will deliver the national curriculum (including ECE) and work within the G2B-ESP framework for curriculum and assessment reform, with operators encouraged to explore more effective, low-cost teaching and learning approaches and support materials (for example, tablet based curriculum and assessment). Evaluation data from the PSL trial and PSL annual assessments will be shared and feed into the development of national curriculum and assessment materials.

⁷⁶ RTI. (2009). EGRA Plus Liberia. Data Analytic Report: EGRA Plus: Liberia Baseline Assessment.

⁷⁷ Hobbs, J. and Davidson, M. (2015). Expanding EGRA: The Early Grade Literacy Assessment and its contribution to language instruction in Liberia. Presentation at UKFIET 2015.

10.3 Legal and policy context

The Education Reform Act (2011) calls for the establishment of a Center for Curriculum Development and Research, which would be responsible for developing curriculum and instructional materials for all schools, including, if sought, developing local language curricula. The Act also confirms the Center as leading in the area of textbook policies, as well as in curriculum for "teaching of national languages, human rights, citizenship and civil responsibilities, health and hygiene, agricultural and other educational programs" (MoE 2011: 19). This Centre is not yet established.

In the absence of the Center, the Bureau of Curriculum, Research and Textbooks retains responsibility for the development of the national curriculum. Guidelines for Textbook Origination, Provision and Management ⁷⁸ provide guidance on textbook selection and approval, publishing, procurement, distribution, use, safekeeping, inventory and storage as well as roles and responsibilities of key stakeholders. The syllabuses list textbook recommendations on a subject-by-subject basis. Textbook procurement does not appear to be included in the annual budget submission and currently schools cannot use their grants to purchase textbooks. Currently, there are no national policies for curriculum development or assessment.

While English is identified as the national language of instruction, the proposed Center would be responsible for developing curriculum for local languages. There are over 18 different language groups and the Act allows County School Boards to select a local language which may also be taught in primary schools. To date no local language curriculum has been approved.

The Act identifies the West African Examination Council (WAEC) as responsible for promotional examinations of the students. WAEC examinations are based on syllabil developed by WAEC. Most SH schools in Liberia follow the WAEC curriculum but there is some concern among stakeholders about the extent to which the content, pacing and sequencing of the national curriculum and WAEC curriculum are aligned. An expert group—the Public Examinations Review Committee—has recently been formed to review issues around the WAEC results.

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⁷⁸ MoE. (2013). Guidelines for Textbook Origination, provision and Management.

10.4 Achievements

MoE achievements in Curriculum and Assessment include:

- Successful distribution of basic and secondary education textbooks and reading books in 2015-16, substantially reducing the Student/Textbook Ratio
- Baseline reading assessments using robust methodologies in 2011 and 2014
- Successful trial of early grade reading and numeracy intervention including instructional materials, teacher training and decodable readers which significantly improved children's reading skills
- Development and approval of National Textbook Policy and Guidelines
- Development of an ECE curriculum (see ECE chapter)
- Establishment of a legal process for including local languages in the curriculum
- Development of Comprehensive Sexuality Education curriculum

10.5 Challenges

10.5.1 Student learning outcomes are low, especially in literacy

Literacy is a national priority throughout the education system. Two diagnostic assessments of early grade literacy have been conducted:⁷⁹ an EGRA baseline completed in November 2008 (RTI 2009)⁸⁰ and an Early Grade Literacy Assessment (EGLA) assessment completed in 2014 (Hobbes and Davidson, 2015)⁸¹. The evaluations tested non-representative samples of grade 2 and grade 3 students in letter naming, phonemic awareness, unfamiliar word decoding, oral reading fluency, reading comprehension, and listening comprehension.

In both assessments, grade 3 students' mean scores in oral reading fluency came in below 25 correct words per minute. International benchmarks identify an oral reading fluency of

⁷⁹ The documents referred to for this section include:

[·] RTI. (2009). EGRA Plus Liberia. Data Analytic Report: EGRA Plus: Liberia Baseline Assessment.

[·] Piper, B. and Korda, M. (2010). EGRA Plus: Liberia. Program evaluation report.

Hobbs, J. and Davidson, M. (2015). Expanding EGRA: The Early Grade Literacy Assessment and its contribution to language instruction in Liberia. Presentation at UKFIET 2015.

Hobbs, J and Ajoku, L. (2014). Lost for Words: An Analysis of Early Grade Reading Assessments in the Most Vulnerable Communities in Five of the Worlds' Poorest Countries from 2012-2014. Concern.

⁸⁰ In November 2008, RTI conducted a baseline literacy assessment using EGRA. The assessment collected EGRA data from nearly 3,000 Grade 2 and Grade 3 students in Liberia.

⁸¹ In 2014, Concern implemented an EGRA-like assessment (called EGLA) and evaluated 940 Grade 2 and Grade 3 students in Grand Bassa county.

between 45-65 correct words per minute to be strongly associated with comprehension⁸². Nearly 35% of grade 2 students and 17% of grade 3 students were unable to read a single word. Of grade 3 students assessed, 17% had zero scores in oral reading fluency and 40% had zero scores in reading comprehension (RTI 2009). Both studies found slightly lower baseline scores for girls than for boys. Unsurprisingly, national WAEC examination results are also poor.

Worryingly, high poverty households and households in rural or remote areas are more likely to be headed by an individual with lower levels of literacy and educational attainment than the general population⁸³. Children from these households are also likely to score lower on reading assessments. As reading is essential for the rest of the curriculum, the consequences for individuals and for the nation's economic and social development are severe and long-lasting.

10.5.2 Curriculum documents do not provide enough support and guidance for teachers

One of the contributory causes of the poor learning outcomes is the limited structure provided by the curriculum.⁸⁴ The Language Arts English curriculum for grades 1-6, for example, only contains limited content in English language spelling, grammar, composition and reading⁸⁵. The syllabus does not emphasize important instructional information (i.e., sequence of phonological and vocabulary acquisition, pace of reading acquisition, national standards etc.) or provide adequate guidance on pedagogy for teaching reading

Many basic education teachers have either one year of post-high school teacher education or are untrained. Teacher guides with detailed scripted lesson plans such as EGRA Plus show the potential of additional instructional scaffolding to improve reading and mathematics outcomes. These instructional materials are most effective when coupled with sufficient decodable reading books and targeted teacher training.

While, the use of external funding has filled a critical gap, limited progress has been made in ensuring enough Government resources are allocated to replenish and update student

⁸² RTI International and the Liberian Education Trust (2010) EGRA Plus Evaluation Report; USAID

⁸³ Liberia Institute of Statistics and Geo-Information Services (2013) Demographic Household Survey

⁸⁴ Most subject curricula identify a few opportunities for group work, but for the most part curriculum statements emphasize lecture as the primary mode for delivering subject matter knowledge.

⁸⁵ MoE (2011) Language Arts English Syllabus

textbooks. More work needs to be done on costing a sustainable plan for textbook procurement.⁸⁶

A review of the primary curriculum could also increase the minimum lesson time for literacy and numeracy to ensure these are prioritized in schools and introduce improved classroom and national assessments to track students' progress. The new curriculum and teacher guides (with scripted lesson plans and sample assessment tasks) will need to be used by both pre- and in-service teachers for maximum impact so close collaboration with the Bureau of Teacher Education is essential.

10.5.3 MoE and teachers do not have strong systems for assessing primary student progress

There are no systems in place for measuring student learning outcomes in grades 1-6 aside from end-of-chapter tests or end-of-semester school-based tests. It is not possible to: (i) determine the level of student learning in early grades or (ii) track system progress in terms of learning outcomes. A national assessment system for literacy and numeracy would help MoE identify key challenges to meeting national goals and learn whether interventions designed to improve student learning are having an impact.

Previous reading assessments have been conducted by external organizations and MoE will need to increase its technical expertise to design, implement and analyze such assessments. Existing EGRA and Early Grade Mathematics Assessment (EGMA) periodic assessment materials are still valid for Grades 1-3 and could be incorporated into a national assessment system.

At the classroom level, learning assessment tools should be included in teacher guides to enable teachers to evaluate students and identify which students may require additional support. This is especially important for identifying children who have special educational needs for early intervention.

The recent Joint Education Sector Review⁸⁷ identifies "establish and implement a national reading strategy" as a key priority. The MoE 2015 Annual Report states the MoE will "...invest further in early grade reading and math, including teacher training, learning materials and national assessments ⁸⁸." As a response to issues around the WAEC

⁸⁶ A recent World Bank study *Getting Textbooks to Every Child in Sub-Saharan Africa* speaks to some of these issues seen in Liberia and identifies some ways forward. World Bank (2016). Getting Textbooks to Every Child in Sub-Saharan Africa: Strategies for Addressing the High Cost and Low Availability Problem.

⁸⁷ Ministry of Education (2016) Joint Education Sector Review; p15

⁸⁸ Ministry of Education (2015) Annual Report 2015; p29

examinations, a Public Examinations Review Committee was established in September 2016.

10.6 Curriculum & Assessment Program

Component 1: New English and mathematics syllabuses and teacher guides Develop curriculum policy, curriculum framework, and new syllabuses

- 1. Review existing curriculum and best international examples.
- 2. Develop and approve a National Curriculum Policy which lays out the education philosophy and curriculum development process. Coordinate with TVET to ensure coherence and linkages with proposed TVET National Qualification Framework. Coordinate with AE to ensure harmonization with AE curriculum. Coordinate with special education to ensure inclusive approaches.
- 3. Extend the time for student instruction with at least five hours a week for English and mathematics.
- 4. Establish expert groups for English, mathematics, science and social science including ECE, special education, school health (including comprehensive sexuality education and infectious diseases), alternative education and gender experts. Ensure inclusion of sustainability, peace-building, human rights and citizenship. Draft and consult on new curriculum framework which show learning standards for each grade from ECE to grade 12 (taking into consideration the existing curriculum).
- 5. Use framework and learning from LTTP EGRA Plus and EGMA to write new syllabuses for English and mathematics, prioritizing grades 1-6 and including benchmarks for literacy and numeracy.
- 6. Consult, edit, approve, print and disseminate the policy, framework, and syllabuses in coordination with the Teacher Education and Management Program.

Develop, trial and approve teacher guides with lesson plans for English and mathematics

- Write teacher guides for grades 1-4⁸⁹ with daily lesson plans based on EGRA Plus and EGMA materials. Include literacy and numeracy assessment tools in the teacher guides. Utilize evaluation data from PSL trial to inform development of guides and support materials.
- 2. Produce low-cost materials to support teacher guides (e.g. flash cards).
- 3. Trial syllabuses and teacher guides, monitoring and evaluating teacher practice, student learning outcomes and teachers' comprehension of the materials.

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⁸⁹ Commercial teacher guides for grade 5-6 textbooks were distributed as part of the GPE project in 2016.

- 4. In partnership with the Teacher Education and Management Program CPD and preservice activities, develop additional teacher training modules for the new syllabus and teacher guides including videos demonstrating effective teaching strategies.
- 5. Approve and procure sufficient copies of new materials for pre- and in-service teachers.
- Evaluate the impact of the materials on student learning and teacher practice using the national assessments (Curriculum & Assessment Program) and inspections (Education Management Program).

Develop primary textbooks and reading book criteria

- Develop student textbook and reading book criteria in line with framework, syllabuses and teacher guides. Update Textbook Policy – Textbook Development and Distribution Policy for Kindergarten, Primary, Junior and Senior Secondary Education produced in 2008.
- Agree on arrangement for developing Grade 1-4 Textbooks based on the new Curriculum Framework, focusing on mathematics and English. Inform commercial publishers of new requirements. Inform schools of approved textbooks which meet these requirements.
- 3. Develop costing models for textbook and reading book procurement and prioritize early grade English and mathematics.

Component 2: Establish a national assessment system for grades 3 and 6

Develop, trial and implement a national literacy assessment

- 1. Examine national literacy and numeracy assessment systems from similar countries.
- 2. Improve technical expertise to develop, implement and analyze national literacy assessments. Coordinate with the PSL trial.
- 3. Develop and approve a National Assessment Policy.
- 4. Develop, trial and implement a national literacy and numeracy assessment for grades 3 and 6 which use the benchmarks established in Component 1.

Reintroduce the WAEC grade 6 examination

- 5. Coordinate with WAEC to explore the possibility of reintroducing the grade 6 examination. Examine purpose, risks, costs and benefits with stakeholders.
- 6. Pilot WAEC grade 6 examinations for English and mathematics.

Chapter 11 Student Well-being Program

11.1 Summary

G2B impact	Improved student learning outcomes			
G2B priority	Improve girls' learning outcomes			
Challenges	economic factors hinder or retention and completion high school. High teenag continuation and is amondrop-out. High levels of sexual and schools affect both girls at Though the National Polistrong, it is not being disamonitored. School health activities no sustained.	economic factors hinder girls' access to education. Girls' retention and completion rates are significantly lower for high school. High teenage pregnancies disrupt school continuation and is among the leading causes of school drop-out. High levels of sexual and gender-based violence in schools affect both girls and boys. Though the National Policy on Girls' Education is very strong, it is not being disseminated, fully implemented, or monitored. School health activities need to be strengthened and sustained. Children and young people with disabilities need more		
SDG targets	 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all 			
Strategy	Mainstream gender and school health across the education sector			
Program	Student Well-being Program			
Responsible officer	Deputy Minister for Instruction			
Components	1. Implement National Policy on Girls' Education Assistant Minister for Basic & Secondary Education			

Counter school-related gender-based violence	Assistant Minister for Basic & Secondary Education
3. Strengthen school health and student well-being	Assistant Minister for Student Personnel Services

11.2 Introduction

Inequality, especially gender inequality, and poor health status disadvantages students in all parts of the education system. Improving access to education and learning outcomes requires interventions to improve student well-being through:

- ensuring that male and female students from all communities, especially disadvantaged communities, can start school on time and complete education (ECE Program, Chapter 7, and Overage and Out-of-School Program, Chapter 8)
- improving the skills of teachers and principals to include male and female students, informing parents of the Code of Conduct and increasing the number of women teachers, especially in high schools (Teacher Education & Management Program, Chapter 9);
- developing curriculum and instructional materials which show that both girls and boys have the same rights and the same potential (Curriculum & Assessment Program, Chapter 10);
- revising the curriculum and developing instructional materials and teacher training modules that can deliver culturally appropriate, gender sensitive and age specific Comprehensive Sexuality Education;
- building sufficient toilets and water systems (School Quality Program, Chapter 5);
- training principals, inspectors and district education officers in student well-being management and responsibilities (Education Management & Accountability Program, Chapter 6)
- ensuring that schools are safe places where students are not harassed or exploited;
- providing effective reporting and support systems for students;
- ensuring that students are healthy and well-fed; and,
- implementing targeted programs which improve education access and learning outcomes for girls and young women, especially in upper basic and high school.

This chapter addresses the latter four issues for student well-being across all levels of education.

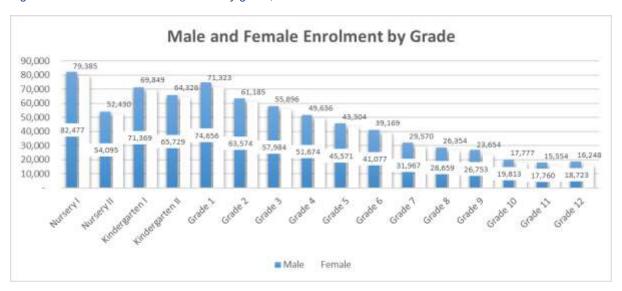
11.2.1 Girls' access to education

Girls and young women are less likely than boys to complete basic or secondary education (Figure 11-1). This is due to a range of issues including:

- School fees and other costs of attending school
- Need to work or support their family
- Safety traveling to school

- Cultural attitudes towards girls' education
- Sexual abuse and early or teenage pregnancy

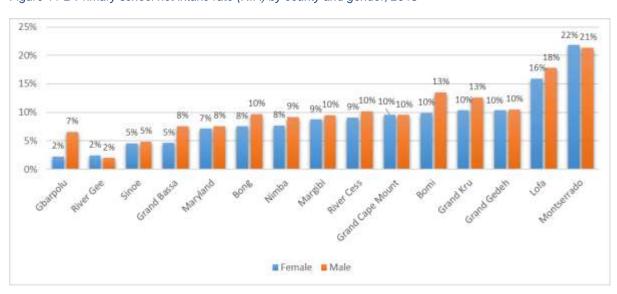
Figure 11-1 Male and female enrolment by grade, 2015



Source: EMIS, 2015

There is marked regional variation in girls' access to education which is noticeably better in Montserrado County (in Montserrado there are 130,726 girls in primary school, compared to 119,541 boys). However, both at-age enrollment rates for both genders and gender disparities are worse in other counties: net intake rates are very low (for instance, in River Gee and Sinoe) and disparities in net intake rates are wide in many counties (notably Gbarpolu and Grand Bassa) (Figure 11-2).

Figure 11-2 Primary school net intake rate (NIR) by county and gender, 2015



Source: EMIS 2015

Gender inequality in the education system is linked to inequality in wider society. Wealth, economic security and decision-making power are all unevenly distributed. ⁹⁰ Persistent gender biases and gendered beliefs are widespread both in the education sector and across society. A survey of school students, for instance, found that 75% of male students agreed that 'men are superior to women'. ⁹¹

Liberia has already seen significant progress in extending education to women. Comparing schooling for men and women of different age groups illustrates that change (Figure 11-3). Within the public education sector, the Gender Parity Index (GPI) has improved from 0.76 in 2012 to 0.84 in 2015 in primary and secondary education. Nonetheless, girls still attend school at lower rates than boys and access to secondary education is a particular problem.

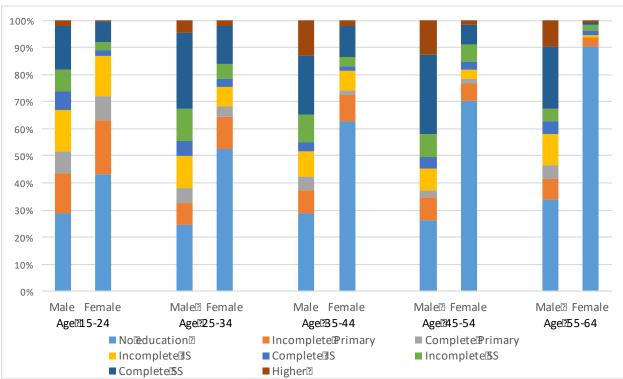


Figure 11-3 Education attainment by gender and age group, 2014

Source: HIES 2014

⁹⁰ See the Global Gender Gap Index report for 2015, which ranks Liberia 112th out of 145 countries, with inequality especially pronounced in the political and economic spheres. http://reports.weforum.org/global-gender-gap-report-2015/economies/#economy=LIB

⁹¹ Postmus et al., 'Examining gender based violence and abuse among Liberian school students in four counties: An exploratory study', *Child Abuse Neglect* 44 (June 2015), 76-86. See also 'Passing the test – the real cost of being a student', IBIS, Concern, the Norwegian Refugee Council and Save the Children, 2014, available via http://ibis-global.org/publications/passing-test-real-cost-being-student/.

11.2.2 The gender gap in learning outcomes

Girls are also less likely to succeed in education. The differences in education outcomes emerge at the early grades, and become more pronounced as students grow older. By Grade 9 and Grade 12, fewer girls are sitting the WASSCE and WAEC exams, and fewer girls are passing. Though the gap is steadily narrowing, in 2016 47% of candidates sitting the examinations were female. Of the female candidates, 39% passed, compared to 41% of male candidates. There are also significant gaps in learning outcomes across the wider population who do not complete Grade 12: Young women's learning outcomes are significantly poorer than those of young men: 38% of young women aged 15–24 are unable to read a basic sentence, compared to just 17% of young men. In rural areas, 67% of young women cannot read a simple sentence, compared to 32% of young men in rural areas.

These disparities in school achievement continue after secondary school, and are replicated in the teaching profession. Far too few Liberian women study science, technology, engineering and mathematics fields at the tertiary level. In 2012, for instance, just 4.8 per cent of women graduating from tertiary education had completed science programs (and women constituted only 38.2 per cent of graduates). Women are less likely to enter the teaching profession (Table 11-1) and become a principal (Table 5-4), and those who do face discrimination and multiple obstacles. ⁹⁴ Just 20% of trainee teachers at the RTTIs are women.

Table 11-1 Teacher workforce by gender and level of school, public schools, 2015

		ECE	Primary	Junior High	Senior High	TVET &	All schools
Teachers	Male	3409	10,447	3568	1520	573	15,894
	Female	1899	1768	312	88	103	3609

Source: EMIS 2015

 $^{^{92}}$ Calculation of gender ratio of candidates and gender-disaggregated pass rate, using results for 2012 – 2016 WASSCE and WAEC examinations, 2012-2016. In 2016, 38.80% of female candidates passed; 41.36% of male candidates passed.

⁹³ World Inequality Database on Education.

⁹⁴ Stromquist et al., 'Women teachers in Liberia: Social and institutional forces accounting for their underrepresentation', *International Journal of Educational Development* 33:5 (September 2013), 521-530.

Though there are gender disparities in learning outcomes, successful interventions have demonstrated that these can reduced and eliminated. Notably, over the past decade, women's literacy rates have increased more quickly than those of men⁹⁵. Additionally, a recent EGRA intervention shows that, while Grade 2 and Grade 3 girls may start off behind boys in reading skills, the intervention allows them to catch up: at the conclusion of the intervention, girls' scores were no different from those of boys.⁹⁶

The Gender-Equitable Education and Achievement Program (GEEAP) enrolled 60% girls, and saw marked improvement in learning outcomes. Between 2012 and 2013, the program of grants, classes and community programs obtained an 86% promotion rate for the 1,122 Grade 7 and 8 students (580 girls and 542 boys) enrolled. The Girls' Opportunities to Access Learning (GOAL) Plus reached a total of 8,000 students in Grades 1-6, providing wideranging support for students and community members.

Meanwhile, the Special Girls' Education Initiative provided night school classes for pregnant girls, young mothers, and mothers who wished to return to school. Childcare and other support facilitated a return to education for girls and young women whose education had been interrupted. Implemented in Montserrado, Bomi and Lofa counties, the program offered alternative education, up to the equivalent of Grade 6. Though initially targeted at girls and young women whose education had been disrupted by pregnancy and parenting responsibilities, the SGEI attracted women of all ages who had dropped out or never begun school.

