

Republic of
Liberia

Education Sector Analysis

2022



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Republic of
Liberia

Education Sector Analysis

2022

Technical support



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PRIORITÉ À L'ÉGALITÉ
GENDER AT THE
CENTRE

Published in 2022 by:
IIEP-UNESCO Dakar
Almadies–Route de Ngor
BP 3311 Dakar–Senegal
Tel: + 221 33 859 77 30
<https://dakar.iiep.unesco.org>

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Attribution:
Education Sector Analysis of the Republic of Liberia. World
Bank, IIEP-UNESCO Dakar 2022

ISBN: 978-92-803-1458-8

Graphic Design: Madelie Oosthuizen
Proofreading: Marike van Rensburg
Photo credit: © UNICEF/UNI196036/Grile



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Abbreviations

AfT	Agenda for Transformation 2012–2017
ALP	alternative learning programme
AVAT	African Vaccine Acquisition Trust
BEQI	Brief Early Childhood Quality Inventory
CASS	continuous assessment score
CBL	Central Bank of Liberia
CDC	Centers for Disease Control and Prevention
CEPI	Coalition for Epidemic Preparedness Innovations
CEO	county education officer
CPD	continuous professional development
CRPD	Convention on the Rights of Persons with Disabilities
CSB	county school board
DEO	district education officer
DHS	Demographic and Health Survey
DSB	district school board
ECD	early childhood development
ECE	early childhood education
ECOWAS	Economic Community of West African States
ELP	early learning partnership
ELSR	Early Learning Systems Research
EMIS	education management information system
ERA	Education Reform Act
ESA	education sector analysis
EUI	Economist Intelligence Unit
FGM/C	female genital mutilation and cutting
G2B-ESP	Getting to Best Education Sector Plan
GBV	gender-based violence
GDI	gender development index
GDP	gross domestic product
GEMR	Global Education Monitoring Report
GEMR-GR	Global Education Monitoring Report – Gender Report
GER	gross enrolment ratio
GPE	Global Partnership for Education
HCI	human capital index
HDI	human development index
HEI	higher education institution
HIES	Household Income and Expenditure Survey
ICT	information and communications technology
IECD	Institut Européen de Coopération et de Développement
IIEP	UNESCO International Institute for Educational Planning
ILO	International Labour Organization
IMF	International Monetary Fund
IPU	Inter-Parliamentary Union
IRT	item response theory

ISCED	International Standard Classification of Education
ISCO	International Standard Classification of Occupations
J&J	Johnson and Johnson
JSS	junior secondary school
LDHS	Liberia Demographic and Health Survey
LEAP	Liberia Education Advancement Program
LISGIS	Liberia Institute of Statistics and Geo-Information Services
LiTCOM	Liberia TVET Commission
LJHSCE	Liberia Junior High School Certificate Examination
LPSCE	Liberia Primary School Certificate Examination
MELQO	Measuring Early Learning Quality and Outcomes
MFDP	Ministry of Finance and Development Planning
MODEL	Measure of Development and Early Learning
MoE	Ministry of Education
MoYS	Ministry of Youth and Sports
NAP 2018–2024	National Adaptation Plan
NAPA	National Adaptation Plan of Action 2008
NBS	National Bureau of Statistics, Nigeria
NCHE	National Commission on Higher Education
NDCHEI	National Data Collection on Higher Education Institutions
NEET	not in employment, education or training
NER	net enrolment ratio
NIPECD	National Inter-Sectoral Policy on Early Childhood Development
NPHIL	National Public Health Institute, Liberia
NTVETQF	National TVET Qualifications Framework
OECD	Organisation for Economic Co-operation and Development
OOSC	out-of-school children
OPM	Oxford Policy Management
PAPD	Pro-Poor Agenda for Prosperity and Development
PCGDP	per capita gross domestic product
PhD	Doctor of Philosophy
PqTR	pupil/qualified teacher ratio
RTTI	rural teacher training institute
SCORE	Social Cohesion and Reconciliation
SDG	sustainable development goal
SeeD	Centre for Sustainable Peace and Democratic Development
SGBV	sexual gender-based violence
Sida	Swedish International Development Cooperation Agency
SSS	senior secondary school
Stats SL	Statistics Sierra Leone
STEM	Science, technology, engineering, and mathematics
TASS	terminal assessment score
TOR	terms of reference
TVET	technical and vocational education and training
UIS	UNESCO Institute of Statistics

UNDP	United Nations Development Programme
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNGEI	United Nations Girls Education Initiative
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
UNIDO	United Nations Industrial Development Organization
UNOHCHR	United Nations Office of the High Commissioner of Human Rights
UN Women	United Nations Women
US Aid	United States Agency for International Development
WAEC	West Africa Examination Council
WASH	water, sanitation, and hygiene
WASSCE	West Africa Senior School Certificate Examination
WHO	World Health Organization

Executive Summary

Sociopolitical stability

Although Liberia is witnessing relative sociopolitical stability, the challenging socioeconomic context, further amplified by COVID-19, may create tensions and fuel social unrest, especially among the youth.

The population of Liberia was estimated to be over 5 million people in 2020 with forecasts predicting growth to 6.4 million by 2030. Population growth witnessed a boom after the war years. Growth has since steadied and is now anticipated to decrease. The population is characterized by a high proportion of youth with 40 per cent of the population in 2020 being under the age of 15. This contributes to a growing pressure on the education system, which is predicted to accommodate an additional 483,000 children and youth by 2030. Furthermore, the population is distributed unevenly over the territorial space with two-thirds of the population currently living in Montserrado and the three counties that make up the North Central region.

Liberia has enjoyed relative stability since the end of the civil war in 2003, and elections since then have been deemed to be free and credible. However, elections are still recognized to be influenced by patronage practices, which have resulted in the population feeling neglected. In response, civil society in Liberia has been mobilizing as is evidenced in the growing number of demonstrations in the country pushing for reforms to address corruption and improve political inclusion. Liberia is further particularly vulnerable to epidemics, such as the outbreak of the Ebola virus disease in 2014, while malaria continues to rank first in terms of the leading cause of morbidity and mortality.

While social indicators have improved over the years, they remain low and are marked by sharp location disparities. The population is observed to be overwhelmingly poor. In 2016, 50.9 per cent of the population was estimated to be living below the poverty line, of which 71.6 per cent was in rural areas and 31.5 per cent in urban areas. Although improvements have been witnessed, the population still lacks access to basic utilities and facilities. The proportion of the population who has access to an improved water source increased from 66 per cent in 2007 to 85 per cent in 2019. High maternal mortality rates indicate an overall poor quality health system and limited access to healthcare services. Early childbearing is seen to be widespread and represents a major threat to girls' education. Overarchingly, the human development index stood at 0.480 in 2019, positioning Liberia at 175 of 189 countries.