11.2.3 Gender based violence in schools

Sexual gender-based violence (SGBV) is thought to be widespread in schools. In one study, one in five students – both girls and boys – report experiencing SGBV from teachers or staff.⁹⁷

Data on SGBV is often complicated by underreporting; survivors are especially unlikely to report their experiences when social attitudes are especially stigmatizing. In Liberia,

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⁹⁵ UNESCO Institute of Statistics: literacy rate for male population over 15 years of age increased from 61% to 62% between 2004 and 2015; during the same period for female population over 15 years of age, literacy rate increased from 26% to 33%.

⁹⁶ Benjamin Piper and Medina Korda, 'EGRA Plus: Liberia, Program Evaluation Report', RTI International and the Liberian Education Trust, for the United States Agency for International Development, 2009.

⁹⁷ Postmus et al., 'Examining gender based violence and abuse among Liberian school students in four counties: An exploratory study', *Child Abuse Neglect* 44 (June 2015), 76-86. See also 'Passing the test – the real cost of being a student', IBIS, Concern, the Norwegian Refugee Council and Save the Children, 2014, available via http://ibis-global.org/publications/passing-test-real-cost-being-student/.

homosexual sex is strongly taboo, which may discourage reporting, especially of transactional sex and sexual exploitation involving boys.

'Sex for grades' (the rape of students by teachers engaging in transactional sex or threatening students with failure) is probably commonplace. 'Sex for grades' is often represented as a form of bribery, but the relationship of power that a teacher has over a student means that students, even if they are above the age of consent, cannot freely consent. In MoE surveys and focus groups, students report teachers explicitly or implicitly threatening them with fail grades if they do not 'offer' sex.⁹⁸

Efforts have been made to train school-based counsellors to support young men and women. A manual and six-day training program have been developed but issues around counsellors' roles, time and allowances remain and most schools do not yet have a trained counsellor of either sex. There are plans to provide a helpline for students to report cases of abuse, and the teachers' Code of Conduct has been updated, with a student-friendly version being planned (Teacher Education & Management Program). It is important that there is an inter-ministerial response: MoE will not be able to achieve measurable improvements alone, without the support of law and justice agencies.

11.2.4 Pregnancy and sexual health

Pregnancy interrupts the education of too many Liberian girls and young women. 31% of young women will have get pregnant before the age of 20 (LDHS, 2013) a very significant proportion of the school-age population, especially as nearly all students are overage for the grade in which they are enrolled.

In a nation-wide study, 67% of households responding to questions about out-of-school children reported that pregnancy was the main reason that a girl in the household had dropped out of school.⁹⁹ Young, unmarried mothers are subject to stigma and marginalized; in fact many report feeling worthless or hopeless.¹⁰⁰ Pregnant students report being mocked and harassed by both staff and other students, and that parents discourage other students from associating with them.¹⁰¹ It is therefore not surprising that many pregnant students and

⁹⁸ Ministry of Education focus group (with girls from four schools), July 2015; Ministry of Education survey of university students (survey included questions on whether students had been asked for sex in exchange for grades during their schooling), February 2016. Note that these were small-scale, qualitative surveys and not designed to collect representative samples.

⁹⁹ Liberia Country Study: Profiles of Children Out of School, Subah-Belleh Associates, UNESCO Institute of Statistics and UNICEF, 2012.

¹⁰⁰ 'In their Own Words: Girls from Liberia Speak on Sexuality, Pregnancy and Services', International Planned Parenthood Federation, Foundation for Women's Health, Research and Development (FORWARD) and Planned Parenthood Association of Liberia, 2012.

¹⁰¹ 'In their Own Words', 2012; MoE scoping study, 2015.

their families feel ashamed, choose to withdraw from school and are reluctant to return. Principals and teachers often remove the young woman from education, sometimes to night school, increasing the risk she will drop out of school. The National Policy on Girls' Education does not explicitly protect the right of pregnant girls to continue attending the school of their choice, nor does it strongly affirm their right to reasonable flexibility on attendance and assessment requirements.

The education sector is also an important part of efforts prevent early pregnancy. Comprehensive sexuality education (CSE) is built around teaching life skills, including decision-making and negotiation skills, discussions of gender roles and relationships. The Division of School Health has developed a CSE curriculum in partnership with UNFPA, which is now being integrated into the national curriculum. Additionally, school health clubs have been established (approximately 500-600 were set up during 2015/16) in partnership with UNICEF and menstruation guidelines and activities included in health club and WASH guidelines.

In other areas, work undertaken in Bureaus and Divisions across the Ministry has contributed to gender objectives. For instance, staff working on water, sanitation and hygiene have ensured that guidelines have incorporated girl-friendly measures. School construction and renovations undertaken under the Global Partnership for Education program incorporated facilities for menstrual hygiene.

11.2.5 Feeding and deworming

Over 400,000 students are fed daily in ECE and basic education schools. Liberia has been providing school feeding since the 1960s and the national school feeding program now covers 14 counties through two providers: World Food Program (nine counties, 270,000 students) and Mary's Meals (520 public and non-government schools, 157,000 students). MoE plays a monitoring and supervisory role and leads a monthly coordination meeting. As levels of child stunting remain high (42% of five-year old children according to recent UNICEF estimates) and many communities are food insecure the program will need to continue, although there are efforts to introduce home grown school feeding using locally procured foodstuffs (a WFP pilot at 12 schools in Nimba is currently underway).

The school deworming program targets 6-15 year old children (in school and in the surrounding community) across all counties. The MoE, in collaboration with the Ministry of Health (MoH), aims to provide deworming medicines at the start of each academic year and children should receive two doses of deworming medication annually. Deworming medicines are usually donated by international development partners, and then warehoused by the MoH; then funds for transportation and distribution are required. The medicines are

distributed in both public and private schools based on the National Worm Control in School-Age Children - Guide for County and District Managers and Teacher Training Kit. At the beginning of the 2016/2017 school year, deworming medicines were distributed to about 1.2 million basic school-aged children.

11.2.6 Children and young people with disabilities

Few children and young people with disabilities attend school (Overage & Out-of-School Program, Chapter 8) and those that are enrolled face significant challenges: poor infrastructure, lack of toilets, distance from school and teachers who lack the skills and knowledge to teach effectively. Although there are a small number of schools for children with physical disabilities, MoE has not been able to regularly conduct quality assurance of their programs. There is an urgent need to include special education in pre-service and inservice teacher training (Teacher Education & Management Program, Chapter 9) and school management and inspection (School Quality Program, Chapter 5, and, Education Management & Accountability Program, Chapter 6).

11.3 Legal and policy context

Gender equity and girls' education

The Liberian Constitution (1986) states that "all persons are born equally free and independent and have certain natural, inherent and inalienable rights" including the "right to equality and non-discrimination" (Article 11). Referring specifically to education, Article 6 of the Constitution sets out a commitment to "provide equal access to educational opportunities and facilities for all citizens" with an emphasis on "the elimination of illiteracy". These commitments to equality are affirmed by the Education Reform Act of 2011, which provides the central strand in Objective 1.5.g, to "Promote gender equity and equality throughout the educational system and opportunities for education". In addition, Liberia is a signatory to several international conventions and commitments.¹⁰²

The main policy on gender and education is the National Policy on Girls' Education (2013). The Policy sets out an ambitious agenda to reduce economic, social and cultural barriers to girls' education. Within MoE, the Division of Girls' Education, part of the Bureau of Basic and Secondary Education, takes the lead on many policy and program areas. Several other Ministries are also involved in gender equity and girls' education: the Ministry of Gender,

¹⁰² The commitments and conventions include the Universal Declaration of Human Rights, the Convention on the Rights of the Child, Education for All (EFA) Goals, the Convention on the Elimination of all Forms of Discrimination Against Women (CEDAW), and the Beijing Platform for Action and subsequent declarations. Regular reports on progress on international commitments, including CEDAW, are required.

Children and Social Protection; the Ministry of Justice; the Ministry of Internal Affairs; the Ministry of Youth and Sports; and the Ministry of Health.

The Education Reform Act (2011) identifies sexual offences under the penal law as criminal matters, to be referred immediately to the appropriate authorities. In 2014, the MoE published a Code of Conduct for Teachers and School Administrators in Liberia. The Code of Conduct clearly sets out that SGBV will be punished. Consultations with MoE staff, however, indicate that knowledge of referral pathways for students and staff who experience violence is limited.

School health and well-being

The School Health Division, under the Department of Instruction and Bureau of Student Personnel Services, are responsible for school health related issues. These include WASH, HIV and reproductive health education, deworming, and nutrition and physical education. Within the same Bureau, the Division of School Feeding is responsible for school feeding, and the Division of Guidance and Counselling for counselling and mentoring. A School Health Policy has been drafted, but is yet to be validated and disseminated. There is a national WASH in Schools Protocol, specific guidelines for deworming and a School Feeding Policy. Nine counties have staff given responsibilities as School Feeding County Coordinators and District Focal Points to provide coordination and supervision of activities. However, school health programs utilize existing CEO and DEO personnel and, except for the Monrovia Consolidated School System, there are no school counsellors in public schools. The school health program works closely with the Ministry of Health and Ministry of Gender. Children and Social Protection.

Children and young people with disabilities

The Division of Special and Inclusive Education has overall responsibility for managing and monitoring special education provision. The Director reports to the Assistant Minister for Science, Technology, Vocational and Special Education. Currently there is no national education policy on children and young people with disabilities.

11.4 Achievements

- Strong policy framework for Girls' Education with specific directives for action
- Clear messages on sexual gender based violence in the Education Reform Act (2011), policy and Code of Conduct
- Draft CSE curricular one for Grades 3-9, and a parallel one for children who are physically out-of-school – currently being piloted and planned for inclusion in national curriculum

- Deworming programs for the last two years for 600,000 funded and delivered
- WASH in school protocol approved along with construction of over 1,000 toilets and hundreds of water points and handwashing stations
- Approximately 320,000 children fed daily in 14 counties
- School-based counsellor training manual developed and 42 master trainers prepared
- 500-600 school health clubs established
- Nationwide school health hotline set up in 2016

11.5 Challenges

11.5.1 Girls' retention and completion rates are lower

Girls' access to education, learning outcomes and dropout rates are poorer than boys. This is especially marked in rural districts. The root causes of this problem include cultural values, poverty and school fees, distance to school, sexual violence, early pregnancy and lack of girl-friendly teaching and infrastructure. The education impacts are in poorer learning outcomes and, ultimately, a lack of female teachers and principals. Not completing school severely impacts a woman's economic potential. Although girls and women are increasingly likely to go to school, this problem needs continued interventions, particularly at high school. Specific activities to increase the number of female teachers are needed (Teacher Education & Management Program, Chapter 9).

11.5.2 High levels of sexual and gender-based violence in schools

One of the drivers for poor female enrolment and attainment is the high levels of sexual and gender-based violence in schools. Driven by cultural values, attitudes which blame the young woman rather than the teacher, and a lack of accountability and prosecution, the problem reduces student enrolment and increases drop-out rates. The G2B-ESP will implement multiple and interrelated activities to reduce the abuse of students: Code of Conduct implementation and publicity, a helpline, teacher blacklist, community engagement, school-based counsellors, strengthened referral pathways, regular school inspections and increasing the number of female teachers.

11.5.3 The National Policy on Girls' Education is not being disseminated, fully implemented, or monitored.

The National Policy on Girls' Education is strong and has specific directions to address access, quality and safety issues affecting girls and young women. However, implementation, monitoring and reporting at the school and system level needs strengthening. Additionally, coordination with other quality improvement programs must improve (for example, in school inspection/supervision).

11.5.4 School health programs need to be strengthened and sustained

Students' learning outcomes are dependent on their health and nutritional status. It is critical that targeted health programs such as improving WASH infrastructure in schools (School Quality Program, Chapter 5), reproductive health, deworming and school feeding continue. There are concerns that these programs are donor supported with little investment by GoL. To complement and enhance these programs, there needs to be school-based resourcing such as school health clubs, male and female school-based counsellors and a strong health and comprehensive sexuality education curriculum.

11.5.5 Children and young people with disabilities need more support in school

Children and young people with disabilities who attend school will need additional support to ensure they do not drop out and can learn effectively. Social support from school-based counsellors and health advisers, trained teachers and child-friendly school management are essential. Currently, special educational needs are not mainstreamed into teacher education, principal's training, curriculum design and school supervision and inspection.

11.6 Student Well-being Program

Component 1: Implement National Policy on Girls' Education

Implement core components of National Policy on Girls' Education

- Develop a simplified version of the National Policy of Girls' Education (2013) for schools including referral pathways for gender-based violence, access to reproductive health services and non-discrimination against pregnant students.
- 2. Print and distribute 6,000 copies of parent-friendly policy. Print 500 copies of full Policy for MoE staff at county and district level.
- 3. Raise awareness of the Policy's provisions on non-discrimination against pregnant adolescents and young mothers using Ministerial press statements, Ministerial Circular, website and media.
- 4. Using 2016 rapid assessment evidence and learning from partners, identify vulnerabilities and barriers to girls' enrollment and attainment. Prioritize implementation of Policy components addressing those issues.

Improve data collection on gender issues

- 5. Collect, review and report data on girl's education (as set out in the National Policy). Disaggregate data by region and remoteness, household income, and other forms of disadvantage, and use it to plan and target programs.
- 6. Develop and publish annually a Girls' Education Report Card, as provided by the Policy. Include WASH, CSE, alternative education and other related issues.

- 7. Incorporate indicators of a girl-friendly and gender-sensitive environment into monitoring of school quality (under the School Quality Program).
- 8. Build on partnerships with international and local partners to share data and program evaluations.

Build Ministry capacity to address gender equality issues

9. Train 120 staff in Central Office and counties on girl's education issues. Train staff to use gender mainstreaming tools such as gender audits, making use of the expertise of the Ministry of Gender, Children and Social Protection and partners.

Implement priority gender equity interventions through other Programs

- 10. Build support for gender equity among teachers and principals, as part of pre-service teacher training and continuous professional development. Incorporate gender-sensitive approaches to teaching, pedagogy and planning into continuous professional development in coordination with Teacher Education & Management, Curriculum & Assessment, Over-age & Out-of-School, ECE and TVET Programs.
- 11. Support recruitment and advancement of women in the teaching profession (see Teacher Education & Management Program component 1).
- 12. In coordination with partners, design, pilot, evaluate and scale-up interventions to improve access and learning outcomes for girls and young women. For example,
 - Targeted school-fee support and scholarships
 - Mentoring programs
 - Tutorial or booster classes and extra support
 - Conditional cash transfers
 - Employability programs
 - Psychosocial support (such as training and supporting school-based counsellors)
 - Projects to reduce gender-based violence and abuse in schools

Component 2: Counter school-related gender-based violence

Strengthen processes for reporting and responding to gender-based violence

- Develop a clear referral process for victims of violence and sexual exploitation and include in parent-friendly National Policy of Girls' Education booklet. Work in partnership with relevant Ministries, Police, National Taskforce and school principal training program.
- 2. Build on the Teacher Code of Conduct to develop procedures for responding to anonymous complaints fairly, and with maximum weight given to MoE's obligations to

- protect students. Include county-based meetings with Police and other stakeholders. Collect and report data in Girl's Education Gender Report Card.
- Publicize MoE telephone hotline, and develop anonymous (SMS and web-based)
 reporting channels, to complement improved monitoring under the Education
 Management & Accountability Program. Establish teacher blacklist of convicted
 teachers.

Long-term strategies to reduce gender-based violence

- 4. Support a gender focal point person or people (such as the school counsellor or school health adviser) at the school level to support gender programs and local referral pathways. Include GBV in training for principals, school counsellors and school health advisers.
- Develop and implement long-term programs to raise awareness of SGBV, including SGBV affecting boys, and to challenge attitudes that make it easier for perpetrators to commit SGBV.
- 6. Incorporate preventative measures and messages into the curriculum, including life skills and content on gender equality; support this with guidance counselling and psychosocial support.

Component 3: School health and student well-being

Improve water, sanitation and hygiene (WASH) facilities at schools

- 1. Refer to School Quality Program for construction and Education Management & Accountability Program for inspection of WASH quality.
- 2. Continue WASH training programs for new toilet construction, targeting the most disadvantaged schools. Include community mobilization, training and monitoring.
- 3. Ensure menstruation hygiene and disabilities are considered in design of WASH programs, school based training and school improvement planning.

Roll out comprehensive sexuality and health education and psychosocial training for school-based counsellors

- Continue to expand and support school health clubs and school counselling services, with training for Instructional Supervisors, school-based counsellors and school health advisers and provision of school health kits. Work in close collaboration with MoH. Include school-based counsellors in Educator Management Policy.
- Finalise full integration and undertake national roll out of syllabus and teacher guides for gender-sensitive, culturally-appropriate and age specific Comprehensive Sexuality and health education for grade 3-9. Working with Curriculum & Assessment

- Program and Overage & Out-of-School Program, include in national curriculum framework and alternative education modules at relevant levels.
- 3. Develop and nationally distribute instructional materials to support delivery of comprehensive sexuality and health education in schools.
- Conduct training of in-service teachers to deliver quality comprehensive sexuality education integrated in the curriculum for the identified grades as part of the Teacher Education & Management Program.
- 5. Work with Teacher Education & Management Program and RTTIs to include Comprehensive Sexuality Education as a component of in new (pre-service) teacher training courses. Share with partners and on MoE website.
- 6. Continue to expand and support school health programs through clubs and school counselling services

Training in health, nutrition and deworming

- 1. Include training in nutrition and health in both pre-service teacher training and CPD at the school level (in Teacher Education & Management Program).
- 2. Include deworming, nutrition and school feeding in principals' training (Education Management & Accountability Program) and new CSE and Health curriculum (above).

Deworming and school feeding

- 1. Procure and distribute deworming medication twice annually for all 4-15 year olds, prioritizing schools in low-income communities and communities without sanitation.
- 2. Provide one nutritious meal a day to 350,000 children in areas of poor food security. Include school feeding in school quality inspection (Education Management & Accountability Program). Train focal point teachers in nutrition and food safety.
- 3. Continue coordination with partners providing meals.
- 4. Conduct annual training for County School Feeding Coordinators.
- 5. Conduct monitoring visits to district focal points and schools.
- 6. Work with TVET Program and Ministry of Agriculture to ensure food security and home grown food security are included in proposed Certificate 1 and 2 for Agriculture.
- 7. Develop long-term sustainability plan to gradually increase use of local suppliers and school gardens to supplement/replace external food provision.

Support for children with disabilities

1. Develop an Inclusive Education Policy and Guidelines for children and young people with disabilities.

- 2. Ensure new syllabuses and instructional materials take into account children and young people with disabilities (Curriculum & Assessment Program).
- 3. Improve teacher preparation and CPD with a compulsory module on teaching children with disabilities (Teacher Education & Management Program).
- 4. Train principals in effective management strategies to include children with disabilities in school (School Quality Program).
- 5. Include special education in school quality assessments and reporting, including regular inspections of schools for the physically disabled (Education Management & Accountability Program).
- 6. Improve data collection on children and young people with disabilities by updating the school census form and auditing special education schools (Education Management & Accountability Program).
- 7. Include children and young people with disabilities in interventions to improve school attendance (Overage & Out-of-School Program).
- 8. Train school-based counsellors and school health advisers in special education socio-emotional support.

Chapter 12 Technical and Vocational Education and Training Program

12.1 Summary

G2B impact	Young people have the necessary skills for livelihoods and employment					
G2B priorities	As above					
Challenges	market information collect capacity to monitor the TV Lack of adequately traine Absence of a (i) National (ii) Demand-driven curriculaross ministries, which re Weak linkages between The productive sectors of the Lack of adequate gender-	FVET curricula and the economy limit relevance -sensitive activities to address oung women face in TVET dalities fail to incentivize				
SDG target	affordable and quality technical, including university 4.4 By 2030, substantially increase.	cess for all women and men to vocational and tertiary education, ease the number of youth and including technical and vocational os and entrepreneurship				
Strategy	Improve the quality and relevance education and training	mprove the quality and relevance of technical and vocational education and training				
Program	Technical and Vocational Educ	cation and Training Program				
Responsible officer	Deputy Minister for Instruction					
Components	1. Improve the TVET	Assistant Minister for Science,				

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¹⁰³ Financing will be addressed in the Education Management & Accountability Program.

information base	Technology, Vocational and Special Education		
2. Improve the quality of TVET delivery	Assistant Minister for Science, Technology, Vocational and Special Education		
3. Lay the foundation for a national qualification framework for agriculture and another area of high demand	Assistant Minister for Science, Technology, Vocational and Special Education		

12.2 Introduction

Technical and Vocational Education and Training (TVET) provides an important avenue for the acquisition of employment-oriented and life coping skills and attitudes. While a variety of TVET training institutions exist, the TVET delivery system remains largely fragmented, supply-driven and under-resourced. As the GoL is pursuing a revitalization of TVET as a response to the youth employment challenge, MoE will work in partnership with relevant Ministries, institutions and employers to prioritize, streamline and coordinate efforts in the sector. Responsibilities for TVET are shared across a number of Ministries.

12.2.1 TVET system

The TVET system in Liberia is complex and fragmented in terms of providers and data. There are broadly two types of TVET providers:

- (i) Formal TVET programs that provide class-room based training in both vocational and technical skills;
- (ii) Programs that provide on-the-job training or apprenticeships in a particular type of vocation or skill and often in a non-formal or informal set-up.

While the MOE and Ministry of Youth and Sport (MYS) are key training providers, other Ministries, NGOs and private sector providers play a substantial role.

Formal TVET Programs

In the public sector, the MoE and MYS offer different TVET courses at different levels. The MoE offers pre-vocational education and general academic programs at the senior high school level. The Ministry has encouraged every school to provide elective learning opportunities in at least one vocational skill between grade 1 and 12 ¹⁰⁴ and currently organizes basic formal TVET courses for students who have completed grade 7. The MYS

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^{104 2016-2017} Calendar Year, Ministry of Education.

operates vocational training centers which offer TVET courses at the basic and intermediate levels targeting students who have finished high school at or before Grade 10. Some Community Colleges, which are semi-autonomous MoE-responsible government institutions, offer TVET post-secondary education and have strong linkages to the tertiary education level.

At the tertiary level, students can either attend junior college which offers technical training for middle level managerial positions, or regular full-time college granting degrees in professional disciplines. Given that a grade 9 certificate is the minimum entry requirement into formal TVET a large proportion of the population are excluded from this level.

Private TVET providers target mainly basic skills acquisition for different categories of learners (including urban poor, early school leavers and girls and women with no livelihood skills). The courses offered are generally of shorter duration and relate more to the business and service sectors.

10.3.1.2. Non-formal and informal TVET programs

On-the-job skills acquisition is the most common form of training in Liberia, mostly for manual trades (such as carpentry, welding, artisanal skills etc.) but is harder to quantify. Some on-the-job training opportunities also exist in the service sector in fields such as tailoring, cosmetology, hospitality and catering. Programs are typically longer in duration than formal TVET programs. Youth from lower socioeconomic classes and with lower levels of educational attainment are more likely to choose apprenticeships and on-the-job training¹⁰⁵.

A number of Ministries including the Ministry of Agriculture, Ministry of Commerce and Industry and the Ministry of Gender as well as NGOs run TVET programs in this area. Nonformal or informal TVET programs have often been provided in conjunction with alternative education programs.

12.2.2. Training centers and enrollment

TVET provision is divided between public, private, faith-based and community providers. Currently, 148 TVET institutions in the country are formally registered with the MoE and MYS, which is an increase of 16 from the 132 TVET institutions registered in 2012. However, the 2015/2016 EMIS data collection revealed that far fewer institutions actively offer courses and have enrolled students. 65 active institutions were captured in the 2015/2016 EMIS

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¹⁰⁵ Constraints on Youth Skills Development in the Informal Sector in Liberia (2016), World Bank.

data¹⁰⁶ where the majority were private (63%) followed by public (20%), faith-baed (11%) and community-owned (6%). The large majority of TVET institutions are in the more urban and densely populated areas including Montserrado (43%), followed by Nimba (23%) and Margibi (12%), which highlights the need to consider the imbalance in TVET access. Data regarding access to TVET is limited. Estimates from 2010 indicate that 255,000 people, representing 14 percent of those aged 15 and over, had completed some formal vocational training¹⁰⁷. Administrative data confirms that only a small proportion of young people (10 %) participate in vocational training. These young people have relatively high levels of education, having completed secondary education, or even university¹⁰⁸.

Enrollment in TVET institutions seems to be evenly divided between public and private institutions (Table 12-1). Although TVET provision is dominated by private providers, public TVET schools appear to be larger in size. Enrollment in TVET institutions is therefore evenly divided between public and private institutions. A total of 11,871 students are currently enrolled in a TVET institution of whom 46,73% are female¹⁰⁹. This is a marked decrease in total enrollment from 16,884 in 2012 and 18,032 in 2006.

Table 12-1 Enrollment in TVET institutions by provider, 2015

Provider	Total	Male		Female	
		Count	% total	Count	% total
Public	4478	2922	65.25%	1556	34.75%
Private	4366	1877	42.99%	2489	57.01%
Faith-based	2156	987	45.78%	1169	54.22%
Community	871	538	61.77%	333	38.23%
Total	11871	6324	53.27%	5547	46.73%

Source: EMIS. 2015

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¹⁰⁶ It is estimated that at least three relatively large institutions offering only technical and vocational education as well as a few TVET institutions falling under the purview of the MYS may not have been captured in the school census.

¹⁰⁷ Report on the Liberia Labour Force Survey 2010, ILO.

¹⁰⁸ Constraints on Youth Skills Development in the Informal Sector in Liberia (2016), World Bank.

¹⁰⁹ A comparison of TVET enrollment numbers from institutions present in both EMIS and the registered TVET unit lists has led to limited congruence. EMIS numbers for TVET institutions must therefore be treated with caution.

Fewer females are enrolled in public TVET institutions than in private institutions. While enrollment figures overall suggest a fairly equal gender distribution, far fewer females (34.75%) are enrolled in public institutions than male (65.25%). For private institutions, female enrollment proportions tend to be higher (57.01%) than for male (42.99%).

Geographically, TVET students are concentrated in the more urban and densely populated counties. 84.34% of the enrolled students are studying in Montserrado, Margibi or Nimba.

12.2.3. Skills areas

Computer Science is the significant concentration of interest in TVET institutions with nearly 30% of candidates choosing it as their primary specialization. The area of specialization with the second highest number of enrolled students is agriculture (8%). Courses offered in the formal TVET institutions are mainly in the traditional areas or fields, such as carpentry, masonry, plumbing, cookery, tailoring, soap making, and secretarial services.

Vocational training subjects are somewhat segregated along traditional gender roles, although computer training is popular with both young men and women (Table 12-2). Areas which are strongly divided on gender lines include 'Electricity,' 'Auto Mechanic,' 'Building' and 'Carpentry' with more than 80% of the enrolled students being male. On the other hand, 'Pastry,' 'Home Arts,' and 'Tailoring' are dominated by females. This division may be largely driven by social norms and perceptions and highlights the need for further analysis and use of incentives.

Table 12-2 Enrollment in TVET institutions by area of specialization, 2015

Specialization	Total	Male		Female	
		Count	% total	Count	% total
Computer Science	3,464	1,782	51%	1,682	49%
Agriculture	954	633	66%	321	34%
Other	935	335	36%	600	64%
Home Arts	730	83	11%	647	89%
Auto-Mechanic	680	564	83%	116	17%
Accounting	591	317	54%	167	28%
Electricity	577	510	88%	67	12%
Plumbing	575	404	70%	171	30%

Business Education	571	240	42%	331	58%
Building Trades	528	422	80%	106	20%
Tailoring	502	108	22%	394	78%
Electronics/ICT	425	366	86%	59	14%
Pastry	276	31	11%	245	89%
Type & Dye	225	92	41%	133	59%
Architectural Drafting	217	178	82%	39	18%
Wood-Work	145	23	16%	122	84%
Carpentry	142	113	80%	29	20%
Soap-Making	139	41	29%	98	71%
Hospitality Science	73	22	30%	51	70%
Metal Work	65	48	74%	17	26%
Interior Decoration	57	12	21%	45	79%
Total	11,871	6,324	53%	5,440	46%

Source: EMIS, 2015

A distinction is made between technical and vocational skill and general job and "life" skills acquisition. The latter category tends to include general business skills, socio-emotional skills, literacy and IT skills. There is a growing demand and interest in adding job-skills to technical and vocational skills programs. Job-skills are particularly relevant for the more vulnerable and marginalized groups including Not in Education, Employment, or Training (NEET) youth, young women and ex-combatants. Training programs in non-formal and informal settings tend to focus on these.

12.2.4. Teaching workforce and teacher training

Information about the TVET teaching workforce is sparse. 2015 EMIS figures estimate that a total number of 507 teachers are currently active although this may be an underestimate given the large number of private providers. 80% of the teachers are male and in line with enrolment figures, 78.3% of teachers are based in Monstserrado, Margibi or Nimba. EMIS data indicates that the average age of TVET teachers is 45.8 which is similar to the average age across education levels.

There is currently no dedicated vocational teacher training center or certification standards for TVET teachers. Development partners including the EU and UNESCO have suggested programs to train and re-train TVET teachers.

12.2.5 Education and employment TVET pathways

The current pathways in the education system to TVET and from TVET to the labor market are summarized in Figure 12-1 below. The large majority of employment opportunities for the Liberian youth currently lie in the informal sector, which is traditionally accessed through informal and non-formal TVET programs¹¹⁰.

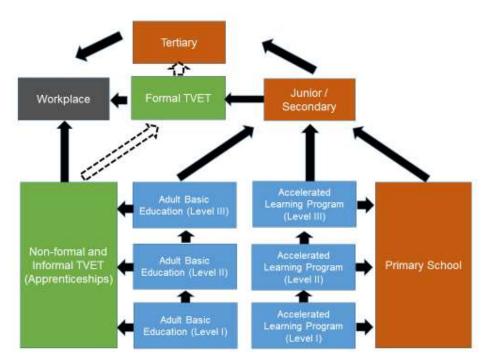


Figure 12-1 Education and employment TVET pathways

12.2.6 Resourcing

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The public TVET institutions rely heavily on government funding, whilst the other providers are financed mainly through tuition fees, donations from external benefactors, and production and sale of goods they produce. The MOE has allocated around 5% percent of overall education expenditure on average to TVET for the period 2012-2015. Many TVET institutions are not included in education budget, rather under MYS. Combining the different sources of funding, TVET unit cost calculated is USD 1100 per year, more than 15 times that of the primary level.

¹¹⁰ Constraints on Youth Skills Development in the Informal Sector in Liberia (2016), World Bank.

There are large disparities in financing and an on ongoing lack of sustainability. The GoL provides some subsidy to selected TVET institutions, although subsidies appear to be granted on an ad hoc basis. Students tend to pay a fee ranging between USD 50-100 to enroll, which for many is difficult to meet. There have been no major procurements of materials to TVET schools and no distribution of a national curriculum or teaching resources.

12.3 Legal and policy context

In absence of an independent TVET authority, an Inter-Ministerial TVET Taskforce (IMTTF) was formed by the President in 2014 to develop a comprehensive plan for TVET, with the aim of achieving the TVET goals outlined in the Agenda For Transformation (2013). The elaboration of the National Policy for Technical and Vocational Education and Training 2015-2020 (2015) was led by the IMTTF and is the first specific TVET policy in Liberia. It outlines key challenges and strategies to develop a holistic and flexible TVET system and is accompanied by an operational plan for 2015-2021.

Legislation has been drafted to provide a legal framework for implementing the policy goals and objectives of the Policy. In particular, the legislation seeks to establish a Liberia TVET Commission (LiTCOM). The TVET legislation is in the process of submission for Cabinet approval. In absence of LiTCOM, an Interim Governance Structure has recently been proposed by the MoE. This governance system would be led by the IMTTF and a National Technical Committee, comprising representatives from the MoE, MYS, Ministry of Commerce and Industry, National Investment Committee, Ministry of Agriculture, Ministry of Labor, NGOs and the private sector.

Under the MoE, the Bureau of Vocational and Technical Education is responsible for implementing vocational and technical education programs at the pre-tertiary level in the public school systems. It has a supervisory oversight responsibility of TVET in the private sector as well as the responsibility to ensure that national standards are met. However, the MoE is not the only entity responsible for TVET in Liberia; various ministries – notably, Youth and Sports, Health, and Agriculture - are providing TVET training in an ad hoc manner, each with different governance and management practices.

Additionally, there are several other GOL policies and strategies which refer to TVET including among others:

Liberia Rising: Vision 2030 provides the rationale and impetus for revitalizing the
TVET system in order to produce the skilled human capital that is required to spur
and sustain the growth and industrialization of the economy.

- **Economic Stabilization and Recovery Plan (2015)** states that investments in TVET programs and improvement in the quality of secondary and tertiary education will ensure that the youth have the skills to meet the labor market needs of the country.
- National Industrial Policy (2011) describes the labor force in Liberia as largely unskilled and in need of training or re-training due to the introduction of new technology.
- *Employment Policy (2009)* urges the systems for TVET to be reshaped to provide the young generation with the education, knowledge and skills necessary to meet the requirements of the labor market. It also highlights the discrimination of girls and women in TVET, leaving women disadvantaged in terms of employable skills.
- National Youth Policy (2012-2017). Elaborated under the guidance of the MYS the
 policy highlights education and training as one of the eight key priority themes and
 strategic interventions.

12.4 Achievements

While the TVET sector is facing a number of challenges there have also been a number of significant achievements:

- Creation of an Inter-Ministerial TVET Taskforce demonstrating commitment for reform;
- Elaboration of the first National TVET Policy in Liberia with the establishment of guiding principles for the TVET system, a detailed operational plan and costing exercise;
- A dedicated TVET legal framework which is under consideration;
- The existence of a variety of TVET training institutions both in rural and urban areas;
- An existing structure for formal skills development programs; and,
- Growing interest and commitment to involve other stakeholders, including the private sector.

12.5 Challenges

12.5.1 Outdated and limited equipment

Many TVET institutions lack the modern training equipment and facilities to provide the jobready skills demanded by employers. Moreover, most TVET schools have basic infrastructural constraints including lack of power and insufficient access to water and sanitation. Where limited equipment exists, improved management structures are needed to ensure effective and appropriate use of equipment.

12.5.2 Lack of adequately trained and incentivized trained teachers

Assessment studies¹¹¹ reveal that the TVET instructors and trainers are aging, unskilled, poorly compensated and motivated. There is no training and recruitment plan to replace the aging workforce and many current instructors do not have access to continued training and exposure to more modern and advanced TVET technologies and capabilities. Furthermore, modest salaries lead to low retention of teachers. At the same time, there is also an overwhelming need for new teachers. Some schools have addressed this shortage by using volunteers or contractors.

12.5.3 Lack of an accreditation system and standardized TVET curricula

The absence of a credible institutional accreditation system and standardized TVET curricula has prevented the development and implementation of a nationally certified qualifications system. In some cases, TVET programs with similar titles have substantially different course content and duration in different institutions. Often, the level at which the program is delivered is not specified. Consequently, the certificates delivered alone are not enough to evaluate the skills competence level attained by the trainee or certificate holder and thereby limit employability.

12.5.4 Weak linkages between TVET curricula and the productive sectors of the economy

A significant mismatch exists between the skills offered by training providers and those in demand in the labor market or required by employers or self-employment. This is due to a combination of factors including (i) Theory-dominated curricula leaving learners unprepared for the labor market, (ii) Lack of skills-gap analysis and tracer studies; (iii) Lack of public-private partnerships and; (iv) Lack of involvement of the private sector in TVET governance or provision.

12.5.5 Low management capacity at central and local levels

The current centralized structure leaves little autonomy to the public schools. Public TVET institutions are often understaffed and the management staff is poorly skilled, with low capacity in generating additional revenue and promoting local partnerships with the private sector. A decentralized administration of TVET institutions with strong linkages with the private sector could contribute to improve the management of the system. At the same time, the capacity by line Ministries to monitor program interventions, planning and management,

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¹¹¹ Identification and formulation of the 11th EDF support to education sector in Liberia (2016).

including end user monitoring of supplies, and governing the teacher body needs to be strengthened.

12.5.5 Challenge of coordination among TVET stakeholders

The TVET system is highly fragmented thereby compromising coherence and accountability. The coordination of activities administered by different government ministries and agencies, as well as private sector and NGOs, is not supported by an appropriate legal framework and a strong relationship between the government and the private sector is lacking. While the LiTCOM will be stablished as a semi-autonomous agency in the longer term to coordinate and oversee all aspects of skills development in the country, there is an immediate need to improve coordination for assuring standardization of provision and avoiding costly duplication of training programs.

12.5.7 Lack of defined pathways into and from TVET

As a result of the lack of coordination in the TVET system, the pathways into and from TVET in the education system are unclear. Information provided to students is either missing or weak thereby contributing to low demand for TVET skills. There is currently a lack of clarity and connection between the education system and TVET as well as between TVET and the workplace. Ultimately, a flexible transition and clear pathways between basic and higher level or specialized skills development programs and qualification will be crucial for the TVET sector.

12.5.8 Negative public perception of TVET

Although recognized in official policy documents for several years, TVET continues to have negative perceptions to the public and is perceived to be a second-best choice for young people. TVET is often perceived as a dead-end choice as skills attained are considered not to be adaptable to other vocations and to lead to an inflexible employment position.

12.5.9 Lack of gender-sensitive measures in TVET

Challenging gender perceptions in TVET and providing incentives for women to opt for traditionally 'male' training options is currently lacking. Young women from poor communities face access constraints to TVET due to community or family beliefs that undermine the potential role women can play to contribute to sustainable and productive livelihoods¹¹². Available training opportunities in Liberia are furthermore often confined to 'feminine' areas, which may not necessarily lead to profitable work. Even when enrolled in training courses in

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¹¹² Women and TVET (2011), UNESCO.

more male dominated areas, girls and women can face barriers, e.g. when the learning environments are de-motivating and do not take into account their specific needs.

12.5.10 Insufficient financing for TVET

The lack of assured, predictable and sustained public financing of TVET is a major problem to achieving robust outcomes in TVET development. The lack of a coherent and transparent subsidy policy has further highlighted the disparities in TVET funding. Opportunities for private financing for TVET and public-private partnerships remain untapped.

At the same time, TVET programs are deemed very costly with high unit costs (notwithstanding that most of the TVET institutions need physical rehabilitation, new equipment, and training of teachers).

12.6 Technical and Vocational Education and Training Program

Component 1: Improve the TVET information base

Improve demand-side information base

- Collate and review existing labor market demand studies on a yearly basis from Ministries, Development Partners and NGOs.
- 2. Consolidate reviews and highlight areas of high demand areas in an annual report with the National Technical Committee to be presented to the IMTTF and shared with donor partners:
 - Establish a National Technical Committee to act as a secretariat for the IMTTF.
 - Outline the structure and key components of the report.
- Hold a national stakeholder forum bringing together Ministries, TVET providers and other stakeholders to share best practices and discuss important issues in TVET based on the annual reports.
- Identify labor market monitoring methodology and information gaps based on the report to serve as the foundation for the elaboration of a Labor Market Information System.
- 5. Work closely with Higher Education Program on demand and supply research and reports.

Improve supply-side information base

- 6. Mapping existing TVET suppliers in terms of location, courses provided, measures of effectiveness, graduation numbers, tracer studies and job placements.
- 7. Review and update the EMIS TVET capture form:
 - Improve and customize the school census questionnaire to TVET.

- Capture a wider range of TVET providers.
- Provide recommendations for other improvements, notably in the area of gender-disaggregated data, based on a desk review of EMIS TVET capture forms in other countries.
- 8. Train CEOs specifically on TVET to improve the accuracy of TVET data capture.

Component 2: Improve the quality of TVET delivery

Build the capacity of TVET teachers

- Introduce TVET certificate teacher training course in an existing training institution aiming for four intakes of 60 teachers across different trades. The focus will be on pedagogy and management of TVET training (for example, managing student placements in industry). The course could be delivered in either residential preservice or in-service mode.
 - Coordinate with the Teacher Education & Management Program to ensure consistency and quality.
 - Conduct a desk-based review of training modules in ECOWAS countries.
 - Build on alternative education teacher training modules for adults and young people from Overage & Out-of-School Program.
 - Trial training modules paying careful attention to teacher practice and teachers' and students' comprehension of the materials.
 - Include assessment tools for completion of training.
 - Design the pre-assessment and pre-requisites to enter training.
 - Update the Educator Management Policy accordingly
 - Plan with CSA to ensure salary increases once certified are budgeted adequately.
- 2. Promote the training program and support female TVET teachers in male-dominated occupations or fields to apply.
- 3. Gradually move to a user-pay funding model.
- 4. Evaluate of the impact of the training and monitor graduates after training and certification in collaboration with the Monitoring and Evaluation Department.

Build the capacity of TVET training providers

- 5. Support and strengthen the administration and management in three TVET institutions.
- 6. Provision of equipment, technical training and infrastructure to three TVET institutions.

7. Hold a forum to lay the foundation for a reform of the governance structure at the level of provider including the consideration of decentralization measures and the inclusion of the private sector.

Component 3: Lay the foundation for a national qualification framework for agriculture and another area of high demand

Develop a TVET curriculum for agriculture for certificate levels 1 and 2 of the Liberian National Qualifications Framework (LNQF)

- 1. Map and review existing Liberian TVET curricula in agriculture. Review best examples and curriculum standards from ECOWAS and internationally.
- Establish an expert group including experts from industry, training institutions and relevant Ministries, for the design of a competency-based curriculum framework for Agriculture including Certificate 1 and 2 levels. Coordinate with Curriculum & Assessment and Overage & Out-of-School Programs.
- 3. Draft specialized agricultural training modules, including entrepreneurship and small business skills.
- 4. Trial modules in a mixture of TVET institutions.
- 5. Consult, edit, approve, print and distribute modules which can be made publicly available online for TVET institutions to download.

Lay the foundation for an independent testing agency to approve certificates in agriculture

6. Develop, pilot and implement a competency assessment for Certificate 1 and 2 in Agriculture in partnership with the relevant Ministries and agriculture businesses.

Establish pre-requisites for entering each qualification level in the LNQF for agriculture

- 7. Map and review existing qualifications and standards.
- 8. Review best examples and qualification standards from ECOWAS and internationally.
- 9. Draft, consult and approve qualification standards.

Identify another area of high demand and replicate above steps activities 10. As above.

Chapter 13 Higher Education Program

13.1 Summary

G2B impact	Young people have the necessary skills for livelihoods and employment					
G2B priority	As above					
Challenges	 The demand for higher skills and degrees are not appropriately linked with the supply of higher education study programs. Quality of higher education programs are not internationally validated. Resources are not distributed based on performance, public priorities (e.g. AfT) or equity considerations and are not used efficiently or cost-effectively. Higher education courses are not affordable for most of the population. 					
SDG targets	affordable and quality technical, including university 4.4 By 2030, substantially increa adults who have relevant skills, in	4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship				
Strategy	target market demand for critical of education expenditure to drive	Leverage regional and international partnerships and expertise, target market demand for critical skills and increase the efficiency of education expenditure to drive quality improvement and increase equitable access in Liberian higher education.				
Program name	Higher Education Program					
Responsible officer	Director General, National Comn	nission on Higher Education				
Components	Increase quality and relevance in Higher Education	Director General, National Commission on Higher Education				
	2. Improve equity and efficiency in higher education finance	Director General, National Commission on Higher Education				

13.2 Introduction

Liberia's industries, especially the ones that depend on natural resources, have been expanding quickly during the post-conflict period. While the firms can relatively easily recruit low skilled labor, it is hard for them to hire Liberian professionals that possess advanced skills. Preparing reliable and productive human capital is important for the country to benefit from its abundant natural resources and develop the economy.

However, the civil wars took a heavy toll on the higher education system. The universities experienced a massive brain drain of their most highly qualified faculty and administrators. Institutions were shut down intermittently due to war and student unrest in the turbulent political environment. Infrastructure (including equipment, facilities, libraries, laboratories, and buildings) was severely damaged, looted, or destroyed (Diagnostic Paper for Higher Education in Liberia, 2012). Rebuilding is further hampered by poor learning outcomes at the earlier educational levels.

13.2.1 Higher education sector

In 2014, National Commission on Higher Education (NCHE) recognized and accredited 33 higher education institutions (HEI), up from 30 in 2012. 19 of these HEIs are located in Montserrado County, within which the majority is concentrated in Monrovia. The rest of the HEIs are scattered in Bong, Bomi, Maryland, Margabi, Nimba, Grand Bassa, Grand Gedeh and Lofa Counties. Only nine counties have the physical presence of at least one HEI. Most institutions are small: only ten institutions had more than 500 students in 2012¹¹³ (University of Liberia, African Methodist Episcopal University, United Methodist University, African Methodist Episcopal Zion University College, Cuttington University, Smythe Institute of Management and Technology, Grand Bassa Community College, William V.S. Tubman University, Nimba Community College and Stella Maris Polytechnic.