The Liberian economy has suffered greatly as a result of the COVID-19 pandemic due to the country's small and undiversified nature, which makes it very vulnerable to external shocks. The economy is dominated by services, including agriculture and industry, and remains informal with 87 per cent of those aged 15 to 64 citing employment in this sector. Despite the large size of the agricultural economy in the country, productivity is low, resulting in the country importing 50 to 60 per cent of its staple food requirements. Revenues have remained largely stagnant over the past five years with government expenditure decreasing. Although the domestic revenue mobilization is high in Liberia, decreasing reliance on external funding makes its fiscal position fragile, which jeopardizes the provision of quality social services.

Early childhood education enrolment in Liberia

Liberia has one of the highest ECE enrolment rates in the region; however, it is driven by the high proportion of overaged children observed in pre-primary classrooms, which has knock-on effects for the rest of the education system.

ECE has been the responsibility of the Ministry of Education (MoE) since the promulgation of the Education Reform Act of 2011. However, access to this level is not fee-free as public ECE institutions are permitted to charge a capped fee amount. Furthermore, the government continues to commit very little financially to ECE. No development spending was allocated in 2020, whereas 14 per cent of the total salary expenditure was allocated to ECE teachers in the same year.

Although ECE services are primarily offered by public institutions, the proportion of enrolment in public schools has declined since 2015 in favour of faith-based and private institutions. Gross enrolment in pre-primary was found to be 123 per cent in 2020 and was relatively consistent across sociodemographic characteristics. Additionally, between 8 per cent and 10 per cent of ECE learners were observed to repeat a year, which is a unique trend. Net enrolment was much lower than gross enrolment, at 58 per cent in 2020. Enrolment was affected greatly by wealth quintile, signalling the existence of financial barriers to enrolling in ECE at the appropriate age. Overall, 82 per cent of learners enrolled in ECE are overaged, with rural populations being more overaged than urban populations. Structural elements contribute to overaged enrolment, specifically the use of tests to deter-

mine appropriateness for primary entry. Discussions with parents further reveal that fees continue to serve as the greatest barrier to age-appropriate enrolment, followed by a lack of accessible schools.

Few play-based learning materials or support is present in Liberian ECE classrooms, and the most frequently used materials are blackboards and chalk. Furthermore, some classrooms are seen to pose safety risks in themselves, which is particularly concerning in the context of young children.

There is an undersupply of ECE teachers with an average pupil/teacher ratio of one teacher per 37 learners. Moreover, there is a lack of ECE-specific training opportunities for teachers in Liberia. Thus far, only 174 teachers have benefited from the newly introduced ECE C certificate. As such, there are practically no teachers who are specifically qualified to teach at ECE level. Only 35 per cent of teachers have a C certificate, which is the minimum required to teach in primary schools.

Despite the existence of a national curriculum with a focus on play-based learning, these skills are not observed in the classroom. Rote-teaching methodologies such as drilling, practising and instructing seem to occupy the most classroom time. There is evidence that ECE teachers continue to use negative physical or verbal disciplining methods in the classroom. This report aimed to generate a score for teachers according to their use of play-based and child-centred techniques. It was found that 82 per cent of teachers scored in the lowest two quintiles.

Perhaps unsurprisingly given the limited quality of inputs in terms of teachers,

materials and teaching practice, MELQO testing administered in Liberian preschools revealed weak levels of school readiness, with only 13 per cent of learners in public schools demonstrating adequate skills to progress to primary education. Private and government schools had weaker performing learners based on this testing, while mission, church and community schools demonstrated stronger performance. Accordingly, there is an evident need to strengthen both inputs in terms of teaching and learning materials – particularly providing play-based materials more suited to the needs of young children and upskilling existing teachers.

Decline in basic education

Access to basic education in Liberia has declined and is at risk of privatization, and expansion among private and faith-based providers is observed. The education structure in Liberia follows a 3–9–3–4 model with a parallel alternative education model providing accelerated learning opportunities as well as adult education for overaged students. Despite the large proportion of overaged learners observed across subsectors, the alternative education sector remains small. In 2020, 13,000 students were enrolled in alternative learning programmes, which represented just over 2 per cent of primary enrolment.

Public schools are the most prevalent providers at primary level; however, private schools represent the majority at the junior and senior secondary level. Furthermore, the total proportion of learners enrolled in public schools has decreased across all levels since 2015. Enrolment at primary level has also decreased from 89 per cent in 2015 to 82 per cent in 2020 – both in absolute terms and in terms of gross enrolment.

However, the gross enrolment ratio (GER) in both the junior and senior secondary level increased slightly, growing from 51 per cent to 54 per cent, and 36 per cent to 38 per cent, respectively. Net enrolment has remained stable over the same period, standing at 43 per cent at primary level, 14 per cent at junior secondary level, and 10 per cent at senior secondary level. Parity is observed in both GER and net enrolment ratio between male and females. However, locality and wealth cause large disparities in access across all subsectors, where populations in the richest wealth quintile exhibit a primary GER that is 56 percentage points higher than populations from the poorest quintile.

The Children's Law of 2011 enshrined the right of children with disabilities to an education. This law was followed by the Inclusive Education Policy in 2018. Between 0.43 per cent and 0.74 per cent learners in Liberia are reported to have a disability, with disability type ranging by subsector. Some estimates put the proportion of school-aged children who have a disability as high as 15.3 per cent. When considering that an average of 0.53 per cent of learners enrolled in 2020 had a disability, it is suggested that 97.45 per cent of school-aged children with disabilities in Liberia are out of school.

An examination of the evolution of the schooling profile using administrative data in Liberia from 2015 to 2020 shows an improvement in transition rates coupled with a decrease in retention rates. Household survey data indicates equal levels of access for male and female learners in the first grade of primary; however, the gap grows between the sexes with ascending grade. The greatest difference in access is again seen between wealth quintiles, with chil-

dren from the poorest families being 21 per cent less likely to access Grade 1 than those from the richest backgrounds. This leads to an average school life expectancy of 10.4 years among the richest quintile—more than double the 4.8 observed for the poorest.

Ninety-two per cent of primary learners, 95 per cent of junior secondary learners, and 84 per cent of senior secondary learners are overaged for the grade they are enrolled in. Similar proportions of overaged learners are seen across population groups, including wealth quintiles. However, differences among population groups are more distinct when examining the proportion of learners more than three years above the official age for their grade. Both rural and poorer wealth quintiles are seen to have significantly higher proportions of learners more than three years overaged for the grade they are enrolled in, suggesting the existence of economic and physical barriers to age-appropriate enrolment.

Nineteen per cent of primary-aged children are seen to be overaged, along with 14 per cent of junior-secondary-aged, and 20 per cent of senior-secondary-aged children. Locality and wealth status are once the most influential factors that affect enrolment, with rural populations of primary age two times more likely to be out-of-school children (OOSC) than their urban counterparts. The highest level of education attained by OOSC is reflective of the issue of overaged enrolment, with 97 per cent of OOSC of primary age never having received education. Wealth is again seen to be a strong determinant of enrolment, suggesting the continued existence of financial barriers to enrolment despite fee-free access at primary and junior secondary levels.

Low education expenditure

Expenditure on education remains low in Liberia, calling to question the feasibility of achieving the Education 2030 Agenda if the trend is sustained in the future. In 2020/2021, education expenditure represented 13.8 per cent of overall spending and 2.6 per cent of gross domestic product (GDP), falling short of UNESCO's recommendations of 20 per cent and 4–6 per cent, respectively. Growth in expenditure has been limited due to external shocks such as the Ebola virus disease epidemic, leading to a meagre 8 per cent growth in sectoral expenditure over the past eight years. Education expenditure is strongly predictable with execution rates averaging 93 per cent between 2013 and 2020.

Almost all government expenditure in education is allocated to recurrent spending. Development expenditure fluctuated from a low of zero per cent to a high of 3.2 per cent over the past eight years. Of this recurrent spending, 63.5 per cent was spent on salaries in 2020/2021; therefore, there is less room for implementing other services in the sector, which limits the improvement of quality education in the country. The greatest proportion of non-salary expenditure went to grants and transfers, of which almost 100 per cent benefited university education. Conversely, only 4.1 per cent of all non-salary expenditure was committed to learning materials and supplies. Beyond salaries, the administration of examinations dominates the balance of spending in basic and secondary education, with little inputs from the government left in support of schooling and learning once fees are removed. When considering spending by subsector, higher education

is seen to receive the greatest proportion. Spending at this level is almost five times higher than for basic and secondary education. Liberia spends the third lowest per learner of the ECOWAS countries, at around 11 per cent of per capita GDP at primary but is among the highest at secondary at 37 per cent.

In terms of beneficiaries, the analysis revealed an unbalanced structure in the workforce with males dominating teaching and non-teaching staff and, inherently, the wage bill. Furthermore, females are underrepresented in school leadership positions, for example, females represent 13 per cent of the teaching force at junior secondary level and only 4 per cent of all principals. The dominance is partly due to the pay gap between males and females since females receive 6 per cent and 11 per cent lower salaries in the case of teaching and non-teaching staff, respectively, than their male counterparts. Attracting and retaining motivated staff will include addressing the pay gap while also paying attention to the claims of the late payment of salaries.

The low public expenditure on education and the large variations observed across counties mean that learning must be supported from complementary sources, including households. Spending by households is seen to increase with ascending levels of education. This trend is broken after senior secondary level where the promise of free tuition in higher education reduces the contribution from families. In the lower levels, household spending on education is mostly focused on tuition and management of institutions despite the promise of fee-free education at primary and junior secondary level.

Education challenges

The Liberian education system is faced with a myriad of quality-related education challenges, including an under-supply of teaching and learning materials, and a high proportion of unqualified teachers, which are further reflected in low learning outcomes. Pupil/textbook ratios in primary school are high, with the best case observed in public schools where up to six learners share a single language textbook. This shortage is also seen at secondary level where the junior secondary learner/textbook ratios average is 1:7 for language and mathematics and 1:8 for science, respectively.

In terms of learning facilities, trends vary according to subsector. Adequate average class sizes of 23 and 31 learners per classroom are seen at ECE and primary level, while these are much larger in junior and secondary school at 51 and 54, respectively. Furthermore, two-thirds of classrooms in junior secondary and half of those in senior secondary are not constructed from solid materials, which can be used as a proxy for the quality of classrooms available. A similar shortage is observed in the access to sanitation facilities, notably toilets, with more than 120 boys sharing one toilet in Gbarpolu county.

National examinations in Liberia include the Liberia Primary School Certificate Examination (LPSCE), Liberia Junior High School Certificate Examination (LJHSCE), and the regional West Africa Senior School Certificate Examination (WASSCE). Interestingly, LPSCE and LJHSCE have continuous assessment components carried out regularly by schools, thereby substantially reducing

the high-stake pressure from national examinations. The 2020 results from the national and regional examinations show that most candidates passed their respective examinations, with the share of those who passed dropping with advancing level of examination. Except for primary level, where there is only marginal gap, there are no observable gender differentials in pass rates at national level. Variations were, however, seen across subjects with only mathematics and English registering more than half of the candidates with at least a pass. Sciences, conversely, were seen to have the lowest pass rates, with an 11 per cent pass rate observed in biology.

Teacher training in Liberia is mostly carried out by three rural teacher training institutes (RTTIs), together with a host of private institutes authorized to conduct such training. The number of teacher trainees graduating from the three RTTIs has declined gradually since 2012, with male dominance recorded throughout the past decade. Basic and senior secondary education is served by more than 60,000 teachers, of which more than 80 per cent is deployed in basic education. In basic and secondary education, 46 per cent of teachers are deployed in public schools, while 32 per cent are in private schools, and the complement in faith-based and community schools. Of the 25,700 teachers in public schools, 12,400 are paid directly by the government, which translates to 45 per cent of teachers in public schools. This means that more than half of the teachers in public schools are paid by other entities (communities, local and international non-governmental organizations, etc.).

There are modest pupil/teacher ratios across basic and senior secondary schools, ranging from 11 in senior secondary to 37 in ECE. The ratio is higher in public schools, ranging from a high of 41 in ECE to a low of six in senior secondary school. However, the ratio rises considerably when only government-paid teachers are considered, with pupil/teacher ratios reaching 100 learners per government-paid teacher in public ECE centres. There is an acute shortage of trained teachers at basic and senior secondary level – a reflection of the low output from RTTIs, with the share of trained teachers ranging from 35 per cent in ECE, 45 per cent in primary school, 31 per cent in junior secondary school, and 26 per cent in senior secondary school. With an average of 45 per cent of teachers trained, this places Liberia below the sub-Saharan Africa average of 68 per cent.

Teacher deployment improves with advancing levels of basic education, with the randomness highest in ECE where 45 per cent (i.e. 1–55 per cent) of the teacher deployment is based on factors other than enrolment. Generally, teachers in primary schools are dissatisfied with their remuneration. Results of a study conducted in October 2021 revealed that eight in 10 teachers are not satisfied. The dissatisfaction is compounded by the late payment of salaries with only 40 per cent of teachers reporting that they receive their salaries on time, with the highest in public primary schools at 90 per cent. Of teachers surveyed, one in five was absent from school repeatedly, and nearly all teachers were reported to have missed coming to school at least once a week. Only a minority of 4 per cent of teachers never missed coming to school.

Youth employment challenges

The youth employment challenge in low-income economies such as Liberia stems from a myriad of demand- and supply-side constraints, including a pervasive informal economy and poor human capital development.