13.2.2 Enrolment

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In 2012, the overall number of students enrolled in higher education reached 43,843, within which the University of Liberia accounted for 54.4% of total enrollment. Only 16,258 female

¹¹³ National Commission on Higher Education (NCHE). (2012). Status of Higher Education: Census Survey of Institutions.

students were enrolled as compared to 27,585 male students (Gender Parity Index (GPI) 0.59). However, GPI varies significantly across institutions and a number of private institutions enrolled many more female students than male students such as Smythe Institute of Management and Technology with GPI at 5.44 and Morris Community College of Airline Studies with GPI at 4.76. Most institutions have increasing enrolment.

13.2.3 Courses

From 2009/10 to 2011/12, the major chosen by the largest number of students was Business/Management while the major that was least pursued was Education Studies (Table 13-1). Overall number of students increased for all majors. The number of male students decreased for Humanity/Art major and increased substantially for Education Studies. The number of female students increased across all majors and has shown the biggest growth in Agriculture/Forestry the major.

Table 13-1 Student enrollment by major, 2009/10 to 2011/12.

		2009/10			2011/12			
	Male	Female	Total	Male	Female	Total	Male growth %	Female growth %
Business/ management	10544	5381	15925	11443	7532	18975	9%	40%
Hum/art	5679	3325	9004	5152	4216	9368	-9%	27%
Science	2024	633	2657	2638	967	3605	30%	53%
Engineering	1218	92	1310	2317	256	2573	90%	178%
Agr/Forestry	1202	128	1330	2275	566	2841	89%	342%
Med/Nursing	837	1694	2531	910	2600	3510	9%	53%
Ed Studies	508	205	713	1314	581	1895	159%	183%
Total	22012	11458	33470	26049	16718	42767	18%	46%

Source: National Commission on Higher Education (NCHE). (2012). Status of Higher Education: Census Survey of Institutions

13.2.4 Faculty

The student-faculty ratio differs widely across institutions with a continuing shortage of senior faculty positions (Table 13-2).

Table 13-2 Student-Faculty Ratio, higher education institutions with more than 500 students, 2012

Institution	Ownership	Total student numbers	Student-Faculty Ratio
University of Liberia	Public	23,837	33
African Methodist Episcopal University	Faith-based	3,370	30.1
United Methodist University	Faith-based	3,290	12.3
African Methodist Episcopal Zion University College	Faith-based	2,836	19.2
Cuttington University	Faith-based	2,565	17
Smythe Institute of Management and Technology	Private	1,707	32
Grand Bassa Community College	Public	1,290	21
William V.S Tubman University	Public	757	17.6
Nimba Community College	Public	722	23
Stella Maris Polytechnic	Faith-based	555	Not reported

Source: National Commission on Higher Education (NCHE). (2012). Status of Higher Education: Census Survey of Institutions

13.2.5 Funding

Higher education institutions receive funding through direct transfer (also known as subsidies) from central government, and the amount is determined by the national budget. There are additional institutions that receive budget allocation through Ministry of Education, but the total amount is much smaller as compared to those receiving direct transfers. In 2015/16 budget, only USD 150,000 was channeled through MoE, while over 30 USD million was directly transferred to institutions (Figure 13-1).

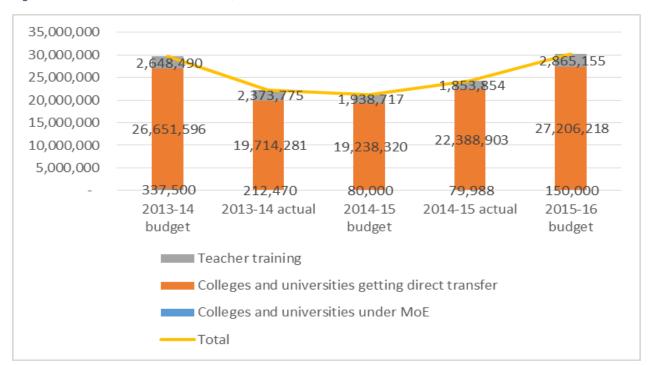


Figure 13-1 Transfers to HEIs 2013-2016, USD

Source: National budget 2013/14, 14/15 and 15/16

The University of Liberia dominates the share of transfers. Since 2010, the annual transfer to University of Liberia has exceeded USD 10m and 2014/15 witnessed an over-execution of the budget with a rate of 129%. In 2015/16, the funding to University of Liberia increased by over USD 4m as compared to the 2014/15 budget. Salaries at the University of Liberia have increased over the last few years from about \$125/month to nearly \$1,400/month at the top levels and from \$45/month to \$780/month at the lower faculty levels.

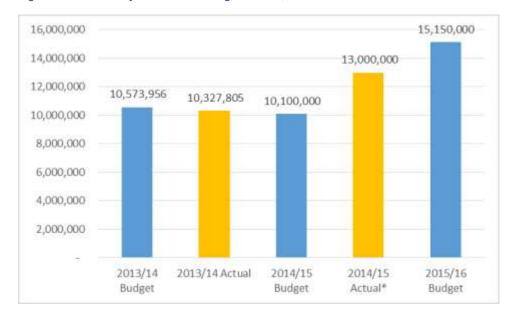


Figure 13-2 University of Liberia funding, 2013-16, USD

Source: National Budget, 2013/14, 14/15. Note: Actual* is GoL projection

Additional support has come from oil and mining concessional contracts with prescribed allocations to higher education in these important development areas, and these contributions have been used to improve the quality of engineering and mathematics fields. (Diagnostic Paper for Higher Education in Liberia, 2012).

13.2.6 Scholarships

The Ministry has tightened up scholarship processes recently to focus scholarships on development priorities (reducing local scholarships to 1,052 from 5,000) and limiting foreign scholarship to graduate level only. However, they remain a substantial proportion of the budget with foreign scholarships alone costing an average USD 2.1m annually (2.8% of the total education sector budget).

Foreign scholarship is only targeted at graduate school education (minimum 3.0 grade point average). Recipients have to sign a Memorandum of Understanding and agree to come back and work for the government for two years. The program prioritizes certain strategic areas such as science, agriculture and education. Advertisements of scholarship are broadcast on newspaper, radio, national website to encourage students to apply. Interviews are conducted to complement a written test. There is supervision of the students through academic reports every semester. Scholarship varies based on the destination country. For example, for students studying in Morocco, the government pays USD 4,000 per student, including allowance and health insurance.

Gender imbalance in international scholarship recipients remains a major problem, and no specific intervention has taken place to address this issue.

The local scholarship program covers both undergraduate and graduate levels but was halted in 2012. No new scholarship has been given out to students studying in Liberian universities, only to existing students who were enrolled in the program previously. In 2015 total number of students benefiting from the program is 1052, dropped from more than 5000 in previous years. The majority of the students are studying in STEM areas.

The scholarship covers 18 credits per students, and the cost per credit differs by university/institution. On average one credit costs USD 25, totaling USD 450 per student. The scholarship does not include social subsidies. In 2014/15, USD 0.5m was given out to students currently benefiting from the program. However, there was USD 1.5m funding gap to cover tuition for all students.

13.3 Legal and policy context

In 1989, an Act on Higher Education was passed to provide legal guidance on higher education development. The National Commission on Higher Education (NCHE) was established by the Act to take charge of monitoring, evaluating and accrediting all institutions of higher learning. The NCHE coordinates activities related to strategy development and is the primary implementation agency for the oversight of strategy and policy recommendations (Diagnostic Paper for Higher Education in Liberia, 2012).

NCHE is also charged with licensing and accreditation of Higher Education institutions. Before a university can become accredited, it must be licensed by NCHE which is under the aegis of the Ministry of Education. Accreditation is a voluntary process. However, all public institutions must be accredited. Private institutions that are not accredited cannot receive government subsidies and their students are not eligible for government scholarships or any other government financial aid.

Currently only the colleges and universities are included under the regulations and oversight of the NCHE. The other institutions are under the authority of the Ministry of Education, reporting to the Deputy Minister for Instruction, such as Rural Teacher Training Institutes at Kakata, Zorzor, and Webbo and TVET institutions such as Booker Washington Technical Institute (Diagnostic Paper for Higher Education in Liberia, 2012).

13.4 Achievements

- The first comprehensive census of institutions was completed in June, 2010, and resulted in a report: A Transformative Higher Education for Sustainable Development: 2009/10 Statistical Report on Tertiary Institutions in Liberia.
- The second census survey was completed in 2012 with a report: Status of Higher Education: Census Survey of Institutions (National Commission on Higher Education (NCHE), 2012).
- Consultations on amending the Higher Education Act.

13.5 Challenges

13.5.1 Recruitment and retention of quality faculty staff

After the conflict, the pool of talent is small. The low level of salaries for lecturers and professors at many institutions means that they cannot generally afford to hold only one position (although there have been substantial salary increases at the University of Liberia in recent years). As over two-thirds of the HEIs are located in Montserrado County, and most do not have more than 1,000 students, many of the institutions share faculty for common courses (Diagnostic Paper for Higher Education in Liberia, 2012) which can reduce contact time for teaching.

13.5.2 Poor infrastructure, equipment and curricula

Well-equipped libraries and laboratories are scarce resources in Liberian universities. Sumaworo 114 found that in the University of Liberia, some normal classrooms have to accommodate more than 100 students at once with inadequate equipment. Many institutions are too small to achieve economies of scale, increasing their costs and decreasing quality. There is no national quality assurance or accreditation system, or process for international or national peer appraisal.

13.5.3 Students lack foundational skills

Due to the poor learning outcomes at the lower level, high school graduates are incapable of handling the advanced educational programs at the higher education level. In 2013, nearly 25,000 school-leavers failed the admission test at the University of Liberia. As a result, the product of HEIs can be very poor and much effort has to be expended in remedial programs.

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¹¹⁴ Sumaworo, M. D. (2015). Challenges of Tertiary Education in Liberia and Possible Solutions.

13.5.4 Inadequate funding mechanism

Funding allocations are based on previous years' budgets and the lobbying power of each institution. The amount allocated to institutions can be volatile due to political or economic changes or poor planning. As a result, the execution rate of higher education transfers is far from being close to 100%. The 2013/14 fiscal year execution rate is 75% and that for 2014/15 fiscal year is 114%. Once approved in the national budget, the funding is for general purpose, meaning that it can fund any type of expenditure.

13.5.5 Inequity in access

Despite efforts by the GoL, a large number of young people cannot access higher education due to long distances between their homes and institutions, poor infrastructure, cultural norms and poverty. According to the 2014/15 Liberia Household Income and Expenditure survey, the Gross Enrollment Ratio for tertiary education is 3.14%. Students from the richest quintile account for 57.14% of higher education enrolment while students from the poorest quintile accounts for only 0.71%. Current scholarships do not address these issues adequately.

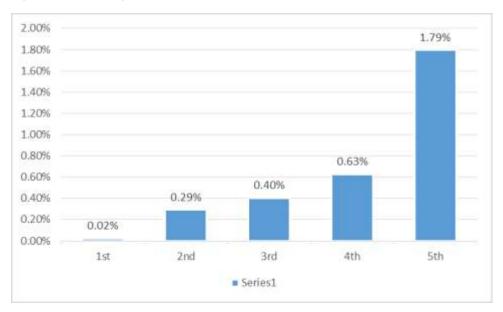


Figure 13-3 Tertiary gross enrollment ratio by quintile, 2014/15

Source: Liberia Household Income and Expenditure Survey, 2014/15

13.6 Higher Education Program

Component 1: Higher Education quality and relevance through partnerships and accreditation

Program accreditation

- Identify three diploma or degree programs at three universities in fields which align
 with Liberia's strategic and economic development priorities, including science,
 technology, engineering and mathematics (STEM), to initiate program accreditation
 activities.
- 2. Create program accreditation task team for each of the three selected programs to design and begin implementation of accreditation process.
- 3. Integrate this activity with regional/international partnership activities.

Curriculum strengthening and diversification for market relevance

- Conduct labor market survey, including study fields and gaps in skills, among major formal employers and informal industries proximate to three community colleges to identify mismatches between community college programs and labor market skills needs/employment projections.
- 2. Establish industry partnerships between employers and higher education study programs or institutions.
- Convene Community College Labor Market Relevance Task Force (CC-LMRTF) to review survey findings and recommend development of new programs, with an emphasis on short cycle and non-degree programs which could respond to survey findings.

Regional and international partnerships for quality strengthening

- Build on existing University partnership experiences arrangements to 'pair' universities with regional and international higher education institutions (e.g., ALU relationship with University of Ibadan).
- 2. Partnership arrangements to be designed to focus on priority quality improvement activities including (i) peer review of selected STEM and AfT priority programs and (ii) support academic and student exchange.
- Partnership arrangements will be designed so as to provide institutional foundation and policy framework for development of an institutional accreditation system.
 Partnership arrangements will allow for the exchange common standards and practice for accreditation.

4. Universities and colleges will develop strategic plans and institute annual reporting exercises (i.e., Tubman University model).

Component 2: Realign financing of higher education to improve efficiency and equity Driving efficiency in higher education finance

- Implement comparative unit costs and cost-effectiveness study for three-five priority diploma and degree programs each of which are offered at no less than three universities.
- Introduce monitoring indicators for programs and for performance monitoring (including enrollment, admission, graduation, equity, quality and efficiency of services as well as job placement and earnings upon graduation.) by including all higher education institutions in the annual school census.
- 3. Realign higher education subsidy policy to improve the equity in the distribution of public financing across higher education institutions with a focus on increasing value for money and the alignment of financing with GoL developmental priorities with the aim to reduce high education transfers by at least USD 1m annually.
- 4. Gradually introduce performance financing of higher education institutions starting by introducing demand driven grant financing of innovation in teaching and learning.

Improving equity in higher education finance

- Continue to reform international and national scholarship programs to increase share
 of enrolment of students from low income households. Reduce total expenditure on
 scholarships to USD1.5m annually.
- Explore options for supporting the increased generation of second and third stream income and pilot programs designed to generate new revenue streams, including pro-poor user fee policies. Good practices could be identified from leading regional universities and elsewhere.

Component 3: Update Higher Education Act

 Revise of the 1989 Act on Higher Education Act though support and engagement of key stakeholders and in alignment with relevant national, regional and international agendas.

Chapter 14 Financing the G2B-ESP

14.1 Introduction

The G2B-ESP focuses on strategic areas that have the most significant impact on the quality of the education system and can most likely attract funds from various resources. It adopts a realistic approach and focuses on programmatic budgeting to improve the efficiency of operational and development budget of MoE. Programmatic budgeting ensures clear responsibilities and accountability.

Financing for quality: Programmatic budgeting allows for improving the current budget framework, targeting policy changes and strengthening sustainability of program areas. It also allows external financing to be tapped where funding gaps are identified.

Financing for efficiency and equity: The G2B ESP focuses on available resources from efficiency gains such as subsidy policy reform and payroll cleaning. For example, savings from the reduction in non-government subsidies will be directed to equity related interventions such as school grants. Payroll cleaning releases a large amount of available resources to improve teacher quality.

14.2 Budget projections

National budget reductions for FY2016/17 put serious financial constraint on the education sector. The total government budget in 2016/17 is projected to drop to USD 556 million from USD 623 million in 2015/16¹¹⁵. In FY 2016/17, the overall education sector is expected to slightly decrease, however its share in total government expenditure will increase to 15%, the highest level over the past five years. The education share of the national budget is projected to be 14.5% from 2017/18 to 2019/21 (Table 14-1) with little variation in allocation to MoE and other institutions (Table 14-3).

¹¹⁵ The national budget used for these projections was accessed on 12th September 2016 via https://www.mfdp.gov.lr/index.php/the-budget. This budget was under revision in November 2016 at the time of writing.

Table 14-1 Education expenditure actual and projections, 2012/13-2019/21, USD

	2012/13	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20	2
Education Budget	76,928,436	70,942,476	64,156,410	83,832,003	83,473,764	84,369,510	87,089,246	92,314,601	97
Total GoL Budget	672,050,000	582,931,413	605,900,000	622,743,420	555,993,000	580,593,000	599,309,000	635,267,540	673
% of Edu in GoL Budget	11.45%	12.17%	10.59%	13.46%	15.01%	14.53%	14.53%	14.53%	1
GDP (USD billion)	1.75	1.96	2.01	2.04	2.11	2.26	2.47	2.72	
Education as % of GDP	4.41%	3.62%	3.19%	4.12%	3.96%	3.73%	3.52%	3.39%	

Source: GoL national budget, 2016/17, September 2016 draft, MFDP

The share of Ministry of Education in the total education budget is projected by MFDP as equivalent to 55% over the next five years (Table 14-2). The rest of the budget is allocated to Monrovia Consolidated School System (MCSS), higher education institutions, three rural teacher training institutes, TVET colleges and institutions and WAEC.

Table 14-2 Education sub-sector projections, 2016/17-2020/21 USD

	2016/17	2017/18	2018/19	2019/20	2020/21	Share
Ministry of Education	45,566,123	46,160,260	47,648,283	50,507,180	53,537,611	55%
MCSS	3,902,552	3,960,400	4,088,068	4,333,352	4,593,353	5%
Higher education	26,514,275	26,651,012	27,510,134	29,160,742	30,910,387	32%
Teacher training RTTIs	2,865,155	2,908,133	3,001,878	3,181,991	3,372,910	3%
TVET	3,025,659	3,068,704	3,167,626	3,357,684	3,559,145	4%
WAEC	1,600,000	1,621,000	1,673,255	1,773,650	1,880,069	2%
Grand Total	83,473,764	84,369,509	87,089,244	92,314,599	97,853,475	100%

Source: GoL national budget, 2016/17, September 2016 draft, MFDP

Within the MoE budget, the salaries of teachers and education staff absorb the majority of the resources. However, there are significant projections in the current budget for subsidies and scholarships (Table 14-3). Although these are in the current budget projections, there may be scope for more equitable and efficient use of these resources.

Table 14-3 Ministry of Education budget projections by expenditure type excluding higher education and Monrovia Consolidated School System, 2016/17-2019/20, USD

		FY2016	/17	FY2017	/18	FY2018	/19	FY2019	/20
		Draft Budget	Share	Budget Projection	Share	Budget Projection	Share	Budget Projection	Share
Compensation of Employees		35,584,988	78%	36,101,603	78%	37,265,375	78%	39,501,298	78%
	Local scholarship	500,000		507,500		523,860		555,292	
Goods and Services	Foreign scholarship	2,000,000		2,000,000		2,064,472		2,188,340	
	Other Goods and Services	4,212,135		4,271,132		4,408,816		4,673,345	
	Total	6,712,135	15%	6,778,632	15%	6,997,148	15%	7,416,977	15%
Consumption of Fixed Capital		735,000	2%	746,025	2%	770,074	2%	816,278	2%
Subsidy ¹¹⁷		2,534,000	6%	2,534,000	5%	2,615,686	5%	2,772,627	5%
Capital Expenditure		0	0%	0	0%	0	0%	0	0%
Total		45,566,123	100%	46,160,260	100%	47,648,283	100%	50,507,180	100%
Share in Total Edu. Exp.		55%		55%		55%		55%	

Source: Ministry of Education budget, September 2016 draft

The G2B-ESP assumes that modest amounts of development funding (USD 19,397,779 over the lifetime of the G2B-ESP) can be found from within the existing budget projection envelope utilization of non-recurrent budget (Table 14-4). In addition, there are projected efficiency gains which can be redirected to priority areas. These will require negotiation with MFDP and stakeholders.

¹¹⁶ These are budget projections from draft 2016/17 budget. The G2B-ESP plans to redirect scholarship funds to priority activities (see below).

¹¹⁷ The subsidy projections are from the draft 2016/17 budget. G2B-ESP efficiency savings and draft Subsidy Policy redirect subsidy funds to priority development activities (see below). These are not yet reflected in 2016/17 budget and require further discussions with MFDP.

Table 14-4 Development expenditure projection, 2016-2021, USD

Detail	FY2016/17	FY2017/18	FY2018/19	FY2019/20	FY2020/21	Total
Goods and Services for development purpose ¹¹⁸	1,665,500	1,690,483	1,744,978	1,849,677	1,960,657	8,911,295
Allowances and professional fees ¹¹⁹	2,810,132	2,835,124	2,926,517	3,102,108	3,288,235	14,962,116
Total development envelope in current budget	4,475,632	4,525,607	4,671,495	4,951,785	5,248,892	23,873,410

Source: Authors' estimates based on MoE budget, expenditure and projections, 2014-17, September 2016 draft

14.3 Projected efficiency gains

14.3.1 Payroll cleanup

The G2B-ESP assumes that the payroll cleanup (Education Management & Accountability Program, Chapter 6) will result in projected annual savings of USD 4m from the removal of ghost and unqualified teachers. In addition, the retirement and retrenchment of teachers and public servants will result in annual savings of USD 2m. In total, MoE estimates that USD 6m will be available annually to partially fill the fiscal gap from bringing additional trained teachers onto the regular payroll (for example, from the volunteer teacher pool, newly qualified teachers or Accelerated C certificate program).

14.3.2 Removal of subsidies from non-government institutions

Currently the Ministry of Education is drafting a subsidy policy and listing the qualifications of schools eligible for subsidies, such as no school fees and no entrance test. If schools that are not eligible for subsidies are removed from the budget, approximately USD 2m per year is estimated to be achieved in subsidy efficiency gains which will be directed to investment in G2B-ESP programs (Education Management & Accountability Program, Chapter 6).

¹¹⁸ Non-recurrent expenditure would be consultancy fees, staff training, specialized materials, workshops and seminars and gifts. Recurrent expenditure includes operational costs of running Central, county and district offices such as power, communications, vehicle repairs, stationery etc.

Allowances are assumed to be used for education officer visits to schools and other travel. These allowances are included in relevant G2B-ESP activity budgets (for example, school inspection and DEO supervisory visits).

14.3.3 Improved targeting of scholarships

International and local scholarships cost approximately USD 2.5 annually. Building on the successful reduction of local scholarships and improving the targeting at the poorest students (Higher Education Program, Chapter 13), MoE will reduce total expenditure on scholarships to USD 1.5m annually, freeing up USD 1m for G2B-ESP activities.

14.3.4 More efficient use of higher education transfers

Moving to a value-for-money system of higher education transfers (Higher Education Program) is projected to reduce the higher education budget allocation from USD 30m to USD 29m annually, releasing an additional conservatively estimated USD 1m for G2B-ESP activities. MoE will request that higher education budgets will be frozen in real terms for the duration of the G2B-ESP.

In total, there is an estimated annual saving of USD 10m which can be redirected to G2B-ESP priorities (Table 14-5).

Table 14-5 Annual efficiency saving projections redirected to G2B-ESP priorities, USD

Efficiency	Annual saving (USD)	Redirected	
Payroll reform	6.0m	Costs of bringing volunteer, trained and newly qualified teachers onto regular payroll	
Subsidy reform	2.0m	G2B-ESP priorities	
Scholarship reform	1.0m	G2B-ESP priorities	
High education funding reform ¹²⁰	1.0m	G2B-ESP priorities	
Total savings	10.0m		

MoE development activities and efficiency savings are modest (Table 14-6) and remain vulnerable to the wider GoL fiscal trends. The efficiency savings rely on successfully implementing public sector reform activities in the plan (such as retirement of staff and policy implementation) and would require negotiation and agreement from MFDP. These could be incentivized through development loan policy triggers, results-based financing or other mechanisms.

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¹²⁰ MoE currently has limited authority over the higher education transfers outside of those to community colleges and RTTIs. Efficiency savings will require dialogue with the legislature, Cabinet, Association of Liberian Universities and MFDP.

It is important to note that teacher payroll expansion is a significant budgetary challenge which requires regular monitoring and modelling. Additionally, decision making in key budget areas is strongly influenced by external stakeholders (including higher education, school subsidy and payroll) which adds uncertainty as to the scope of efficiency savings. Failure to implement G2B-ESP reforms has implications for other development activities such as funding ECE, school inspections and teacher education.

Table 14-6 Estimated MoE contribution to G2B-ESP activities, 2017-2021, USD

Detail	FY2017/18	FY2018/19	FY2019/20	FY2020/21	Total
Total development envelope in current budget projections	4,525,607	4,671,495	4,951,785	5,248,892	23,873,410
Efficiency savings from payroll cleaning	6,000,000	6,000,000	6,000,000	6,000,000	24,000,000
Efficiency savings from policy reform	4,000,000	4,000,000	4,000,000	4,000,000	16,000,000
Total	14,525,607	14,671,495	14,951,785	15,248,892	63,873,410

14.4 Development partner contributions

The support of development partners will be necessary for the successful delivery of the G2B-ESP. The education sector is fortunate to have a number of donors and implementing partners (Table 14-7). During the G2B-ESP, MoE aims to increasingly reflect development partner contributions in programmatic budgeting and Annual Operational Plan. MoE will continue to engage with development partners through bilateral relationships and the Education Sector Development Committee. It will also expand fundraising efforts (Education Management & Accountability Program, Chapter 6).

Table 14-7 Selected education sector development partners and donors

Development partner/donor	Sub-sector priorities (selected)
Ark, PSL school operators and philanthropic funders	School quality, education management
Big Win Philanthropy	Public sector reform

Development partner/donor	Sub-sector priorities (selected)
European Union	MoE capacity development (central & decentralized levels) for planning, management and M&E, out-of-school children, teacher education & management, TVET system (governance, capacity development for TVET qualifications structure, curriculum, system for TVET instructor training & CPD among others), WASH
Global Partnership for Education	School grants, infrastructure (classrooms, WASH) and textbook procurement distribution
Open Society Foundation	Early childhood education
Mary's Meals	School feeding
UNESCO	TVET, education system monitoring
UNFPA	Reproductive sexual health education
UNICEF	Out-of-school children, girls' education, WASH, ECE
USAID	Young people, girls' education, early grade literacy and math, learning materials, EMIS, higher education, scholarships (assistance packages), community engagement
World Bank	Early childhood education, education sector planning, public sector reform
World Food Programme	School feeding

In addition to these organizations, the education sector has the support of a wide number of international and national non-governmental organizations.

For the purposes of G2B-ESP planning and implementation, development partner and implementing partners are expected to align with the G2B-ESP priorities and coordinate with MoE and other stakeholders. MoE recognizes that some externally funded activities have been planned and implemented already and other projects are in planning or development

phase. As such development partner contributions fall into three categories within the G2B-ESP budget:

- Activities in G2B-ESP, costed and funded (included in component budget, Table 14-11)
- Proposed and planned activities G2B-ESP but total contribution and scope not known as yet (footnoted in Table 14-11)
- Activities outside of the G2B-ESP or which will be completed by the G2B-ESP start date (not included in G2B-ESP budgets but referred to in component text if relevant (for example, teacher testing and payroll verification which will complete by June 2017))

14.5 Other contributions to education sector activities

Other off-budget contributions to the education sector include mining and farming concessions (which may operate their own schools) and the County Development Funds. The scope of contributions from both areas are not clearly understood and have not been included in budget estimates. The task force on education financing will attempt to quantify both areas (Education Management & Accountability Program, Chapter 6).

14.6 G2B-ESP budget

Programmatic budgeting calls for a substantial change in the current budget framework. The annual budget that is not allocated to salary or recurrent operations will be aligned with the programs identified in G2B-ESP. In addition, efficiency savings create substantial fiscal space to be used on activities that are essential to enhance education quality and access.

The Government is committed to sustain the programs proposed in G2B-ESP and use its own resources and savings from efficiency gains to fund the programs wherever possible. The programmatic planning is one of the tools to achieve the ultimate goal of sustaining the programs beyond the life of G2B-ESP by, for example, ensuring that each any new recurrent expenditures has its own separate budget line. Hence a new chart of accounts will be implemented.

Estimated costs of programs are comprised of several elements, such as consulting fees for researching, developing and implementing pilot programs, cost to provide service to target recipients of each intervention, materials to be distributed, training cost, and travelling cost.

14.5.1 MoE projected contribution to G2B-ESP

Table 14-8 Financial projections of G2B-ESP MoE contribution

Source of funding	Detail	FY2017/18	FY2018/19	FY2019/20	FY2020/21	Total Funding
	Development budget available for G2B-ESP	4,525,607	4,671,495	4,951,785	5,248,892	23,873,410
MoE	Efficiencies from subsidy, higher education and scholarship reform	4,000,000	4,000,000	4,000,000	4,000,000	16,000,000
	Payroll reform ¹²¹	6,000,000	6,000,000	6,000,000	6,000,000	24,000,000
	RTTI direct funding ¹²²	1,800,000	1,800,000	1,800,000	1,800,000	7,200,000
Total	Total GoL commitment	16,325,607	16,471,495	16,751,785	17,048,892	71,073,410
	Available be allocated to other G2B-ESP priorities ¹²³	8,525,607	8,671,495	8,951,785	9,248,892	39,873,410

¹²¹ Allocated in Education Management & Accountability Program Component 2 budget

¹²² Allocated in the Teacher Education & Management Program Component 2 budget. This envelope is estimated from the 2013-16 budgets. RTTIs will be required to reduce their unit costs and explore user- pay. This total includes RTTI staff salary.

¹²³ After additional payroll commitments and RTTI funding.

14.5.2 G2B-ESP program budget summary

Table 14-9 G2B-ESP program budget, USD

Program	Cost	2017/18	2018/19	2019/20	2020/21	Total Cost
School Quality	Total cost	3,567,950	4,002,585	5,079,593	5,209,229	17,859,357
	MoE commitment	-	-	-	-	-
	Funding identified	57,350	-	-	-	57,350
	Funding gap	3,510,600	4,002,585	5,079,593	5,209,229	17,802,007
Education Management & Accountability	Total cost	15,223,175	11,848,800	13,243,800	16,414,300	56,730,075
	MoE commitment	6,000,000	6,000,000	6,000,000	6,000,000	24,000,000
	Funding identified	-	-	-	-	-
	Funding gap	9,223,175	5,848,800	7,243,800	10,414,300	32,730,075
Early Childhood Education	Total cost	4,296,450	4,241,450	4,141,450	3,891,450	16,445,800
	MoE commitment	-	-	-	-	-
	Funding identified	400,000	350,000	250,000	-	1,000,000
	Funding gap	3,896,450	3,891,450	3,891,450	3,891,450	15,445,800
Overage & Out-of-School	Total cost	1,360,900	5,319,800	5,310,700	5,272,700	17,264,100
	MoE commitment	-	-	-	-	-
	Funding identified	-	-	-	-	-

Program	Cost	2017/18	2018/19	2019/20	2020/21	Total Cost
	Funding gap	1,360,900	5,319,800	5,310,700	5,272,700	17,264,100
Teacher Education & Management	Total cost	1,947,650	4,533,550	4,500,550	4,420,550	15,402,300
	MoE commitment	1,800,000	1,800,000	1,800,000	1,800,000	7,200,000
	Funding identified	-	-	-	-	-
	Funding gap	147,650	2,733,550	2,700,550	2,620,550	8,202,300
Curriculum & Assessment	Total cost	238,413	1,078,497	919,497	104,833	2,341,240
	MoE commitment	-	-	-	-	-
	Funding identified	-	-	-	-	-
	Funding gap	238,413	1,078,497	919,497	104,833	2,341,240
Student Well-being	Total cost	14,995,050	15,042,700	15,045,050	14,729,050	59,811,850
	MoE commitment	-	-	-	-	-
	Funding identified	14,800,000	14,800,000	14,800,000	14,600,000	59,000,000
	Funding gap	195,050	242,700	245,050	129,050	811,850
TVET	Total cost	84,100	1,102,875	1,109,500	1,142,300	3,438,775
	MoE commitment	-	-	-	-	-
	Funding identified	-	-	-	-	-
	Funding gap	84,100	1,102,875	1,109,500	1,142,300	3,438,775

Program	Cost	2017/18	2018/19	2019/20	2020/21	Total Cost
Higher Education	Total cost	114,900	87,900	232,900	207,900	643,600
	MoE commitment	-	-	-	-	-
	Funding identified	-	-	-	-	-
	Funding gap	114,900	87,900	232,900	207,900	643,600
Grand Total	Total cost	41,828,588	47,258,156	49,583,040	51,392,313	189,937,097
	MoE commitment	7,800,000	7,800,000	7,800,000	7,800,000	31,200,000
	Funding identified	15,257,350	15,150,000	15,050,000	14,600,000	60,057,350
	Funding gap	18,771,238	24,308,156	26,733,040	28,992,313	98,679,747

14.5.3 Funding gap

Table 14-10 Funding gap after MoE and partner program commitments

	2017/18	2018/19	2019/20	2020/21	Total
Total cost	41,828,588	47,258,156	49,583,040	51,392,313	189,937,097
Funding gap	18,771,238	24,308,156	26,733,040	28,992,313	98,679,747
MoE development envelope (Table 14-7)	8,525,607	8,671,495	8,951,785	9,248,892	39,873,410
Additional fundraising, GoL resources or development partner support required	10,245,631	15,636,661	17,781,255	19,743,421	58,806,337

14.5.4 G2B-ESP component budget

Table 14-11 G2B-ESP budget per component, USD

School Quality Program	2017/18	2018/19	2019/20	2020/21	Total Cost	Notes
Establish school quality standards	57,350	-	-	-	57,350	
Funding identified	57,350	-	-	-	57,350	PSL activity
2. School improvement grants	3,110,600	3,235,918	4,287,926	4,417,563	15,052,006.94	
Principals' leadership program	50,000	416,667	441,667	441,667	1,350,000.00	
4. Increase the proportion of ECE, basic and secondary schools with toilets and safe water	350,000	350,000	350,000	350,000	1,400,000	
Total cost of program	3,567,950	4,002,585	5,079,593	5,209,229	17,859,357	
Funding identified	57,350	-	-	-	57,350	PSL
Funding gap	3,510,600	4,002,585	5,079,593	5,209,229	17,802,007	

Education Management & Accountability Program	2017/18	2018/19	2019/20	2020/21	Total Cost	
Education Delivery Unit and education partnerships	3,384,600	3,234,600	4,009,600	4,734,600	15,363,400	
Of which is PSL	3,220,000	3,070,000	3,820,000	4,570,000	14,680,000	
2. Workforce reform	11,196,000	8,028,000	8,550,000	11,142,000	38,916,000	
Funding identified	6,000,000	6,000,000	6,000,000	6,000,000	24,000,000	Payroll clean up savings
Funding gap	5,196,000	2,028,000	2,550,000	5,142,000	14,916,000	Recurrent and one-off costs ¹²⁴
3. School inspection	237,000	343,500	351,500	300,000	1,232,000	

Payroll and retirement reforms will require CSA and MFDP agreement and are reflected in the G2B-ESP budget to indicate the estimated cost of improving the quality of teacher and education officer workforce (for example, by certifying teachers). Includes recurrent costs of new B and C certificate graduates. Note that the estimate does not include the costs of ECE and TVET certification which are yet to be modelled.

Support and accountability at decentralized levels	301,875	169,000	259,000	164,000	893,875	
5. Sector planning, monitoring, budgeting and finance strengthening	103,700	73,700	73,700	73,700	324,800	
Total cost of program	15,223,175	11,848,800	13,243,800	16,414,300	56,730,075	
Funding identified	6,000,000	6,000,000	6,000,000	6,000,000	24,000,000	
Funding gap	9,223,175	5,848,800	7,243,800	10,414,300	32,730,075	
Early Childhood Education	2017/18	2018/19	2019/20	2020/21	Total Cost	
1. ECE public awareness campaign and outreach to families and communities about the value of ECE and good parenting skills	150,000	50,000	50,000	50,000	300,000	
Funding identified	100,000	-	-	-	100,000	ELP ¹²⁵

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¹²⁵ The Early Learning Partnership will commission one service provider to deliver a series of interrelated studies into the ECE sector (Annex 4) in partnership with MoE.

2. Roll out ECE certification and training for teachers through Rural Teacher Training Institutes, colleges and universities 126	636,450	661,450	661,450	611,450	2,445,800	
Funding identified	25,000	50,000	50,000	-	125,000	ELP
Build additional ECE school infrastructure in areas of greatest need	450,000	450,000	450,000	450,000	1,800,000	
4. Improve the quality of ECE provision for children aged 3- to 5-years-old	3,060,000	3,080,000	2,980,000	2,780,000	11,900,000	
Funding identified	275,000	300,000	200,000	-	775,000	ELP
Total cost of program	4,296,450	4,241,450	4,141,450	3,891,450	16,445,800	
Funding identified	400,000	350,000	250,000	-	1,000,000	ELP
Funding gap	3,896,450	3,891,450	3,891,450	3,891,450	15,445,800	

¹²⁶ OSF has previously supported ECE reforms.

Overage & Out-of-						
School	2017/18	2018/19	2019/20	2020/21	Total Cost	
1. Increase capacity to plan, budget and manage alternative education (AE)	53,900	49,800	10,700	10,700	125,100	
2. Professional development for AE teachers, facilitators, principals and administrators	12,000	20,000	50,000	12,000	94,000	
Overage student program	1,285,000	1,250,000	1,250,000	1,250,000	5,035,000	
4. Out-of-school children and young people program ¹²⁷	10,000	4,000,000	4,000,000	4,000,000	12,010,000	
Total cost of program	1,360,900	5,319,800	5,310,700	5,272,700	17,264,100	
Funding identified	0	0	0	0	0	
Funding gap	1,360,900	5,319,800	5,310,700	5,272,700	17,264,100	

 $^{^{127}\,}$ USAID and EU have proposed large-scale programs for this G2B-ESP component.

Teacher Education & Management	2017/18	2018/19	2019/20	2020/21	Total Cost	
Improve teacher registration, performance management and incentives	128,100	207,500	150,500	90,500	576,600	
2. Increase the proportion of qualified and trained teachers ¹²⁸	1,819,550	4,326,050	4,350,050	4,330,050	14,825,700	
Funding identified	1,800,000	1,800,000	1,800,000	1,800,000	7,200,000	MoE RTTI funding
Total cost of program	1,947,650	4,533,550	4,500,550	4,420,550	15,402,300	
Funding identified	1,800,000	1,800,000	1,800,000	1,800,000	7,200,000	
Funding gap	147,650	2,733,550	2,700,550	2,620,550	8,202,300	
Curriculum & Assessment	2017/18	2018/19	2019/20	2020/21	Total Cost	

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¹²⁸ USAID is in the design phase for a large-scale reading program which could deliver some core CPD activities.

1. New English and mathematics syllabuses and teacher guides ¹²⁹	216,913	960,663	833,663	-	2,011,240	
2. National literacy and numeracy assessment system for grades 3 & 6 ¹³⁰	21,500	117,833	85,833	104,833	330,000	
Total cost of program	238,413	1,078,497	919,497	104,833	2,341,240	
Funding identified	-	-	-	-	0	
Funding gap	238,413	1,078,497	919,497	104,833	2,341,240	
Student Well-being	2017/18	2018/19	2019/20	2020/21	Total Cost	
Implement National Policy on Girls' Education	225,500	209,500	209,500	9,500	654,000	
Funding identified	200,000	200,000	200,000	-	600,000	Let Girls Learn ¹³¹ (estimate)

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¹²⁹ USAID reading program may have synergy with the English syllabus and teacher guides (which would be based on EGRA+ instructional materials)

¹³⁰ PSL will be developing literacy and numeracy assessments for operator schools. In addition, the USAID reading intervention may include assessment activities.

¹³¹ USAID's Let Girls Learn will fund a number of NGOs to deliver interventions but the scale and scope was not confirmed at the time of writing.

1. Improve the TVET information base	22,400	17,400	2,400	2,400	44,600	
TVET	2017/18	2018/19	2019/20	2020/21	Total Cost	
Funding gap	195,050	242,700	245,050	129,050	811,850	
Funding identified	14,800,000	14,800,000	14,800,000	14,600,000	59,000,000	
Total cost of program	14,995,050	15,042,700	15,045,050	14,729,050	59,811,850	
Funding identified	14,600,000	14,600,000	14,600,000	14,600,000	58,400,000	WFP & Mary's Meals ¹³⁴
3. Strengthen school health and student well-being ¹³²	14,747,550	14,818,200	14,810,550	14,704,550	59,080,850	School feeding ¹³³
2. Counter school-related gender-based violence	22,000	15,000	25,000	15,000	77,000	

Donations of deworming medication and continued support for school feeding have been assumed and would need additional costing and discussion with development partners. UNFPA may support the roll out of the health curriculum. UNICEF have previously supported school-based counsellors and WASH. World Food Programme and Mary's Meals provide school feeding.

¹³³ Assumes USD 40 per year per child.

WFP aims to apply for McGovern-Dole support for school feeding for 2017/18 onwards. Mary's Meals aims to expand provision using philanthropic donations and fundraising. MoE considers school feeding funding at current levels to be likely.

Total cost of program	114,900	137,900	232,900	207,900	643,600	
3. Higher Education Act	-	15,000	15,000	-	30,000	
2. Improve equity and efficiency in higher education finance	10,000	18,000	163,000	153,000	344,000	
Increase quality and relevance in Higher Education	104,900	104,900	54,900	54,900	269,600	
Higher Education	2017/18	2018/19	2019/20	2020/21	Total Cost	
Funding gap	34,800	99,275	1,109,500	1,142,300	3,438,475	
Funding identified	-	-	-	-	0	
Total cost of program	34,800	99,275	1,109,500	1,142,300	3,438,475	
3. Lay the foundation for a national qualification framework for agriculture	12,400	27,575	36,800	82,000	158,775	
2. Improve the quality of TVET delivery ¹³⁵	-	54,300	1,070,300	1,057,900	3,235,100	

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Both EU and UNESCO have proposed support for TVET quality, teacher training and resourcing.

Funding identified	-	-	-	-	0	
Funding gap	114,900	137,900	232,900	207,900	643,600	

Annex

Annex 1 Intermediate results framework

The current capacity of the education system is taken into consideration when developing the intermediate results. The targets are based on the best estimates of the resources available including both financial and human capital.