Formal technical and vocational education and training (TVET) in Liberia is the responsibility of the MoE and is governed by the National TVET Policy. The Ministry of Youth and Sports is responsible for informal TVET. However, the system lacks a regulatory body or policy document to ensure quality. This gap is largely filled by the European Union's Youth Rising Project. According to administrative data, there was a total of 65 TVET institutions in Liberia in 2015/2016, with the majority located in Montserrado county.

The higher education system in Liberia offers three degree levels, namely: associate's, bachelor's and master's, and no doctoral degree is currently offered. In 2021, Liberia registered a total of 53 higher education institutions (HEIs) that were licensed and accredited by the National Commission on Higher Education. Of these HEIs, 21 per cent are public, 32 per cent private, and 47 per cent faith based. Additionally, there are three RTTIs and 18 private local teacher training institutes. HEIs are not distributed evenly across the country, and only 10 of the 15 counties have a training institution. Furthermore, more than half of the training institutions are found in Montserrado. Only 17 per cent of HEIs offer master's degrees, with the majority offering associate's or bachelor's degrees. A new tuition policy means that all public universities will be tuition-free for undergraduate students. This is

expected to lead to a large increase in enrolment in these institutions, which are not prepared adequately.

According to the 2016 Household Income and Expenditure survey, one in 10 youth attended TVET in 2016. While similar proportions of male and female students were enrolled in TVET, only 6.4 per cent of young women completed their TVET studies compared with 9.5 per cent of young men, evidencing higher rates of dropout among female TVET students. Furthermore, female students are severely underrepresented in specialized technical skills and trades such as carpentry, electric works and plumbing, with 28 per cent of all female students enrolled in the field of hairdressing, beauty and make-up.

Youth employment is overall relatively high; however, it tends to decline with educational attainment, mostly resulting from the lack of employment opportunities and skills mismatches. Furthermore, one-fourth of young, tertiary-educated men are not employed or in education or training (NEETs) compared with 19.3 per cent for women. Female NEETs remain to a large extent inactive across schooling levels, suggesting that education in Liberia does not seem to release women from their responsibilities in the domestic realm.

Labour market transition rates for youth after completing tertiary studies are significantly higher than those after completing TVET studies. Furthermore, two-thirds of tertiary-educated men are in wage employment compared with only half of women. Comparatively, wage jobs are less accessible to youth who have completed TVET at 61 per cent of men and 18 per cent of women. Instead, young women who have completed TVET fall back on self-employ-

ment activities, mostly outside the agricultural sector. TVET remains strongly associated with vulnerable employment, again more severely affecting women than men, demonstrating the prevailing sex-based occupational segregation.

Informal wage employment remains the norm among the youth population in Liberia, with 88 per cent of youth with a senior secondary school education and 57 per cent of youth with a tertiary education working informally. While this represents a drop with tertiary education, it is still far from satisfactory, with an additional 80 per cent of youth with TVET completion also continuing to work in the informal economy. However, when examining this from an occupational skill level perspective, it is clear that tertiary education supports the youth's chance of working in high-skilled, non-manual occupations, with 80 per cent of tertiary-educated youth occupying these positions. Yet, the scarcity of high-skilled jobs available does not allow one to properly allocate the increasing number of tertiary students entering the labour market. Furthermore, at just 30 per cent, high-skilled, non-manual occupations are out of reach for most young employees who completed vocational training.

This occupational misallocation translates into qualification mismatches whereby 51 per cent of primary-educated young employees fall short of the required qualification for their occupation compared with 35 per cent of tertiary-educated youth who are considered over-qualified. However, young employees with tertiary education enjoy overall substantial income gains, earning on average 3.4 times more than those with a senior secondary school education and 6.9 times

more than those with no formal education. Additionally, tertiary-educated youth are seen to have higher job satisfaction.

Strong legal basis of the educational system

The functioning of the educational system in Liberia is found upon strong legal documents and is heavily guided by the previous education sector analysis (ESA); however, efficient functioning is hindered by a lack of resources and interfering forces.

The structure of the MoE was outlined in the Education Reform Act of 2011 that described the decentralized structure. Interviews conducted with officials at the central level revealed a strong understanding of, and a relative satisfaction with the administrative structure of the MoE. However, one challenge identified with this structure and, particularly, the chain of command, was that it was deemed to be overly bureaucratic and inflated, requiring many levels of approval that delay implementation. Furthermore, efforts to decentralize educational responsibilities were hampered by funding challenges.

The Education Reform Act was referred to as the key regulatory document for the sector with high levels of confidence in the document expressed by respondents. While the Education Reform Act was identified as the key document at unit level, terms of references were regarded as the most relevant documents at individual level. Actual duties were seen to align strongly with what is spelled out in the terms of references, with the only issue cited being that officials are unable to fully carry out the responsibilities outlined in their terms of references due to resourcing issues.

Coordination across units was conducted through a variety of facets. The most frequently cited tool was work plans, with 76 per cent of respondents stating the existence of annual work plans in their unit. However, horizontal communication was regarded as more challenging, with 53 per cent of respondents strongly disagreeing or disagreeing with the statement ‘I know what my colleagues in other units are doing’. Meetings, especially those with all staff, were seen to be used infrequently as a communication tool, with 44 per cent of respondents stating they had not attended any meeting in the past 12 months. A final management tool that was regarded as lacking was accountability mechanisms. The current system functioned on self-evaluation, and respondents complained that these evaluations were not used in an interactive and constructive manner.

An examination of recruitment practices of surveyed staff reveals almost a 50/50 split between those who gained their position through competitive recruitment processes and those who gained their position via nominations, recommendations or transfers. Interview respondents noted that individuals may be chosen for positions due to their personal connections with those in positions of power, frequently without regard for their professional qualifications or experience. Internal recruitment was further reported to be heavily prevalent across the ministry. Ministers transferred staff they have previously worked with to their new area of assignments, without necessarily considering suitability for the position.

Access to office equipment, suitable facilities and funding were seen to be severely constrained in the ministry. Extremely low access is observed regarding internet

connectivity, and 72 per cent of respondents cited having no access to an internet connection. Financial resources were reported to be even more scarce, which aligns with what is observed in Chapter 3 – that no development spending is being allocated to the sector. This creates a situation wherein the most frequently reported challenge faced by survey respondents was ‘inadequate access to material resources, including transport’.

The ministry is composed of a majority of male staff who are highly qualified, with 95 per cent possessing either a bachelor’s or master’s degree. However, staff are inexperienced in the field of educational planning, with 49 per cent of survey respondents citing having 0–5 years’ experience in this field. There is widespread dissatisfaction with the financial compensation of ministry staff, although despite this, officials still stated that they would choose the same career again. Workloads are unevenly distributed with 22 per cent stating they do not always have enough work to do, while 36 per cent cited they sometimes have too much work. Self-reported proficiency levels demonstrate low levels of perceived mastery across educational planning and management tasks. Furthermore, staff are seen to rarely undertake continuous professional development training; however, responses also demonstrate a great interest and need for training regarding all planning tasks.