Table 0-1 Intermediate results framework

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
G2B-ESP	Improved student learning outcomes	Proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex, grade and location (SDG 4.1.1)	To be calculated	To be set	To be set	To be set	To be set	Planned grade 3 & 6 learning assessments, EGRA and annual WAEC results
	Young people have the necessary skills for livelihoods and employment	Youth/adult educational attainment rates by age group, economic activity status, level of education and program orientation (SDG 4.4.3)	To be calculated	To be set	To be set	To be set	To be set	Tracer study

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
School Quality	Improved WASH at ECE, basic and secondary schools	Proportion of schools with access to: (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions), by location and type of school (SDG 4.a.1)	Student/functioning toilet ratio 100:1 (2016, all schools, WASH national survey)					Annual school census
Component 1	National school quality standards	Standards developed and disseminated	No	Yes				N/A
	School quality assessment tool for Inspectors, DEOs and principals	SQA tool developed, digitized and operational	No	Yes				N/A
Component 2	School Quality Improvement Plan Guidelines and template and School Grant Guidelines approved	Policy and tools updated, approved and disseminated	No, using previous policy	Yes				N/A

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	School Improvement Plans (SIP)	# and % of public schools with SIP, by location and type of school	To be calculated				90% or 2,500 schools	SQA
	School quality grants provided to schools	# and % of public ECE and basic education schools receiving school grants disaggregated by type, location and amount	To be calculated				90% or 2500 schools	Annual school census and SQA
Component 3	Principals certified	# and % principals certified disaggregated by level, location and gender	0	500	1,000	1,750	2,500 principals certified	Program reports
Component 4	Update VPL and water system designs	Approved and disseminated	No	Yes				N/A
	Construct VPL and water systems	# of toilets and water systems constructed disaggregated by location and level of school	To be calculated	500 toilets 250 water systems	1000 toilets 500 water systems	1500 toilets 750 water systems	2,000 toilets 1,000 water systems	Annual school census and SQA

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
Education Management & Accountability	Resourcing targeted on G2B- ESP programs	% and \$ share of national budget and GDP	FY 2015/16 13.46% of national budget and 4.12% of GDP	To be set	To be set	To be set	To be set	MoE and GoL budget
		% and \$ budget allocation to G2B- ESP programs and education levels	To be calculated	To be set	To be set	To be set	To be set	MoE and GoL budget
		Extent to which explicit formula- based policies reallocate education resources to disadvantaged populations (SDG 4.5.3)	2016 Ministerial Briefing Paper approved by Cabinet	Targeting policy approved				N/A
		Education expenditure per student by level of education and source of funding (SDG 4.5.4)	2015 ECE: \$24 Primary: \$72 JHS: \$79 SHS: \$ 90 TVET: \$1,100 HE: unknown	To be set	To be set	To be set	To be set	MoE and GoL budget

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	Increased monitoring of schools	# and % of schools monitored disaggregated by frequency, level and location	0	50% 1,250	90% 2,500	95% 2,550	100% 2,700	SQA and annual school census
Component 1	EDU established, staffed and functioning	Share (%) of G2B-ESP programs and components that are 'on-track'	-	75%	80%	85%	90%	JESR
Component 2	Workforce reform	# and % of teacher workforce who are supplementary, volunteer, unqualified disaggregated by sex, level of school and location	Oct 2016 Vol. teachers 3,779 Unqualified teachers 20,387	To be set	To be set	To be set	To be set	Payroll and annual school census
Component 3	School quality assurance inspections	# and % of schools monitored disaggregated by frequency, level and location	0	50% 1,250	90% 2,500	95% 2,550	100% 2,700	SQA and annual school census
Component 4	DEO visits	As above						
Component 5	Education sector reviews	# of JESR	1 (2015) 0 (2016)	1	2	3	4	JESR
	School Census	# of annual school census	1 (2015)	1	2	3	4	Annual School

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	implemented							Census Report
	Programmatic budgeting, planning and reporting, including new chart of accounts	# of Annual Operational Plans including programmatic budgets, intermediate targets and quarterly reporting	0	1	2	3	4	Annual Operational Plan
Early Childhood Education	Improved access to quality ECE	Net Enrolment Rate	29.4%	To be set	To be set	To be set	To be set	Annual school census
		Participation rate in organized learning (one year before the official primary entry age), by sex and location (SDG 4.2.2)		To be set	To be set	To be set	To be set	Annual school census & DHS
	Reduced proportion of overage children in ECE	Percentage of children over-age for grade (pre-primary, primary education, lower secondary education), by sex and location (SDG 4.1.6)	74.7%	To be set	To be set	To be set	To be set	Annual school census
	Increased proportion of trained and	Pupil-Qualified Teacher Ratio, by sex and location	77:1	To be set	To be set	To be set	To be set	Annual school census

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	qualified teachers							
Component 1	Public awareness campaign on benefits of ECE and good parenting skills	Number of parents receiving messages, by location	0	50,000	100,000	150,000	200,000	Program report
Component 2	ECE pre-service graduates	# of teachers, by sex and type of certification	Not known	0	100	200	300	Program report
	ECE teachers receive CPD and qualifications	Percentage and # of teachers who received in-service training in the last 12 months by type of training, by sex, type of school and location (SDG 4.c.7)	To be calculated (UNICEF training)	750	1,500	2,250	3,000	Program report and annual school census
Component 3	Construction of ECE infrastructure	# of classrooms constructed	To be calculated (GPE grant)	7	15	23	30	Program reports
Component 4	ECE Policy developed, approved and disseminated	ECE Policy	No	Yes				N/A
	ECE teaching and	# and % of public ECE schools	0	To be set	To be set	To be set	2,700	SQA, program

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	learning materials and grant distribution	receiving additional resources disaggregated by type of intervention, amount of grant and location						reports and annual school census
Overage and Out-of-School Program	Reduced average over-age gap in targeted schools	Average overage gap per grade by sex and location	2.3 years	To be set	To be set	To be set	To be set	EMIS
		Percentage of children over-age for grade (pre-primary, primary education, lower secondary education), by sex and location (SDG 4.1.6)	74.7%	To be set	To be set	To be set	To be set	Annual school census
	Reduced number of out-of-school children and young people	Out-of-school rate (primary education, lower secondary education, upper secondary education) by sex and location (SDG 4.1.5)	To be calculated	To be set	To be set	To be set	To be set	Annual school census and DHS
	Increased number of out-of-school children and young people returning to formal education	# and % of out-of-school children and young people in programs returning to formal education	To be calculated	20,000	40,000	80,000	120,000	Program reports and annual school census

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
Component 1	AE Policy and Guidelines	Approved and disseminated	Draft	Yes				N/A
	Regulate AE providers	#, type and beneficiaries of AE providers licensed by MoE	To be calculated	To be set	To be set	To be set	To be set	Annual school census
	Recruit, induct and deploy 8 new AE Supervisors	# of AE Supervisors active in counties	10	15	15	15	15	Program report
	Update AE curricular and instructional materials	Approved and disseminated	Draft	50% complete	100% complete			Program report
Component 2	CPD for district- based teachers, officers and principals	# trained by sex, role and training module	To be calculated (program reports)	500	1,000	1,500	2,000	Program report
	Institutionalize short course on AE	# of institutions offering approved AE teacher training	1	1	1	2	2	Program report
Component 3	Over-age students supported	# and % of students enrolled and completing over-age programs	To be calculated	25,000	50,000	75,000	100,000	Program report and annual school census

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
Component 4	Out-of-school students supported	# of out-of-school children and young people successfully completing programs	To be calculated	20,000	40,000	80,000	120,000	Program reports
Teacher Education & Management	Increased proportion of trained and qualified teachers	Proportion of teachers in: (a) pre- primary education; (b) primary education; (c) lower secondary education; and (d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex, by sex and location (SDG 4.c.1)	Qualified teachers - 34,331 (62%) Teachers that aren't qualified - 20,387 (37%)	To be set	To be set	To be set	To be set	Annual school census
		Pupil-trained teacher ratio by education level, by sex, type of school and location (SDG 4.c.2)	44:1 Student/ untrained teacher ratio	To be set	To be set	To be set	To be set	Annual school census
		Pupil-qualified teacher ratio by education level, by sex, type of school and location (SDG 4.c.3)	To be calculated	To be set	To be set	To be set	To be set	Annual school census
Component 1	Educator Management Policy	Policy approved and disseminated	No	Yes				N/A

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	approved							
	Biometric certification of teachers	% of newly qualified teachers who have biometric certification, by sex, level and location	0	0	25	50	100	Program reports
	Reduce teacher time out of class	# and % of teachers (current and newly qualified) receiving salary via mobile money	To be calculated	5% total workforce 50% newly qualified	10% total workforce 60% newly qualified	20% total workforce 75% newly qualified	50% total workforce 90% newly qualified	Payroll
	Pilots to improve teacher attendance, to attract teachers to work in rural areas, to attract female into teaching	Pilot interventions/studies	0	1	2	3	3	Study
	National dissemination of the teacher Code of Conduct to teachers, parents	Copies	0	-	50,000	-	-	Program report

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	and students							
Component 2	Pre-service 'C' and 'B' programs	# of teachers graduating by sex and location	2016 cohort graduates C	-	500 C preservice 300 B inservice	-	1,000 C pre- service 300 B in- service	Program report
	Accelerated Inservice 'C' certificate programs for unqualified teachers	# of teachers graduating by sex and location	0	-	870	1,740	2,600	Program report
	In-service CPD teacher training program for qualified teachers	Percentage of teachers who received in-service training in the last 12 months by type of training, by sex, type of school and location (SDG 4.c.7)	0	-	12,000	12,000	12,000	Program report, annual school census and SQA
Curriculum & Assessment	Increased use of quality teaching and learning materials	% of primary teachers using new English and mathematics materials, by location and type of school	0	-	To be set	To be set	95%	SQA and annual school census
Component 1	New English and mathematics	# of copies distributed	0	-	15,000 of each	-	-	Program report

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	syllabuses developed, trialed, approved and distributed for Grades 1-6,				syllabus			
	New English and mathematics teachers guide instructional materials developed for Grade 1-4	# of copies distributed	0	-	15,000 copies of English teacher guides	15,000 copies of math teacher guide		Program report
	National Curriculum Policy and National Curriculum Framework approved	Policy approved and disseminated	No	Yes	-	-	-	N/A
Component 2	National literacy and numeracy assessments for grade 3 & 6 developed, trialed and implemented	Administration of a nationally- representative learning assessment (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education (SDG 4.1.2)	(a) No (b) No (c) Yes				(a) Yes (b) Yes (c) Yes	Program report

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
Student Well- being	Increased number of girls in school	Gender Parity Index disaggregated by level and location	0.95412	To be set	To be set	To be set	To be set	Annual school census
	Improved female student survival rate	Female student transition rates to secondary education, by location	To be calculated	To be set	To be set	To be set	To be set	Annual school census
		Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse, by sex and location (SDG 4.a.2)	To be calculated	To be set	To be set	To be set	To be set	Study
Component 1	National Gender Report Card published	Report published annually	0	1	2	3	4	Annual report
	Train Central Office and county staff on gender issues	# officers trained, by sex and location	0	75	150	150	150	Program report
	Programs to improve girls access, retention and learning outcomes	# of girls supported by programs, by age, type of intervention and location	0	50,000	100,000	150,000	-	Program reports

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
Component 2	Anonymous reporting mechanism and procedures for investigating reports	# of cases reported to helpline, by age, sex, type of report, resolution status and location	0	20	40	60	80	Program report
	Reports of SGBV investigated and acted upon	Percentage of substantiated reports leading to MoE sanctions and judicial referral, by sex, location, type of report and status of resolution	0	25%	50%	75%	95%	Program report
Component 3	WASH training	# of teachers, principals and officers trained, by location, type of school and sex	To be calculated	500	1,000	1,500	2,000	Program report
	School health clubs	# of schools with school health club, by location and type of school	To be calculated	300	600	900	1,200	Program report and annual school census
	School-based counsellors	# and % of schools with one male and one female trained counsellor, by sex, location and type of school	To be calculated	250	500	750	1,000	Program reports and annual school census
	CSE & health curriculum being	Percentage of schools that provide life skills-based HIV and sexuality education, by location and type of	0	25%	50%	95%	95%	Annual school census and

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	taught in schools	school (SDG 4.7.2)						study
	Deworming	# of children receiving deworming	To be calculated	1,200,000	1,200,00	1,200,000	1,200,000	SQA and annual school census
	School feeding	# of children receiving daily meal	360,000 (Oct 2016)	400,000	400,000	400,000	400,000	Annual school census and program reports
Technical and Vocational Education and Training Program	Increased proportion of trained and qualified teachers	Pupil-Qualified Teacher Ratio (TVET sub-sector)	33:1	To be set	To be set	To be set	To be set	Annual school census
		Participation rate in technical and vocational programmes (15- to 24-year-olds), by sex and location (SDG 4.3.3)	To be calculated	To be set	To be set	To be set	To be set	Annual school census or HIES
		Gross enrolment ratio for tertiary education by location and type of education (SDG 4.3.2)	To be calculated	To be set	To be set	To be set	To be set	Annual school census
Component 1	Annual report on labor market	Report disseminated	0	1	2	3	4	Annual report

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	studies developed, approved and shared							
	Increase the share of TVET providers providing annual EMIS information based on the new form and improve the utility of data provided	Number of TVET providers captured each year, by location and type	65	75	95	115	130	Annual school census
Component 2	Selected training institute provided with TVET teacher training support and training TVET teachers	# of TVET qualified teachers graduate, by sex and type of specialism	0	60	120	180	240	Program reports
	Training provided to school administration and management in selected TVET	# of TVET institutions supported, by location and type of specialism	0	-	1	2	3	Program reports

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	institutions							
Component 3	TVET Certificate 1 and 2 agriculture curricula developed, trialed, approved and distributed	Approved and disseminated	No	-	-	Yes		Program report
	Number of institutions using approved curriculum to deliver Certificate 1 or 2 in Agriculture	# of institutions, by location and type # of students, by sex, location and level of qualification	To be calculated	200	3	3	3	Program report and annual school census
Higher Education	Increased share of enrolment of students from low income households and for women	Share of higher education enrollment from the poorest 40% of the 25 to 35 year-old population by sex	0.8 % for women and 1.6% for male (HIES 2014)	To be set	To be set	To be set	To be set	HIES
		Gross enrolment ratio for tertiary education by location and type of education (SDG 4.3.2)	To be calculated	To be set	To be set	To be set	To be set	Annual school census
Component 1	Proportion and number of students enrolled in	Proportion and # of students enrolled in accredited programs, by	0 programs				9 programs	Program report

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	accredited programs	sex and location	0% and 0#					
	Quality assurance meetings between universities	# of meetings	0	9	18	27	36	Program report
	Labor market relevant programs developed at community colleges	# of programs relevant to labor market needs, by institution and type of program	0	1	2	3	5	Program report
	Partnerships developed between Liberian and non- Liberian higher education institutions and also between industry (employers) and higher education institutions	# of partnerships (at faculty or institutional level)	0	3	6	9	12	Program reports
Component 2	Completed cost- effectiveness study	# of studies	0	1	2	-	-	Study

Program	Outcomes or outputs	Indicator/s	Baseline	June 2018	June 2019	June 2020	June 2021	Data source
	Teaching and learning innovation grant financing	\$ of grant financing, by institution	\$0	-	-	\$150,000 disbursed	\$150,000 disbursed	Program report
	Unit cost analysis by institutions, field of studies and degrees	Study completed and a new modality of higher education financing established	0	1	2	3	-	Study
	Scholarships are better targeted	Number of higher education scholarships awarded by beneficiary country by sex, sponsoring country and area of study (SDG 4.b.2)	To be calculated	To be set	To be set	To be set	To be set	Program report
Component 3	Revised Higher Education Act passed	Higher Education Act status	No	-	-	Yes	-	Policy

Annex 2 Operational planning, monitoring and reporting process

An Annual Operational Plan will be developed for each year by the MoE based on G2B-ESP programs, components and activities. Key features of the AOP are:

- Realistic timeframe working within the GoL budget planning cycle
- Programmatic budgeting based on G2B-ESP components which reflects development partner and GoL contributions and identifies funding gaps
- Clear responsibilities and accountability for delivery of activities with tasks allocated to specific officers and departments
- Incorporating data from EMIS and planned G2B-ESP studies
- Intermediate targets and data collection activities
- Inclusion of recommendations and learning from annual Joint Education Sector Reviews which will review targets and indicators
- Quarterly reporting on activities and expenditure and public disclosure of data, audits and reports under the Freedom of Information law
- Active engagement and involvement of ESDC
- Review of risk matrix and mitigation strategies, including national disaster riskreduction plan

The Annual Operational Plan process will be led by the Deputy Minister for Planning, Research and Development and facilitated by officers from planning, monitoring and evaluation, and budgets. Key MFDP and CSA officers will be involved as required. Relevant departments and bureaus will develop operational plans, targets and budgets for each program and component based on a review of the previous year's achievements. Operational planning for Year 1 (2017/18) will begin in December 2016.

The Education Sector Development Committee will be actively consulted and involved to ensure alignment of externally funded activities with G2B-ESP operational budgeting. A key feature of the planning process will be the active involvement of MoE teams to maximize ownership and accountability.

The Annual Operational Plan will be a public document, reviewed and reported quarterly (including internal and external funding, expenditure and funding gaps), assessed annually by the JESR and reported in the MoE Annual Report to the public and legislature (Table 0-2).

Table 0-2 Annual operational planning and reporting cycle (proposed)

Month	Planning and reporting milestone	
January	School census report published. Operational planning for next year begins	
February	Operational plan complete; endorsed by ESDC	
March	Q3 review and reporting including budget expenditure	
April	Budget discussions with MFDP	
May		
June	Q4 review and reporting. Joint Education Sector Review. Annual Report. Annual audit. Review and update national DRR plan.	
July	Implementation begins; monthly ESDC meetings	
August		
September	Q1 review and reporting.	
October	Annual school census data collection	
November	Verification of school census data by independent ESDC team	
December	Q2 review and reporting.	

For Year 1 the schedule for the development of the Operational Plan will begin immediately (Table 0-3)

Table 0-3 Timetable for Year 1 Operational Plan development

Activity	Milestone	Responsible
Prepare Operational Plan template	16 th December	Deputy Minister for Planning, Research and Development
Senior Management Team update on Operational Plan	Weekly	Deputy Minister for Planning, Research and Development
ESDC engagement and briefing on progress	Monthly	Donor coordinator
Reports to Cabinet and legislature on G2B-ESP preparations and implementation	Monthly (Cabinet) Quarterly (legislature) Or as requested	Minister of Education
2017/18 budget planning meetings with MFDP and	Monthly	Deputy Minister for Administration

CSA to ensure efficiency savings and programmatic budgeting		
Convene development partner commitment meeting/s and identify funding for components	16 th December	Minister of Education
Populate Intermediate Results Framework with baseline and targets	End of January 2017	Assistant Minister, Planning, Research and Development
2017/18 Operational Planning workshops for each program led by relevant Deputy Minister and facilitated by planning staff. Includes M&E and budget staff, CEOs and relevant ESDC members.	End of January 2017	Deputy Minister for Planning, Research and Development and relevant program leads
CEOs and DEOs develop county and district operational plans based on G2B-ESP programs. Approval by MoE.	End of February 2017	Assistant Minister, Planning, Research and Development
Endorsement and commitment to Operational Plan from development partners	End of February 2017	Minister of Education
Communication plan for G2B-ESP finalized and implemented including messaging for at-age enrolment	End of February 2017	Director, Communications Director, Parent and Community Engagement and National Dropout Prevention
Approval of new chart-of- accounts for programmatic budgeting including commitments from development partners	End of March 2017	Deputy Minister for Administration
Q3 review and reporting on G2B-ESP related areas	End of March 2017	Deputy Minister for Planning, Research and Development and relevant program leads
Joint Education Sector Review and independent verification for 2016/17 to review targets and indicators	End of April 2017	Deputy Minister for Planning, Research and Development and ESDC chairperson

Final revisions to Operational Plan for 2017/18	End of May 2017	Assistant Minister, Planning, Research and Development
Q4 review and reporting on G2B-ESP related areas	End of June 2017	Deputy Minister for Planning, Research and Development and relevant program leads
Preparations for SDG reporting	End of June 2017	Assistant Minister, Planning, Research and Development and ESDC
G2B-ESP Year 1 implementation	1 st July 2017	All MoE officers

Annex 3 Summary of teacher, principal and education officer professional development

Program/s	Who	What	Target	Unit cost (USD) per person trained	Notes
School Quality	ECE/Basic and Secondary school principals	Principals' Training Program	1,500 over three years	500	WASH, school feeding & deworming, reducing gender-based violence (including counselors), overage & out-of-school children, quality ECE, early grade literacy & numeracy, school grants.
Education Management & Accountability	DEOs	Regional training of CEO, DEO and other county level EO staff	100 a year	210	Training of G2B-ESP priorities
	School Inspectors	Induction & annual refresher training	20 inspectors per year	2,067	20 trained per year x 3 years
ECE	Unqualified ECE teachers	ECE 'C' certificate	3,000 (750 per year)	800	
Overage & Out-of-School	Alternative education teachers	Teaching and management of alternative and accelerated education programs	TBD	TBD	To be included in the program designs
Teacher Education & Management	Pre-service 'C' residential teachers	'C' certificate 18 months	1,000 over four years (500 every two years)	4,800 ¹³⁶	Update curriculum with key G2B-ESP priorities & use new early grade English, math, CSE/health and special education

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Assumes total RTTI funding remains consistent at USD 600,000 annually per RTTI and unit costs are reduced for residential students from USD 5709 to USD 4,800 through user-pay and other institutional reforms. C certificate will be lengthened to 18 months by time of ESP implementation.

Program/s	Who	What	Target	Unit cost (USD) per person trained	Notes
					instructional materials
	In-service junior high school teachers	'B' certificate 18 months	600 over four years (300 every two years)	4,000 ¹³⁷	Assumes any expansion beyond 500 every two years is on a user-pay basis.
	In-service unqualified teachers	Accelerated In-service 'C' certificate 3 weeks residential at district level with self-study & CPD	2,600 over four years (870 per year)	800	Focus on G2B-ESP priorities including English and math instruction using new curriculum plus health, gender, overage & special education modules. Delivered by RTTI lecturers and Instructional Supervisors.
	Early grade basic education in-service teachers	CPD	12,000 annually for three years	122 per teacher per year (USD 83 per year per teacher for cluster workshop)	Modules that focus on teaching English, math, gender, overage children, school health and special education for primary teachers.
	Instructional supervisors	Annual CPD modules	300 annually	610 per IS per year ¹³⁸	One-week county-based training of trainers on CPD modules (above).
Student Well-being	Central office and county based staff	Gender Policy implementation and data collection	75 annually	100 per officer	

¹³⁷ Includes estimate for additional training for lecturers and infrastructure and equipment to expand B certificate. B certificate is 18 month in-service.