Gender inequality

High levels of gender inequality are seen in Liberia – particularly regarding gender norms, attitudes and practices – in the learning environment, within education systems, and in education outcomes that reflect women’s empowerment.

The legal, policy and planning framework in Liberia is broadly supportive of gender equality in and through education, but the impact is undercut by institutional capacity, budget, and implementation limitations. Dissemination, implementation, monitoring, and funding have consistently been identified as key challenges to full implementation. For example, while the Teachers' Code of Conduct mandates sexual violence as a crime under the penal code, awareness at school and subnational level is low. Data further proves a challenge in monitoring gender equality with only 41 per cent of the indicators needed to monitor the sustainable development goals from a gender perspective currently available.

Social norms, such as sexual gender-based violence (SGBV), early marriage and pregnancy, unequal division of domestic labour, and mistrust of women in leadership roles, are key constraints to opportunities for girls' education. Studies have revealed that gender equity is still not broadly supported, with 33 per cent of women and 62 per cent of men cited as opposing gender equality in 2021. The rate of SGBV in Liberia remains high and was seen to increase during COVID-19, with rape being one of the highest reported crimes in Liberia. Children are at particularly risk with 70 per cent of gender-based violence (GBV) cases of a sexual nature between 2016 and 2020 perpetrated against children. Early child-bearing and early marriage rates remain high in Liberia, with 25 per cent of women getting married before the age of 18, and 30 per cent of women giving birth before the age of 18. The adolescent birth rate in Liberia remains one of the highest in the world despite showing signs of decreasing.

In terms of education opportunities, the data shows that, despite progress, the

poorest rural children, especially girls, face the biggest obstacles to accessing and completing education. Gender inequality intersects with other dimensions of disadvantage, such as location and wealth, to constrain gender-equal education opportunities. Poor and rural girls experience the highest levels of disadvantage, with 57 per cent having no formal education and only 2 per cent having attended senior secondary school. Although boys dropping out is an increasingly pressing issue, specific challenges for boys' education access and retention are less researched.

Within the education system, gender barriers to education include critically low numbers of female teachers, with only 20 per cent at primary, 12 per cent at junior secondary, and 10 per cent at senior secondary, meaning that girl learners lack female authority role models. Additionally, SGBV levels continue to be high in schools with one study finding that one in five learners—both girls and boys—report experiencing SGBV from teachers or staff, often related to 'sex for grades'. The lack of single-sex water, sanitation, and hygiene facilities in schools constitutes a particular barrier for girls, with only 25 per cent of facilities being allocated to girls.

While women's participation in the workforce at 72 per cent is higher than the sub-Saharan African average, women are concentrated in lower level, lower paid, and often precarious positions, and women are more likely to be unpaid. Political representation remains very low compared with global and regional levels. Only 12 per cent of parliamentarians are women, leaving women with very little voice in decision-making at the political level, which constrains their power to effect transformational change.

Chapter 1

Sociodemographic and macroeconomic context

This chapter offers a brief description of the political, demographic, socioeconomic and macroeconomic context of Liberia yesterday and today to better understand the environment in which the Liberian education system is evolving. Although exogenous to the education sector, this context influences the development of the education system through direct and indirect effects induced on the supply of and demand for educational services.

1.1 General information

The Republic of Liberia is located in West Africa and covers an area of 111,369 km². The country is bordered to the north-west by Sierra Leone, to the north by Guinea, and to the east by Côte d'Ivoire. Liberia has a coastline of 579 km in the south.

Liberia has a humid, tropical climate characterized by two major seasons: a wet monsoon summer and a dry winter season. The coastal areas register high levels of rainfall of more than 5,000 mm per year. Forests make up 45 per cent of the land cover, and the country is recognized as a global hotspot for biodiversity (UNDP et al., 2018).

Administratively, the country is divided into five regions, 15 counties, 73 electoral districts, and 136 administrative districts (see *Figure 1.1*). Districts are further subdivided into third-level administrative divisions called clans.¹ The county of Montserrado hosts Monrovia, the capital city. Each county is administered by a superintendent appointed by the President.²

In terms of ethnolinguistic structuring (see *Figure 1.2*), the Liberian population comprises 16 ethnic groups, each with their own language that may be categorized into three main groups: Mandé

Figure 1.1 Map of Liberia, region and county delimitation, 2020

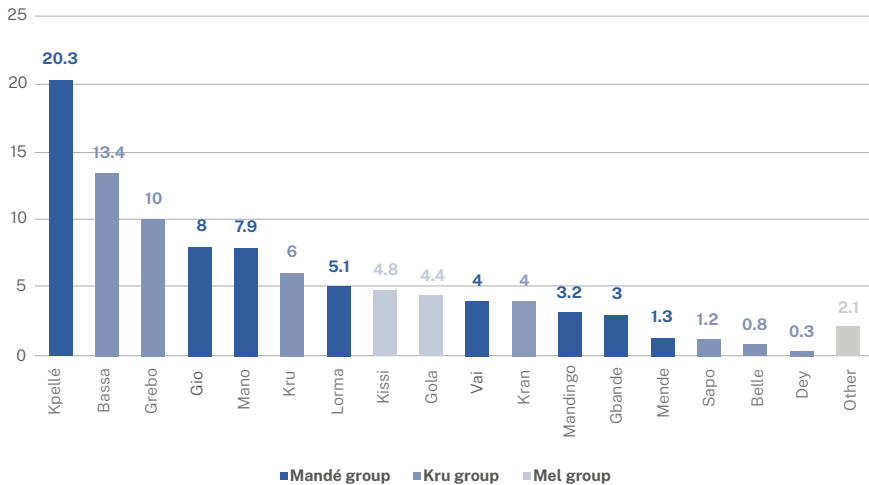


Source: LDHS 2019/2020 (LISGIS et al., 2021).

1 https://en.wikipedia.org/wiki/Administrative_divisions_of_Liberia#Clans

2 https://en.wikipedia.org/wiki/President_of_Liberia

Figure 1.2 Ethnolinguistic groups in Liberia, 2008, percentage



Source: LISGIS (2011).

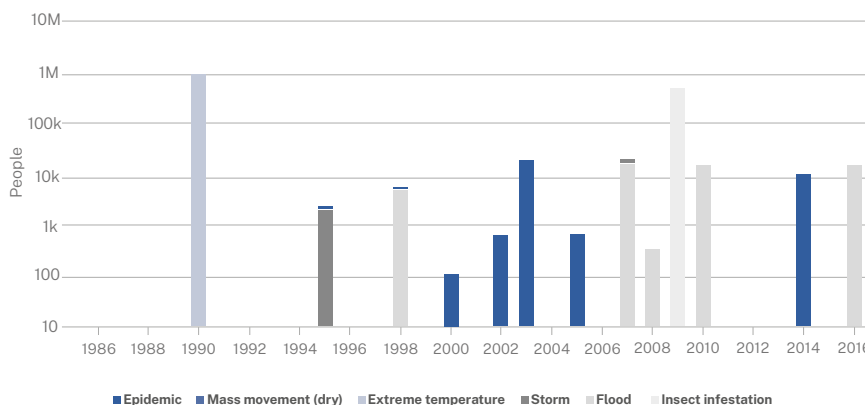
(52 per cent), Kru (37.5 per cent), and Mel (9.2 per cent). The Mandé-speaking people are located primarily in the central and north-western regions of the Liberia area, while the Kru are mostly found in the south-eastern parts of the country, and the Mel (found in Sierra Leone) in the north and the coastal region of the north-west (Britannica, n.d.; Minority Rights Group International, 2020). The largest ethnolinguistic groups are the Kpellé (20.3 per cent); followed by the Bassa (13.4 per cent); and Grebo, Gio, Mano, and Kru (6 per cent). Together they make up two-thirds (66 per cent) of the population (LISGIS, 2011). However, the country's official language of education and public

administration, namely English, is spoken by only 20 per cent of Liberians. Liberian Creole (Pidgin English) is spoken or understood by at least a third of Liberians (USAID, n.d.). The population living in Liberia is mainly Christian (84 per cent), followed remotely by Muslims (14 per cent), and animists (5.5 per cent) (LISGIS, Ministry of Health, and ICF, 2021).

Natural hazards and climate change

While Liberia is not regarded as a country at high risk of any major natural disasters, it is nevertheless prone to natural hazards such as floods, epidemics, sea erosion, storms, extreme temperatures, and insect

Figure 1.3 Key natural hazards statistics, 1990–2016



Source: Climate Change Knowledge Portal (c2021b).

infestation (Figure 1.3). The impact on the population is sizeable, and over an estimated 1.6 million of people have been affected from 1990 to 2016 (Climate Change Knowledge Portal, c2021b). Natural hazards further have major damaging effects on human health, agriculture, infrastructure, and the environment.

The country is further vulnerable to climate change, which is ‘expected to result in more extreme weather situations with more intense temperatures as well as rainfall patterns entailing increased risks and severity of natural disasters’ (Climate Change Knowledge Portal, c2021b). Floods, a particularly recurrent natural disaster, are expected to worsen, especially along the coasts due to rising sea levels. Along with the projected increase in heavy rains, storm surges and erosion, natural hazards are expected to have major detrimental effects on both

the population and infrastructure, which will lead to substantial economic loss following major damage to agricultural lands, livestock destruction, infrastructure destruction [(including schools)] as well as human casualties.³

Combined with limited access to health facilities, limited hygienic practices, and lack of access to safe drinking water there is increased susceptibility to disease outbreaks of malaria, cholera, and diarrheal diseases, with the highest threat in rural areas. (Climate Change Knowledge Portal, c2021a)

The problem is further compounded by the fact that:

Liberia’s coastline includes many of its most densely populated and economically vibrant areas (e.g., the capital city of Monrovia and major port city of Buchanan), as well as numerous informal

³ Vulnerability is exacerbated due to the country’s high level of poverty and high dependence on ‘climate change sensitive’ sectors, such as agriculture, fisheries, mining and forestry (World Bank, n.d.). See also: UNDP et al. (2018).

settlements composed of extremely poor households with little ability to either minimize their exposure to natural disasters or cope with the effects of environmental shocks (e.g., West Point in Monrovia). (World Bank, 2021c)

Preventing and mitigating the risks associated with natural hazards is part of the government's agenda. In 2018, the government developed its National Adaptation Plan (NAP 2018–2024), which builds on the 2008 National Adaptation Plan of Action (NAPA). The NAP 2018–2024 restates NAPA's objectives of reducing vulnerability to climate change impacts and fostering the integration of adaptation into all levels of development planning (UNDP et al., 2018) by helping to:

[i]dentify climate change adaptation needs, develop and implement strategies and program to address those needs to safeguard vulnerable communities' incomes and livelihoods, and

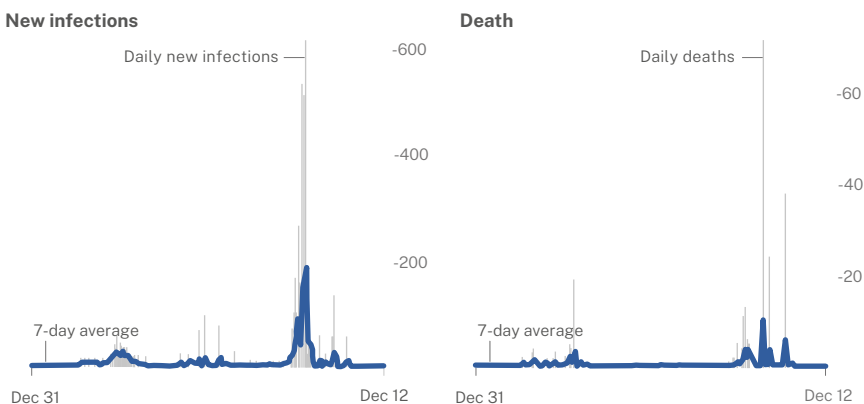
develop medium-term investment plans in climate-sensitive sectors (i.e., agriculture, energy, waste management, forestry and health) and coastal areas in Liberia. (Liberia, 2018)

NAP 2018–2024 further seeks to address the main climate adaptation planning challenges in Liberia, including lack of data and information on climate vulnerability, limited technical and institutional capacity, weak interministerial and inter-agency coordination, and little access to financial resources (Liberia, 2018).

Epidemics and health-related risks

Liberia is prone to a series of epidemics, including malaria, cholera and emerging infectious diseases related to animal-human contact such as Ebola virus disease and COVID-19. Malaria ranks first in terms of the leading cause of morbidity and mortality, and is endemic with year-round, countrywide transmission. According to

Figure 1.4 COVID-19 daily report trend on new infections and deaths, December 2019–August 2021



Source: Reuters (2021) COVID-19 tracker as of 13 December 2021.

the 2018 Health Facility Survey, malaria accounted for 34 per cent of all outpatient consultations and 48 per cent of all inpatient cases. Children under 5 accounted for 35 per cent of all malaria cases and 34 per cent of inpatient deaths (USAID, 2018).

The outbreak of Ebola virus disease in West African countries in 2014 was particularly severe in Liberia, and 10,678 reported cases (of 28,652) and 4,810 deaths (of 11,325) were recorded (CDC, 2019). The recent COVID-19 outbreak, which has been spreading worldwide since December 2019, has been contained somewhat in Liberia as shown in *Figure 1.4* with 5,833 infections and 287 coronavirus-related deaths reported (mainly located in Montserrado county)⁴ since the pandemic began (NPHIL, 2021). As of 13 December 2021, Liberia has been reporting two new infections on average each day after being hit by a new wave of infections in July 2021 (Reuters, 2021).