¹³⁸ Included in the cost of primary teachers' CPD (above)

Program/s	Who	What	Target	Unit cost (USD) per person trained	Notes
	School-based counsellors & school health advisers (volunteer teachers)	School health clubs, CSE and school-based counselling	2,400 over four years (600 annually)	75 per teacher	Includes school health club kit including menstruation and WASH guidance
	County School Feeding Coordinators	Annual refresher training	15 annually	1,303 per officer	Includes deworming
TVET	TVET teachers and instructors	TVET teacher training program in an existing training institution TVET 'C' certificate	240 over four years (60 annually)	800	Short course, pedagogical skills

Annex 4 Summary of research trials and studies

Program	Study, trial or research	Duration	Unit cost (USD)	Notes
Education Management & Accountability	Partnership Schools for Liberia impact evaluation	Three years 2016-19	Funded	IPA
	Capacity assessment and performance appraisal of DEO and CEO staff	One year 2017/18	5,000	
	Evaluation of EO training	One year 2020/21	5,000	
School Quality Program	Test the SQA tool	One year 2017/18	28,500	PSL
	Conduct research on impact of school grants	Two years 2019-21	100,000	
	Evaluation of impact of the principals' training program	Two years 2019-21	50,000	
ECE	Early learning system diagnostic • Quality and learning outcomes study	One year 2017/18	400,000 250,000	Possibly funded by Early Learning Partnership ¹³⁹
	Parental perception surveySupply, demand, and		100,000	

¹³⁹ ELP will commission one service provider to deliver these interrelated diagnostic and systems evaluation studies in partnership with MoE.

projection study:			
projection study			
ECE teacher training costing study		25,000	
		25,000	
Early learning systems evaluations	Two years 2018-2020	600,000	Possibly funded by Early Learning Partnership
 Pilot new school- based and community-based programs in the most at need areas which improve ECE quality 		200,000	
Teacher training evaluation			
 Process evaluation of ECE provision in PSL schools 		100,000	
 Quality and learning outcomes follow-up study 		100,000	
		200,000	
Supply, demand and projection study	One year 2017/18	50,000	To be funded by Early Learning Partnership
Pilot new school-based and community-based programs in the most at need areas	Two years 2018-2020	200,000	To be funded by Early Learning Partnership

	which improve ECE quality			
	Quality and learning outcomes study	Two years 2018-2020	150,000	To be funded by Early Learning Partnership
Overage & Out-of-School	Conduct an analysis of the costs, salary implications and demand for a longer preservice AE specialism 'C' certificate	One year 2020/21	30,000	
	Conduct an analysis of the root causes of overage enrolment	One year 2017/18	30,000	
	Conduct a rapid assessment of evidence and learning from ABE, AYP and other interventions	One year 2017/18	5,000	
Teacher Education & Management	Teacher deployment, efficiency and utilization study	One year 2017/18	50,000	
	Pilot one strategy to reduce teacher absenteeism	One year 2018/19	100,000	
	Remote teacher survey	One month 2017/18	20,000	Phone research
	Pilot rural hardship incentive allowances	Two years 2019-2021	136,000	100 teacher positions receiving hardship incentives
	Pilot one strategy for attracting and retaining more	One year	100,000	

	women to pre-service teacher training	2019/20		
Curriculum & Assessment	Pilot National Assessment System for one grade	2018 or earlier	20,000	Unit cost does not include cost of development of materials. Included in PSL evaluation costs.
Student Well-being	Design, pilot, evaluate and scale-up 3 interventions to improve access and learning outcomes for girls and young women	Three years 2017-2020	200,000 per pilot	Let Girls Learn as possible funding source
TVET	TVET student tracer study	One year 2017/18	20,000	Phone research
	Newly qualified TVET certified teachers' tracer study	Annually 2018-21	15,000	Phone research tracking 60 newly qualified TVET teachers annually
Higher Education	Comparative unit costs and cost-effectiveness study for three-five priority diploma and degree programs	Annually 2017-2020	30,000	10,000 per year

Annex 5 Sustainable Development Goal 4 targets and indicators

- 4.1 By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes
- 4.2 By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education
- 4.3 By 2030, ensure equal access for all women and men to affordable and quality technical, vocational and tertiary education, including university
- 4.4 By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship
- 4.5 By 2030, eliminate gender disparities in education and ensure equal access to all levels of education and vocational training for the vulnerable, including persons with disabilities, indigenous peoples and children in vulnerable situations
- 4.6 By 2030, ensure that all youth and a substantial proportion of adults, both men and women, achieve literacy and numeracy
- 4.7 By 2030, ensure that all learners acquire the knowledge and skills needed to promote sustainable development, including, among others, through education for sustainable development and sustainable lifestyles, human rights, gender equality, promotion of a culture of peace and non-violence, global citizenship and appreciation of cultural diversity and of culture's contribution to sustainable development
- 4.a Build and upgrade education facilities that are child, disability and gender sensitive and provide safe, non-violent, inclusive and effective learning environments for all
- 4.b By 2020, substantially expand globally the number of scholarships available to developing countries, in particular least developed countries, small island developing States and African countries, for enrolment in higher education, including vocational training and information and communications technology, technical, engineering and scientific programmes, in developed countries and other developing countries
- 4.c By 2030, substantially increase the supply of qualified teachers, including through international cooperation for teacher training in developing countries, especially least developed countries and small island developing States.

Table 0-4 SDG4-Education 2030 Indicators and Intended Reporting

No.	Global SDG4-Education 2030 Indicators	Mandatory SDG annual reporting	Annual EMIS reporting	G2B-ESP indicator	Consider for future reporting	Notes
4.1.1	Proportion of children and young people (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education achieving at least a minimum proficiency level in (i) reading and (ii) mathematics, by sex	✓	√	√		
4.1.2	Administration of a nationally-representative learning assessment (a) in Grade 2 or 3; (b) at the end of primary education; and (c) at the end of lower secondary education		✓	✓		
4.1.3	Gross intake ratio to the last grade (primary education, lower secondary education)		✓			
4.1.4	Completion rate (primary education, lower secondary education, upper secondary education)		✓			
4.1.5	Out-of-school rate (primary education, lower secondary education, upper secondary education)		✓	✓		Using HIES data
4.1.6	Percentage of children over-age for grade (primary education, lower secondary education)		✓	✓		
4.1.7	Number of years of (a) free and (b) compulsory primary and secondary education guaranteed in legal frameworks		✓			This indicator is similar to 4.2.5 on pre-primary education
4.2.1	Proportion of children under 5 years of age who are developmentally on track in health, learning and	√			·	Requires health data or specific survey (e.g. Ministry of Health,

No.	Global SDG4-Education 2030 Indicators	Mandatory SDG annual reporting	Annual EMIS reporting	G2B-ESP indicator	Consider for future reporting	Notes
	psychosocial well-being, by sex					UNICEF).
4.2.2	Participation rate in organized learning (one year before the official primary entry age), by sex	√	✓	✓		This will include overage students and affect international comparability.
4.2.3	Percentage of children under 5 years experiencing positive and stimulating home learning environments				√	These data are difficult to collect and require collaboration with Ministry of Health and relevant surveys.
4.2.4	Gross pre-primary enrolment ratio		✓			This will include overage students and affect international comparability.
4.2.5	Number of years of (a) free and (b) compulsory pre- primary education guaranteed in legal frameworks		✓			This indicator is similar to 4.1.7 on primary and secondary education
4.3.1	Participation rate of youth and adults in formal and non- formal education and training in the previous 12 months, by sex	√	*		*	Data on some formal and most non- formal education and training is collected by the MYS. Should include community-based and NGO programs.
4.3.2	Gross enrolment ratio for tertiary education		✓	✓		This includes all post-secondary and tertiary including university.
4.3.3	Participation rate in technical and vocational programmes (15- to 24-year-olds)		1	4		Should include all technical and vocational education programmes, including MoE, MoYS, MoL and others.
4.4.1	Proportion of youth/adults with information and communications technology (ICT) skills, by type of skill	✓			✓	To be considered, along with data on other skills needed for the future world of work. MoE, MYS, MoL and

No.	Global SDG4-Education 2030 Indicators	Mandatory SDG annual reporting	Annual EMIS reporting	G2B-ESP indicator	Consider for future reporting	Notes
		1 0				others
4.4.2	Percentage of youth/adults who have achieved at least a minimum level of proficiency in digital literacy skills				✓	To be considered, along with data on other skills needed for the future world of work. MoE, MYS, MoL and others.
4.4.3	Youth/adult educational attainment rates by age group, economic activity status, level of education and programme orientation			✓	✓	Would require data on economic activity (Ministry of Labour), youth and adults.
4.5.1	Parity indices (female/male, rural/urban, bottom/top wealth quintiles and others such as disability status, indigenous peoples and conflict- affected, as data become available) for all education indicators on this list that can be disaggregated	~	~	*	*	Priorities could be female/male; rural/urban, bottom/top wealth quintiles and disability status. To be reported as data become available.
4.5.2	Percentage of students in primary education whose first or home language is the language of instruction				✓	
4.5.3	Extent to which explicit formula-based policies reallocate education resources to disadvantaged populations			✓		
4.5.4	Education expenditure per student by level of education and source of funding		~	✓	✓	Further data would be required to cover all levels and types of education.
4.5.5	Percentage of total aid to education allocated to low-income countries	n/a	n/a	n/a	n/a	
4.6.1	Percentage of the population in a given age group achieving at least a fixed level of proficiency in functional (a) literacy and (b) numeracy skills, by sex	~	~		~	LISGIS has data on literacy, from HIES Data on numeracy could be collected

No.	Global SDG4-Education 2030 Indicators	Mandatory SDG annual reporting	Annual EMIS reporting	G2B-ESP indicator	Consider for future reporting	Notes
4.6.2	Youth/adult literacy rate		✓		✓	Adult literacy is not a strategic priority in G2B-ESP but will be reported in EMIS.
4.6.3	Participation rate of youth/adults in literacy programmes		✓		✓	Adult literacy is not a strategic priority in G2B-ESP but will be reported in EMIS.
4.7.1	Extent to which (i) global citizenship education and (ii) education for sustainable development, including gender equality and human rights, are mainstreamed at all levels in: (a) national education policies (b) curricula (c) teacher education and (d) student assessments	√			√	Will require reviews of national education policies, curricula, teacher education, and student assessments.
4.7.2	Percentage of schools that provide life skills-based HIV and sexuality education		✓	✓		Data from UNFPA programs. Will require additional EMIS question.
4.7.3	Extent to which the framework on the World Programme on Human Rights Education is implemented nationally (as per the UNGA Resolution 59/113)				✓	
4.7.4	Percentage of students by age group (or education level) showing adequate understanding of issues relating to global citizenship and sustainability				~	Data could be collected through student assessments in coming years.
4.7.5	Percentage of 15-year-old students showing proficiency in knowledge of environmental science and geoscience				✓	Data could be collected through student assessments in coming years.
4.a.1	Proportion of schools with access to: (a) electricity; (b) the Internet for pedagogical purposes; (c) computers for pedagogical purposes; (d) adapted infrastructure and materials for students with disabilities; (e) basic drinking water; (f) single-sex basic sanitation facilities; and (g) basic handwashing facilities (as per the WASH indicator definitions)	✓	4	1	4	The G2B-ESP reporting includes student/toilet ratio. Other data could be collected in due course with additional school census data.

No.	Global SDG4-Education 2030 Indicators	Mandatory SDG annual reporting	Annual EMIS reporting	G2B-ESP indicator	Consider for future reporting	Notes
4.a.2	Percentage of students experiencing bullying, corporal punishment, harassment, violence, sexual discrimination and abuse			✓	*	Some data are collected and further student surveys may be required.
4.a.3	Number of attacks on students, personnel and institutions				✓	Data are difficult to collect.
4.b.1	Volume of official development assistance flows for scholarships by sector and type of study	✓	✓		✓	Data may be available.
4.b.2	Number of higher education scholarships awarded by beneficiary country		✓	✓	√	
4.c.1	Proportion of teachers in: (a) pre-primary education;					
	(b) primary education; (c) lower secondary education; and	✓	✓	✓		
	(d) upper secondary education who have received at least the minimum organized teacher training (e.g. pedagogical training) pre-service or in-service required for teaching at the relevant level in a given country, by sex					
4.c.2	Pupil-trained teacher ratio by education level		✓	✓		
4.c.3	Percentage of teachers qualified according to national standards by level and type of institution		✓			

No.	Global SDG4-Education 2030 Indicators	Mandatory SDG annual reporting	Annual EMIS reporting	G2B-ESP indicator	Consider for future reporting	Notes
4.c.4	Pupil-qualified teacher ratio by education level		✓	✓		
4.c.5	Average teacher salary relative to other professions requiring a comparable level of qualification				~	Further data would be required in cooperation with Ministry of Labour
4.c.6	Teacher attrition rate by education level				~	Further data required.
4.c.7	Percentage of teachers who received in-service training in the last 12 months by type of training		✓	*		Would require additional data.

Annex 6 G2B-ESP risk matrix

Risk	Potential impact	Mitigation strategies
External		
Not getting payroll savings from redundancies and removal of ghost teachers ring-fenced for education	Qualified teachers and competent supplementary and volunteer teachers cannot be added to the payroll, reducing access and quality	Engage regularly with CSA and MFDP; inform Cabinet and legislature; model impact on recurrent budget; target most disadvantaged areas first; include as policy trigger in development assistance
Not getting reduction in subsidies and scholarships	Larger funding gap; inequitable distribution of scarce resources	Engage regularly with MFDP, Cabinet and legislature; ensure development partners provide adequate funding for scholarships; reduce international scholarships and target disadvantaged groups and key development areas; communication campaign to ensure public know reason for reducing subsidy; include as policy trigger in development assistance
Not able to reduce higher education transfers	Larger funding gap; inequitable distribution of resources to tertiary level	Engage regularly with MFDP, Cabinet and legislature; consult with Association of Liberian Universities and student bodies; replace GoL funding with performance- related development funds
Environmental factors e.g. rainy season	Impact on speed and scope of G2B-ESP implementation	Consider in Operational Plan; time activities for different seasons; use distance education approaches for training; use mobile communications
External disruption (e.g. epidemics, conflict, natural disasters, electoral internal violence, refugee influx (i.e. Cote d'Ivoire 2010), internal	Redirection of G2B-ESP human capacity and funding to emergency	National disaster-risk reduction plan updated annually and included in JESR; county and district planning; ensuring adequate

displacement of population, disruption/damaging of school infrastructures)		contingency budget in MoE programmatic budget line and chart of accounts; engagement with ESDC
Funding gap not filled	Critical components may not be implemented	Prioritize critical components in GPE grant application; hold donor summit to ensure commitments are known; review funding position quarterly; EDU fundraising position; ensure development partner contributions are clearly highlighted in budget; lobby Cabinet and legislature
Elections in 2017	Disruptions to school year and possible changes in senior managers; incoming ministers may have different priorities	Use ESDC and Cabinet endorsement for Year 1 Operational Plan; timetable activities accordingly; publicize G2B-ESP main activities; ensure junior officers are prepared, involved and know the plan well; briefing and transition plans for all political positions
Internal		
Key officers could be overloaded with the number and scope of programs and components	Some components may not be implemented due to lack of capacity	Operational plan to break down responsibilities to lower ranking officers; establish quarterly review and reporting to improve program management; use EDU to support key components; outsource (e.g. teacher training)
EDU may pose a risk to the efficiency of other MoE units (through secondment of high performing staff)	High performing staff leave MoE operational units impacting on program implementation	Recruit beyond MoE; ensure transition plans and enough time for handover; identify new talent
Program-level		
The funding available for improving the physical facilities is inadequate in	More schools, toilets and water systems needed than the GoL and development	Develop and use low-cost designs; use community mobilization and self-build

relation to need.	partners can afford reducing access and quality	approaches; engage private sector, faith-based and NGO groups; fundraising; targeting disadvantaged areas; utilize County Development Funds
Overage children are refused entry to school or pushed out of school due to policy reforms or incentives to schools to achieve correctage enrollment	Increase in out-of-school children and young people	Carefully craft communication messages; set policy to prevent expulsion of overage children; provide resourcing and training for schools, principals and teachers in effective strategies; take phased approach; carefully design incentives
Transferring large numbers of teachers onto payroll will be challenging	Slow transfer will mean many children will not have a teacher and teachers will lose moral when not paid	Review systems and processes; dedicate enough staff resources; close collaboration with CSA and MFDP; training for DEOs and CEOs; helpline for teachers; communication strategy; target most needy areas first; phased approach
User pay for pre-service may impact on female and remote teachers	Uncertain prospects of securing a teaching position quickly & fewer poor people and women reduce enrollment into teacher training, especially from remote areas	Scholarships and other measures to ensure women and people from remote areas apply; phased approach with regular review and analysis; ensuring new teachers are quickly on payroll
School level coordination of activities. For example, the removal of overage students from the ECE phase of a particular school may not bring about improved learning in the absence of providing teacher training and teaching materials to the school	Disjointed interventions which do not have the desired impact	Training for principals; careful timetabling of school-related activities during Operational Plan development; clear communication with schools and principals
School monitoring visits may not suffice to improve school	Schools do not change practices and principals are	Target poorly performing schools and districts first; link monitoring with incentives

quality	not held to account	such as school grants; provide improved communication with parents; phase in gradually and evaluate impact
Overage student program preparation, implementation and coordination will be challenging for districts	Overage interventions are not coordinated leading to little impact	Target resources and training at most needy areas first; train principals and DEOs together; develop planning templates; set realistic targets; engage ESDC and NGOs to support programs at local level

Annex 7 Communication strategy

Communication with stakeholders and the wider public is integrated across the G2B-ESP's programs. For example, the theory of change for ECE and basic education (Figure 4-1 and Figure 4-2) identifies pathways to change, and communication and community engagement are key for four of these:

- Engaged parents who can hold schools to account
- Students who are in the right grade and ready for school
- Safe and healthy environment
- Effective systems and policies

At different times, the Plan will require:

- Consultations with stakeholders (for example, the Joint Education Sector Reviews)
- Sharing data, telling people about policies, and publishing information on reforms (for example, data transparency)
- Public awareness campaigns (for example, the benefits of the G2B-ESP)
- Communication for behaviour change (e.g. to encourage age-appropriate enrollment)
- Communication for monitoring and accountability sharing information so that communities can identify problems, and report them (e.g. school report cards)

Table 0-5 sets out major communications activities from the different programs. Resources for these activities are included in those programs. In addition, there will be specific communication activities to promote and launch the plan including the development of a simple information booklet for parents and teachers.

Table 0-5 Selected major communications activities

Program	Component	Communication
School Quality Program	Establish school quality standards	Consultation on school quality standards
	2. School improvement grants	Raise awareness of grants and ensure transparency
	3. Increase the proportion of ECE, basic and secondary schools with toilets and safe water	Community engagement for toilet and water system construction
Education Management and Accountability Program	EDU and education partnerships	Widen stakeholder participation in ESDC
	2. Workforce reform	Communication with
	3. School inspection	teacher workforce on workforce reform
	5. Sector planning, budgeting, monitoring and financial strengthening	Raise MoE and public awareness of the role of the inspectorate.

		School Report Card Subsidy reform Fundraising Data transparency and reporting to stakeholders
Early Childhood Education Program	ECE public awareness campaign and outreach to families and communities about the value of ECE and good parenting skills Build additional ECE infrastructure	Public awareness campaigns to promote ECE, promote good parenting and ensure at- age enrolment Community engagement
Over-age and Out-of- School Program	Increase capacity to plan, budget and manage AE	Develop and implement communication plan in partnership with Public Relations and Communications officers to change public and education personnel perceptions about AE
Teacher Education and Management Program	Improve teacher registration, performance management and incentives	National dissemination of the teacher Code of Conduct to teachers, parents and students
Curriculum and Assessment Program	Develop curriculum policy, curriculum framework, and new syllabuses	Consult, edit, approve, print and disseminate the policy, framework, and syllabuses

Student Well-being Program	Implement National Policy on Girls' Education Counter school-related gender-based violence	Develop a simplified version of the Policy; print and distribute Raise awareness of the Policy's provisions on non-discrimination against pregnant adolescents and young mothers Improve data collection on gender issues; publish Girls' Education Report Card Publicize MoE hot-line and develop anonymous reporting channels
Technical and Vocational Education and Training Program	Improve the TVET information base	Hold a national stakeholder forum
Higher Education Program	3. Update the Higher Education Act	Revise the 1989 Act on Higher Education Act though support and engagement of key stakeholders

Guiding principles for MoE communication with the public

- Give clear, accurate and timely information whether it is good news or bad news so that people can trust the information.
- Use radio and community organizations and grass-roots networks. Make sure that information is easy to get for people who are not confident reading.
- Communication should be two-way, so it needs to be easy for stakeholders and community members to provide feedback and report problems. For example, via the MoE Facebook page.
- Use the MoE website as a repository for data, curricula and reports.

Annex 8 Student and teacher projections

Prior to development of the G2B-ESP, projections of key sectors were calculated. The G2B-ESP development was informed by the projections and other sector data. The projection covers Early Childhood Education, Primary (Basic), Junior High School, and Senior High School levels. TVET and Higher Education levels are excluded from the projection due to the lack of quality enrollment data.

The projection presents a realistic, low performance (status quo) scenario. Targets are set at a moderate rate to reflect that the timeframe of the Education Sector Plan is over the next four years. The methodology is to project enrollment in each level based on population growth and to project teachers and classrooms requirement based on change in enrollment. 2014/15 is chosen as the base year as it is the most recent year when the actual expenditure data is available.

The projection identifies significant demand in teachers supply and infrastructure. According to the current low capacity of three Rural Teacher Training Institutes(RTTI), there will be shortage of trained teachers to cope with the population growth in order to keep the current Student-Trained Teacher Ratio (STTR).

The same trend goes to the infrastructure development. In order to maintain the current Student-Classroom Ratio(SCR), more than 200 classrooms each year need to be built from 2017. Assuming an average school has 12 classrooms, the number equals to more than 20 schools to be built. The Government of Liberia has allocated zero amount of budget to education infrastructure over the past few years and this scenario is unlikely to change.

The public financing of education model was developed by the World Bank and adapted from the Ghana education projection model. The model was re-run in September 2016 with updated EMIS data.

	Target	2015	2016	2017	2018	2019	2020	2,02
	, , , , , , , , , , , , , , , , , , , 	2013	2010	2017	2018	2019	2020	2,02
Early Childhood Education								
SECTION 1: CORE DATA	T			1	1		<u> </u>	1
Population (3-5)		405,32	26 410,716	416,177	421,711	427,318	433,000	438,75
Total enrollment		539,66	537,839.59	535,875	533,764	531,501	526,509	523,38
Kids at age 3-5 enrolled		136,54	49 142,685	148,960	155,377	161,937	168,645	175,50
Gross Enrollment Ratio (GER)	120.0%	133.1%	131%	129%	127%	124%	122%	120%
Net Enrollment Ratio (NER)	40.0%	33.7%	35%	36%	37%	38%	39%	40%
Enrollment in private as % of total enrollment	40.0%	41.3%	41.1%	40.9%	40.7%	40.4%	40.2%	40%
Total public school enrolment		316,678	316,788	316,810	316,735	316,562	314,747	314,02
Teachers								
Pupil Teacher Ratio	30	38	36.42	35.14	33.85	32.57	31.28	3
Number of teachers required by PTR		14,311	14,766	15,250	15,766	16,319	16,829	17,44
Share of trained teachers (%)	80.0%	49%	54%	59%	65%	70%	75%	80%
Number of Trained teachers		7,048	8,029	9,074	10,189	11,382	12,601	13,95
Number of Untrained teachers		7,263	6,737	6,176	5,577	4,937	4,228	3,48
Teacher attrition (only trained teachers)	6.0%	6%	6%	6%	6%	6%	6%	6%

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Number of 'new' trained teachers needed(attrition +								
increase)			1,404	1,526	1,660	1,805	1,902	2,112
Number of upgraded teachers required (untrained to trained based on % trained								
teacher targets)			526	561	599	641	708	739
SECTION 2: Budget Project	tions							
1. Employee Compensation				,				_
PTR in public and community schools	50.00	53.10	52.58	52.07	51.55	51.03	50.52	50
Number of total teachers needed in public and community schools		5964	6024	6085	6144	6203	6231	6,281
Number of teachers paid by government		3929	4079	4228	4377	4525	4641	4,781
Number of teachers in public and community schools paid by nongovernment	1500	2035	1946	1857	1767	1678	1589	1,500
Average salary in multiple of GDP per capita	3.96	3.96	3.96	3.96	3.96	3.96	3.96	4
GDP growth (real GDP+ inflation)		8%	11%	13%	13%	13%	13%	13%
Average salary 'unit cost' per year (USD)		1,812	2,005	2,261	2,551	2,886	3,265	3,693
Total teacher salary (USD)		7,119,348	8,178,009	9,558,050	11,166,840	13,059,371	15,154,130	17,656,923
Number Non-teaching staff at school level paid by government		1,179	1,224	1,268	1,313	1,357	1,392	1,434
Average salary in multiple of GDP per capita	3.70	3.7	3.70	3.70	3.70	3.70	3.70	4

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Average salary 'unit cost' per year (USD)		1,692	1,872	2,111	2,382	2,695	3,049	3,449
Total non-teacher salary		1,994,360	2,290,926	2,677,520	3,128,194	3,658,354	4,245,164	4,946,277
Subtotal Employee Compensation		9,113,708	10,468,934	12,235,569	14,295,035	16,717,725	19,399,294	22,603,200
2. Goods and Services		110,749	122,545	138,166	155,938	176,403	199,554	225,744
3. Consumption of fixed capital		25,987	28,755	32,420	36,590	41,393	46,825	52,970
4. Investment								
Student classroom ratio	47	47.1	47.10	47.10	47.10	47.10	47.10	47
Number of classrooms (public)		6,723.5	6,725.8	6,726.3	6,724.7	6,721.1	6,682.5	6,667
Number of new classrooms needed			2	0	0	0	0	-
Unit cost of classroom		4,200	4,647	5,240	5,914	6,690	7,568	8,561
Subtotal Investment			10,805.9	2,446.1	0.0	0.0	0.0	-
Total for ECE		9,250,000	11,430,000	14,220,000	17,560,000	21,560,000	21,560,001	21,560,002
	Target	2015	2016	2017	2018	2019	2020	2,021
Primary								
SECTION 1: CORE DATA								
Population (6-11)		740,963	752,599	764,418	776,423	788,616	801,000	813,579
•		655,049	,		,	,	Í	·
Total enrollment		,	673,608	692,589	711,999	731,849	752,146	772,900
Kids at age 6-11 enrolled		361,929	375,332	389,067	403,141	417,561	432,334	447,468
Gross Enrollment Ratio (GER)	95.0%	88.4%	90%	91%	92%	93%	94%	95%
Net Enrollment Ratio	55.0%	48.8%	50%	51%	52%	53%	54%	55%

(NER)								
Enrollment in private as % of total enrollment	50.0%	42.8%	44.0%	45.2%	46.4%	47.6%	48.8%	50%
Total public school enrolment		374,535	377,089	379,431	381,548	383,432	385,069	386,450
Teachers								
Pupil Teacher Ratio	20.00	21.50	21.25	21.00	20.75	20.50	20.25	20
Number of teachers required by PTR		30,467	31,699	32,980	34,313	35,700	37,143	38,645
Share of trained/qualified teachers (%)	66.0%	62%	63%	64%	64%	65%	65%	66%
Number of Qualified teachers		18,975	19,944	20,954	22,012	23,122	24,285	25,506
Number of Unqualified teachers		11,492	11,755	12,027	12,301	12,578	12,858	13,139
Teacher attrition (only trained teachers)	6.0%	6%	6%	6%	6%	6%	6%	6%
Number of 'new' trained teachers needed(attition+increase)			2,108	2,206	2,316	2,430	2,551	2,677
Number of upgraded teachers required (untrained to trained based on % trained								
teacher targets) SECTION 2: Budget Project	tions		263	272	274	277	279	282
1. Employee Compensation								
PTR in public and community schools	25.00	27.80	27.33	26.87	26.40	25.93	25.47	25
Number of total teachers needed in public and		13472	13796	14123	14453	14785	15121	15,458

community schools								
Number of teachers paid by government		9940	10602	11268	11936	12608	13282	13,958
Number of teachers in public and community schools paid by nongovernment	1500	3532	3194	2855	2516	2177	1839	1,500
Average salary in multiple of GDP per capita	3.96	3.96	3.96	3.96	3.96	3.96	3.96	4
GDP growth (real GDP+ inflation)		8%	11%	13%	13%	13%	13%	13%
Average salary 'unit cost' per year (USD)		1,812	2,005	2,261	2,551	2,886	3,265	3,693
Total teacher salary (USD)		18,011,280	21,257,409	25,471,557	30,453,812	36,388,470	43,364,649	51,553,433
Number Non-teaching staff at school level paid by government		2,982	3,181	3,380	3,581	3,782	3,985	4,187
Average salary in multiple of GDP per capita	3.70	3.7	3.70	3.70	3.70	3.70	3.70	4
Average salary 'unit cost' per year (USD)		1,692	1,872	2,111	2,382	2,695	3,049	3,449
Total non-teacher salary		5,045,544	5,954,890	7,135,410	8,531,101	10,193,591	12,147,845	14,441,789
Subtotal Employee Compensation		23,056,824.0	27,212,299.5	32,606,966.4	38,984,913.5	46,582,061.2	55,512,494.1	65,995,222
2. Goods and Services		455,117	503,591	567,784	640,818	724,919	820,057	927,681
3. Consumption of fixed capital		94,500	104,565	117,894	133,058	150,521	170,275	192,622
4. Investment								
Student classroom ratio	33	32.7	32.70	32.70	32.70	32.70	32.70	33

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Number of classrooms (public)		11,453.7	11,531.8	11,603.4	11,668.1	11,725.7	11,775.8	11,818
Number of new classrooms needed			78	72	65	58	50	42
Unit cost of classroom		4,200	4,647	5,240	5,914	6,690	7,568	8,561
Subtotal Investment			363,037	375,161	382,978	385,282	379,015	361,461
Total for Primary		23,606,440	28,183,492	33,667,805	40,141,768	47,842,782	56,881,841	67,476,987
	Target	2015	2016	2017	2018	2019	2020	2,021
Junior High School								
SECTION 1: CORE DATA								
Population (12-14)		330531	337890	345412	353102	360964	369000	377,215
Total enrollment		166,957	173,202	179,641	186,282	193,130	200,190	207,468
Gross Enrollment Ratio (GER)	55.0%	50.5%	51%	52%	53%	54%	54%	55%
Enrollment in private as % of total enrollment	30.0%	34.8%	34.0%	33.2%	32.4%	31.6%	30.8%	30%
Total public school enrolment		108,784	114,251	119,949	125,887	132,073	138,517	145,228
Teachers								
Pupil Teacher Ratio	12.90	12.90	12.90	12.90	12.90	12.90	12.90	13
Number of teachers required by PTR		12,942	13,426	13,926	14,440	14,971	15,519	16,083
Share of trained teachers (%)	38.0%	33%	34%	35%	36%	36%	37%	38%
Number of Qualified teachers		4,284	4,554	4,837	5,134	5,445	5,770	6,111

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Number of Unqualified teachers		8,658	8,873	9,089	9,307	9,527	9,748	9,971
Teacher attrition (only trained teachers)	6.0%	6%	6%	6%	6%	6%	6%	6%
Number of 'new' trained teachers needed(attition+increase)			527	556	587	619	652	687
Number of upgraded teachers required (untrained to trained based on % trained teacher targets)			214	216	218	220	222	223
SECTION 2: Budget Project	ions							
1. Employee Compensation								
PTR in public and community schools	20.00	24.87	24.06	23.25	22.44	21.62	20.81	20
Number of total teachers needed in public and community schools		4374	4749	5160	5611	6108	6656	7,261
Number of teachers paid by government		2805	3358	3947	4577	5252	5978	6,761
Number of teachers in public and community schools paid by nongovernment	500	1569	1391	1213	1035	856	678	500
Average salary in multiple of GDP per capita	3.96	3.96	3.96	3.96	3.96	3.96	3.96	4
GDP growth (real GDP+ inflation)		8%	11%	13%	13%	13%	13%	13%
Average salary 'unit cost' per year (USD)		1,812	2,005	2,261	2,551	2,886	3,265	3,693
Total teacher salary (USD)		5,082,660	6,732,731	8,922,655	11,676,506	15,156,831	19,516,492	24,972,990
Number Non-teaching		842	1,007	1,184	1,373	1,575	1,793	2,028

staff at school level paid by government								
Average salary in multiple of GDP per capita	3.70	3.7	3.70	3.70	3.70	3.70	3.70	4
Average salary 'unit cost' per year (USD)		1,692	1,872	2,111	2,382	2,695	3,049	3,449
Total non-teacher salary		1,423,818	1,886,057	2,499,525	3,270,968	4,245,920	5,467,203	6,995,745
Subtotal Employee Compensation		6,506,478.0	8,618,788.0	11,422,179.8	14,947,474.8	19,402,751.6	24,983,694.8	31,968,735
2. Goods and Services		132,937	147,096	165,846	187,179	211,744	239,533	270,970
3. Consumption of fixed capital		18,900	20,913	23,579	26,612	30,104	34,055	38,524
4. Investment								
Student classroom ratio	58	63.7	62.75	61.80	60.85	59.90	58.95	58
Number of classrooms (public)		1,707.8	1,820.7	1,940.9	2,068.8	2,204.9	2,349.7	2,504
Number of new classrooms needed			113	120	128	136	145	154
Unit cost of classroom		4,200	4,647	5,240	5,914	6,690	7,568	8,561
Subtotal Investment			525,035.3	629,764.6	756,262.6	910,407.5	1,096,156.0	1,320,050
Total for JHS		6,658,314	9,311,832	12,241,369	15,917,528	20,555,007	26,353,439	33,598,279
	Target	2015	2016	2017	2018	2019	2020	2,021
Senior High School								
SECTION 1: CORE DATA								
Population (15-17)		297390	306355	315590	325104	334904	345000	355,400
•		105,875	111,313	116,982	122,891	129,051		142,160
Total enrollment Gross Enrollment Ratio	40.0%	35.6%	36%	37%	38%	39%	135,471 39%	40%

(GER)								
Enrollment in private as % of total enrollment	80.0%	86.8%	85.7%	84.5%	83.4%	82.3%	81.1%	80%
Total public school enrolment		13,988	15,966	18,102	20,407	22,890	25,561	28,432
Teachers								
Pupil Teacher Ratio	16.20	16.20	16.20	16.20	16.20	16.20	16.20	16
Number of teachers required by PTR		6,535	6,871	7,221	7,586	7,966	8,362	8,775
Share of trained teachers (%)	50.0%	34%	37%	39%	42%	45%	47%	50%
Number of Qualified teachers		2,216	2,514	2,835	3,182	3,556	3,957	4,388
Number of Unqualified teachers		4,320	4,357	4,386	4,404	4,411	4,406	4,388
Teacher attrition (only trained teachers)	6.0%	6%	6%	6%	6%	6%	6%	6%
Number of 'new' trained teachers needed(attition+increase)			431	473	517	564	615	668
Number of upgraded teachers required (untrained to trained based on % trained								
teacher targets) SECTION 2: Budget Project	ctions		37	28	18	7	5	18
1. Employee Compensation								
PTR in public and community schools	15.00	8.03	9.19	10.35	11.51	12.68	13.84	15
Number of total teachers needed in public and		1743	1738	1749	1773	1806	1847	1,895

community schools								
Number of teachers paid by government		1743	1738	1749	1773	1806	1847	1,895
Number of teachers in public and community schools paid by nongovernment	0	0	0	0	0	0	0	-
Average salary in multiple of GDP per capita	3.96	3.96	3.96	3.96	3.96	3.96	3.96	4
GDP growth (real GDP+ inflation)		8%	11%	13%	13%	13%	13%	13%
Average salary 'unit cost' per year (USD)		1,812	2,005	2,261	2,551	2,886	3,265	3,693
Total teacher salary (USD)		3,158,316	3,484,142	3,953,730	4,522,517	5,212,226	6,031,244	7,000,850
Number Non-teaching staff at school level paid by government		523	521	525	532	542	554	569
Average salary in multiple of GDP per capita	3.70	3.7	3.70	3.70	3.70	3.70	3.70	4
Average salary 'unit cost' per year (USD)		1,692	1,872	2,111	2,382	2,695	3,049	3,449
Total non-teacher salary		884,747	976,021	1,107,568	1,266,904	1,460,114	1,689,547	1,961,165
Subtotal Employee Compensation		4,043,062.8	4,460,163.5	5,061,297.4	5,789,420.9	6,672,339.9	7,720,791.1	8,962,015
2. Goods and Services		40,272	44,561	50,242	56,704	64,146	72,565	82,088
3. Consumption of fixed capital		9,450	10,456	11,789	13,306	15,052	17,028	19,262
4. Investment								
Student classroom ratio	47	63.7	60.93	58.17	55.40	52.63	49.87	47

Number of classrooms (public)		219.6	262.0	311.2	368.4	434.9	512.6	604
Number of new classrooms needed			42	49	57	67	78	91
Unit cost of classroom		4,200	4,647	5,240	5,914	6,690	7,568	8,561
Subtotal Investment			197,177.9	257,772.6	337,946.7	445,122.5	588,003.6	779,527
Total for SHS		4,092,785	4,712,359	5,381,101	6,197,378	7,196,660	8,398,387	9,842,892
Grand Total		43,607,539	53,637,683	65,510,275	79,816,673	97,154,450	113,193,668	132,478,159

References

Campbell, D. (2015). Teacher Verification Report: Montserrado, Bong, and Nimba counties. MoE/LTTP.

EDC. (2015). AYP Harmonization Workshop.

EDC. (2014) AYP 2014 Annual Report

Global Partnership for Education Sector Analysis: Methodological Guidelines, Volumes 1 and 2 (UNESCO, UNICEF, World Bank, GPE 2014).

Government of Liberia (2015) Economic Stabilization and Recovery Plan. Monrovia.

Goyee, Oscar; Hatch, Rachel; Morris, Emmanuel; Tuowal, Delwlebo; & Ginsburg, Mark (2014). Study of Primary Teacher Supply and Demand [based on 2013 EMIS data]. Monrovia: USAID-Liberia Teacher Training Program.

Goyee, Oscar; Hatch, Rachel; Morris, Emmanuel; Tuowal, Delwlebo; Kromah, Mohammed; Browne, Mitchell; Wesseh, Sylvester; Zumo, Josephor; Joboe, Oscar; Ansari, Noor; & Ginsburg, Mark (2015). Study of Primary Teacher Supply and Demand [based on 2014 EMIS data]. Monrovia: USAID-Liberia Teacher Training Program.

Inter-Ministerial TVET Taskforce (2015). National TVET Policy, 2015-2020. Monrovia: Ministry of Education and UNESCO Capacity Development for Education for All Programme.

International Labor Organization (ILO) & United Nations Education, Science, and Culture Organization (UNESCO) (1966). Recommendation Concerning the Status of Teachers. Paris: UNESCO. Available at: http://unesdoc.unesco.org/images/0016/001604/160495e.pdf.

International Monetary Fund (IMF) (2012). Liberia: Staff Report for the 2012 Article IV Consultation and Request for Three-year Arrangement under the Extended Credit Facility. Washington DC: IMF. Available at https://www.imf.org/external/pubs/ft/scr/2012/cr12340.pdf

International Monetary Fund (IMF) (2015). Liberia: Request for Disbursement under the Rapid Credit Facility and Debt Relief under the Catastrophe Containment and Relief Trust-Staff Report. Washington DC: IMF. Available at

https://www.imf.org/external/pubs/ft/scr/2015/cr1549.pdf

International Monetary Fund (IMF) (2016). Liberia: Fourth Review under the Extended Credit Facility Arrangement and Requests for Waivers of Nonobservance of Performance Criteria, and Rephasing and Extension of the Arrangement and Extension of the Arrangement. Washington DC: IMF. Available at

https://www.imf.org/external/pubs/ft/scr/2016/cr1608.pdf

LISGIS. (2008). Liberia Demographic and Health Survey 2007. Monrovia: LISGIS.

LISGIS. (2011). Report on the Liberia Labor Force Survey 2010. Monrovia: LISGIS.

LISGIS. (2016). House Income & Expenditure Survey 2014. Monrovia: LISGIS.

LISGIS. (2014). Liberia Demographic and Health Survey 2013. Monrovia: LISGIS.

Ministry of Education (2007). LPERP.

Ministry of Education (MoE) (2010). The Education Sector Plan of Liberia, 2010-2020: A Commitment to Making a Difference. Monrovia: MoE.

Ministry of Education. (2011). National Curriculum. Monrovia, MoE.

Ministry of Education (MoE) (2011a). National Inter-Sectoral Policy on Early Childhood Development. Monrovia: MoE.

Ministry of Education (MoE) (2011b). Liberian Education Administrative Regulations: Liberian Administrative and Management Policies Guide, Volume 4. Monrovia: MoE.

Ministry of Education (MoE) (2016). Liberia Education Statistics Report 2015-16. Monrovia: MoE.

Ministry of Education (MoE) (2011c). Policies for Reform: Liberian Administrative and Management Policies Guide, Volume 5. Monrovia: MoE.

Ministry of Education (MoE) (2013). National Policy on Girls Education. Monrovia: MoE.

Ministry of Education (MoE) (2014). Code of Conduct for Teachers and School Administrators in Liberia. Monrovia: MoE.

Ministry of Education (MoE) (2014). Operational Plan, 2014-2016. Monrovia: MoE.

Ministry of Education (MoE) (2015). Getting to Best. Monrovia: MoE.

Ministry of Education (MoE) (2015). Getting to Best Powerpoint Slide Presentation. Monrovia: MoE.

Ministry of Education (MoE) (2015). Educator Management Policy (draft). Monrovia: MoE.

Ministry of Education (MoE) (2015). Division of Special and Inclusive Education Brochure. Monrovia: MoE.

Ministry of Education (MoE) (2015). Post JESR Stakeholder Engagement Report. Monrovia: MoE.

Ministry of Education (MoE) (2016). Joint Education Sector Review Report (draft). Monrovia: MoE.

Ministry of Education (MoE) (2016). Ministry of Education Annual Report 2015. Monrovia: MoE.

Ministry of Education (MoE) (2016). February 2 2016 Presentation to Cabinet: Financing Education. Monrovia: MoE.

Ministry of Education (MoE) (2016). Getting to Best (Roadmap). Monrovia: MoE.

Ministry of Education (MoE) (2011). Liberia School Census Report 2010-11. Monrovia: MoE.

Ministry of Education (MoE) (2014). Education Statistics for the Republic of Liberia. Monrovia: MoE. Various years.

Ministry of Gender and Development (MoGD) (2009). The National Gender Policy. Monrovia: MoGD.

Ministry of Planning and Economic Affairs (2012). Agenda for Transformation: Steps toward Liberia Rising 2030: Liberia's Economic Growth and Development Strategy, 2012-2017. Monrovia: Republic of Liberia.

Morris, Emmanuel; Goyee, Oscar; Hatch, Rachel; Tuowal, Delwlebo; & Ginsburg, Mark. (2014). Tracer Study of C-Certificate Program Graduates. Monrovia: USAID-Liberia Teacher Training Program.

Morris, Emmanuel; Hatch, Rachel; Tuowal, Delwlebo; Ansari, Noor; & Ginsburg, Mark (2015). Tracer Study of Female Scholarship Recipients. Monrovia: USAID-Liberia Teacher Training Program.

National Commission on Higher Education. (2012). Status of Higher Education: Census Survey of Institutions. Monrovia: NCHE.

National Commission on Higher Education. (2012). Higher Education Strategic Plan for Liberia. Monrovia: NCHE.

Republic of Liberia (2011). Education Reform Act of 2011. Monrovia.

Republic of Liberia (2012). Liberia National Vision 2030: Draft Summary Report (25 November). Monrovia: Republic of Liberia.

Snyder and Coleman (2013). General Education Accreditation in Liberia.

Snyder, Contrad W.; Hailesalassie, Aberra Makonnen; Chelleh, Morrison; & Odharo, Johnson Odharo (2011). Females Teaching in Liberia: Motivating, Recruiting, and Retaining Female Teachers in Basic Education. Monrovia: USAID-Liberia Teacher Training Program.

Stromquist, Nelly; Lin, Jing; Corneilse, Carol; Klees, Steve; Choti, Truphena; & Haugen, Caitlin (2013). Women teachers in Liberia: Social and institutional Forces Accounting for their Underrepresentation. International Journal of Educational Development 33: 521–530.

Sumaworo, M. D. (2015). Challenges of Tertiary Education in Liberia and Possible Solutions.

Tsimpo, C. and Wodon, Q. (2012). Education in Liberia: Basic Diagnostic Using the 2007 CWIQ Survey. Munich Personal Repec Archive.

Tuowal, Delwlebo; Goyee, Oscar; Morris, Emmanuel; Browne, Mitchell; Joboe, Oscar; Kromah, Mohammed; Wesseh, Sylvester; Zumo, Josepfor; Hatch, Rachel; Ansari, Noor; & Ginsburg, Mark (2014). Follow-up Study of LTTP-Supported C-Certificate Program Graduates Who Were Not in the 2013 EMIS Database. Monrovia: USAID-Liberia Teacher Training Program.

UNDP (2015). Human Development Report 2015: Liberia Briefing Note. UNDP.

UNESCO (2015). Incheon Declaration and Framework for Action for the implementation of Sustainable Development Goal 4. UNESCO

UNICEF. (2012). Liberia Country Study: Global Initiative on out of school children. Monrovia: UNICEF.

UNICEF. (2016). Nationwide Assessment of WASH Facilities in Schools in Liberia. Monrovia: UNICEF.

UIS. (2015). UIS fact sheet: Adult and Youth Literacy 2015. Montreal: UIS.

West African Examinations Council. (2015). Exam Results from 2013-2015 WAEC 2013-2015 Grade 9 and Grade 12 exams. Monrovia: WAEC.

World Bank. (2010). Liberia Country Status Report. Washington DC: World Bank.

World Bank. (2012). Diagnostic Paper for Higher Education in Liberia. Washington DC: World Bank.

World Bank. (2014). The Economic Impact of the 2014 Ebola Epidemic: Short- and Medium-Term Estimates for West Africa. Washington DC: World Bank.

World Bank. (2012). School to Work Transition Survey. Washington DC: World Bank.