Able to capitalize on the experience derived from Ebola virus disease management, Liberia, strongly supported by local and donor communities, was able to rapidly put active measures in place to limit the spread of the virus. This is further detailed in its National COVID-19 Response Plan⁵ (World Bank, 2021e). Under the COVAX facility,⁶ Liberia received 602,000 doses as of September 2021⁷ (IMF, 2021a; UNICEF, 2021a). Liberia administered at least 597,913 doses of COVID vaccines as of 6 December 2021 (Reuters, 2021). However, overall structural and institutional weaknesses constitute critical challenges to a rapid and effective response. These weaknesses are, for example, a fragile health-care system marked by a critical shortage of medical staff and resources including drugs, equipment, and medical supplies, limited cold chain infrastructure, and a weak health information system, among others (World Bank, 2021e).

4 About 78 per cent of cases as of 6 December 2021, according to the NPHIL (2021).

5 'In late March and early April 2020, the Liberian authorities put in place containment measures, including stringent social distancing and hygiene, mandatory face masks, closure of the international airport, suspension of in-person school classes, and administrative leave for non-essential public sector workers. Most measures were lifted starting late July 2020. To deal with the wave in June 2021 the government promptly reinstated temporary measures that proved to be effective' (IMF, 2021a).

6 'COVID-19 Vaccines Global Access, abbreviated as COVAX, is a worldwide initiative aimed at equitable access to COVID-19 vaccines directed by Gavi, the Vaccine Alliance (formerly the Global Alliance for Vaccines and Immunization), the Coalition for Epidemic Preparedness Innovations (CEPI), and the World Health Organization (WHO) to coordinate international resources to enable low-to-middle-income countries equitable access to COVID-19 tests, therapies, and vaccines' (<https://en.wikipedia.org/wiki/COVAX>). The COVAX facility in Liberia is co-led by GAVI, Vaccine Alliance, WHO and CEPI, working in partnership with UNICEF, World Bank, civil society organizations, and manufacturers (UNICEF, 2021a).

7 Under the COVAX facility, three batches of vaccines were received since March 2021: 192,000 doses of AstraZeneca vaccine and 302,400 doses of Johnson and Johnson (J&J). An additional of 137,000 doses of J&J were received under the African Vaccine Acquisition Trust (AVAT), the African Union's initiative (IMF, 2021a). By the end of 2021, 96,000 doses of AstraZeneca and 320,000 doses of Pfizer vaccines had been expected, along with 278,000 doses of J&J under the AVAT initiative (IMF, 2021a).

1.2 Political features

Liberia has enjoyed relative stability since the end of the civil war in 2003 following the signing of the Accra Comprehensive Peace Agreement, which prompted the resignation of President Charles Taylor. The country has had three presidential elections (2005, 2011, and 2017) acknowledged as ‘free, fair, and credible’ by international observers with no major outbreak of violence (UNHCR, 2019; USAID, 2022; World Bank, 2020d). On 22 January 2018, George Weah took office, succeeding Ellen Johnson Sirleaf, the first female elected president in Africa in 2005, allowing the Congress for Democratic Change, the largest opposition party, to win the elections (World Bank, 2020d).

The desire for a more just, accountable, and effective governance has been growing among the general population and civil society in Liberia and is evident from the growing number of demonstrations calling for the implementation of reforms, policies, and mechanisms that can address corruption, foster political inclusion and improve management of natural and economic resources in the country. (World Bank, 2020d)

While democratic elections are still recognized as ‘influenced by patronage practices’ (World Bank, 2020d), prevailing political and sectoral grievances, fuelled

by a profound feeling of the population to be neglected by the political elites, may be major destabilizing peace forces. Indeed, as stressed by Liberia (2018):

[p]eace in Liberia today is represented by the absence of violence rather than equitable access to opportunities and justice for the most vulnerable, the renewal of legal and social systems which effectively serve the needs of the poor, or a fully inclusive society.

The government has made strides to address those grievances at national level. During the latter part of its first year in office, the Weah administration finalized and launched an ambitious ProPoor Agenda for Prosperity and Development (PAPD) (UNHCR, 2019). The PAPD is the second in a series of five-year national development plans anticipated under the Liberia Vision 2030 framework. It follows the Agenda for Transformation 2012–2017 (AfT). ‘The Pro-Poor agenda is a framework for inclusion, more equitable distribution of our national wealth, and a rights-based approach to national development’ (Liberia, 2018). It aims to address major deficiencies and, as such, represents a unique opportunity to deliver the elusive socioeconomic and political transformation long demanded by Liberians (Liberia, 2018).⁸

⁸ The PAPD builds on four pillars: Goals related to improvement of human capacity and the development of a knowledge economy that aim to transfer ‘power to the people’ fall under Pillar 1. It can only be achieved if initiatives are inclusive, non-discriminatory, and respectful of human rights and justice. Likewise, private-sector-led growth under Pillar 2 requires a level of stability and an assurance that long-term investments can be protected if the desired economic transformation is to be achieved. Building a capable state that governs effectively and transparently under Pillar 4 further requires accountability and reconciliation of political, social, and economic injustices (Liberia, 2018).

1.3 Demographic patterns

Population evolution and growth rate

From 1.17 million inhabitants in 1962, the population of Liberia increased to 2.6 million inhabitants in 2008⁹ and was estimated at 5.06 million in 2020. Forecasts for the future point to continued population growth that is estimated at around 6.4 million people in 2030 and 9.3 million people in 2050. The population has been growing at a relatively high rate from 1962 to 2020, at an average annual growth rate of 2.6 per cent. However, the evolution has been far from smooth and is marked by an important drop in the population growth rate in the civil war years (1989–2003) during which more than 250,000 Liberians were killed and over 1 million were internally displaced or sought refuge abroad (including Côte d'Ivoire and Guinea). The post-war years have seen a surge in population growth at 2.9 per cent on average per year. Projections indicate a decreasing

average annual growth rate in the years to come of 2.3 per cent by 2030 and a low 1.9 per cent by 2050 (*Table 1.1*).

The Liberian population is characterized by a high proportion of young people, and 40 per cent of the population was under 15 in 2020. The 15-to 64-year-old category represents more than half (56.3 per cent) of the total population, while people aged 65 and over account for 3.3 per cent of the total population, giving a high dependency rate at 78 dependants per 100 potential workers aged 15–64. However, in principle, this age structure should give Liberia a demographic dividend, following the important number of young people expecting to enter the labour market over the next decade. Yet, the ability to profit from this dividend is contingent on the 'ability of the formal economy to absorb and productively employ this workforce' (Liberia, 2018). So far, opportunities in

Table 1.1 Trend in global population, 1962–2050

	1962	1974	1984	2008	2020*	2030*	2050*
Pop ('000)	1,167	1,556	2,112	3,608	5,058	6,372	9,340
Average annual growth rate		2.4%	3.1%	2.3%	2.9%	2.3%	1.9%
Dependency ratio**	82	90	95	87	78	69	60
Percentage of 0–14 in total population	41.9	44.3	45.5	43.1	40.4	37.2	31.8
Percentage of >65 in total population	3.2	3.2	3.2	3.4	3.4	3.8	5.5

Source: United Nations population, medium variant (UN Population Division, 2019).

Note: Estimates and projections (*). Population and housing censuses occurred in 1962, 1974, 1984, and 2008.

** Nonworking-age population (0–14 and >65) and working-age population (15–64). It consists of the number of dependants per 100 working-age population.

9 The country conducted its last census in 2008. Previous population and housing censuses occurred in 1962, 1974, and 1984.

the formal sector have been limited, constraining workers from engaging in farming and other low productive activities in the informal sector. To benefit from the demographic dividend, Liberia will need to provide its youth with adequate education, training, and productive economic opportunities.

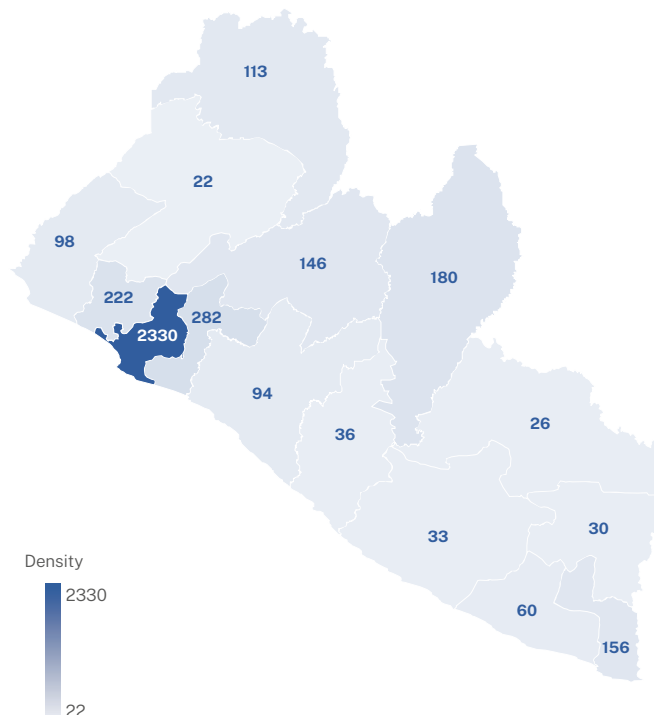
Population density and urbanization rate

The population living in Liberia is unevenly distributed over the national territory. The density, at 131 habitants per square miles on average in 2020, ranges from 21 in Gbarpolu county to 2,330 in Montserrado county, which hosts the

capital city, Monrovia (*Figure 1.5*). The fact that two-thirds of the population currently lives in the Montserrado and the North Central regions comprising three counties further illustrates the imbalance in the population distribution over the territory, as highlighted in the PAPD.

Today, much of the population lives in an urban setting – 52.1 per cent in 2020 from 44.3 per cent in 2000 (World Bank, n.d.) – fuelled partly by internal migration. Over the years, Montserrado county has registered the highest levels of net migration (Liberia, 2018; LISGIS, 2011; LISGIS et al., 2008, 2014, 2021), following internal migration to seek better job opportuni-

Figure 1.5 Population density (population by square mile) by county, 2020



Source: United Nations population, medium variant (LISGIS, 2011; UN Population Division, 2019).

ties.¹⁰ Other population shifts have been seen along current economic corridors, including the Monrovia–Ganta, Monrovia–Buchanan, Monrovia–Tubmanburg, Monrovia–Bo Waterside, Monrovia–Bong County, and Harper–Pleebo routes. Urban centres such as Ganta, Pleebo, Buchanan, and Greenville are also witnessing rapid population increases (Liberia, 2018).

The concentration of the population in Montserrado county and Monrovia particularly poses major economic, lodging, sanitation and health challenges following rapid unplanned urbanization. There is a potential risk of fuelling social unrest and instability, especially among the youth in search of income-earning and self-improvement opportunities (Liberia, 2018).

These demographic features are important indicators for education as they can be used to plan the supply and organization of schools.

School-aged population trend

To assess the potential demand for education, it is necessary to analyse the evolution of school-aged populations according to the specific age groups that characterize them. *Table 1.2* presents the projections of the populations of 3–5 years, 6–11 years, 12–15 years, 16–18 years and 19–23 years, which correspond to the official age groups of preschool and primary school, secondary and tertiary cycle attendance, respectively. The analysis started in 2008, the year of the last census, and goes up to 2030.

The school-aged population is on the rise, but the pressure to meet the demand for the increased school-aged population will decrease following a decrease in the population growth rate. The school-aged population of 3- to 23-year-olds increased from 1.8 million to 2.5 million between 2008 and 2020, and is set to increase to 3 million children and young people by 2030 (UN Population Division, 2019). This

Table 1.2 Trend in school-age population, 1962–2030

Age group	Number ('000) and percentage					Average annual growth rate			
	2008	2017	2020	2026	2030	2008–2017	2017–2020	1920–2026	1926–2030
3–5	345	412	428	469	500	2.0%	1.2%	1.5%	1.6%
6–11	591	760	795	863	921	2.8%	1.5%	1.4%	1.6%
12–14	246	343	367	402	424	3.8%	2.2%	1.5%	1.4%
15–17	222	313	341	383	405	3.9%	2.9%	2.0%	1.4%
18–23	405	528	589	697	752	3.0%	3.7%	2.9%	1.9%
Total	1,809	2,357	2,519	2,814	3,002	3.0%	2.2%	1.9%	1.6%
Share in total pop	50.1%	50.1%	48.6%	48.3%	47.1%				

Source: United Nations population, medium variant (UN Population Division, 2019).

Note: Estimates and projections.

¹⁰ During the war, the city hosted a sizeable number of internal displaced persons fleeing the violence, inflating the number of inhabitants.

represents an additional 483,000 children and youth that the education system will potentially need to accommodate.

However, although on the rise, the weight of the school-aged population in the total population is decreasing from half of the country's total population in 2008

to 47 per cent of the total population in 2030, which follow the decreasing levels of population growth rates. All age groups, except preschool-aged children, are to record lower levels of increase in their population in the years to come, following past decreases in fertility, thus easing the pressure on the education system.

1.4 Social context

Beyond the purely demographic dimension, it is helpful to present some key social indicators that facilitate understanding of specific social situations that can affect the demand for education or the supply thereof.

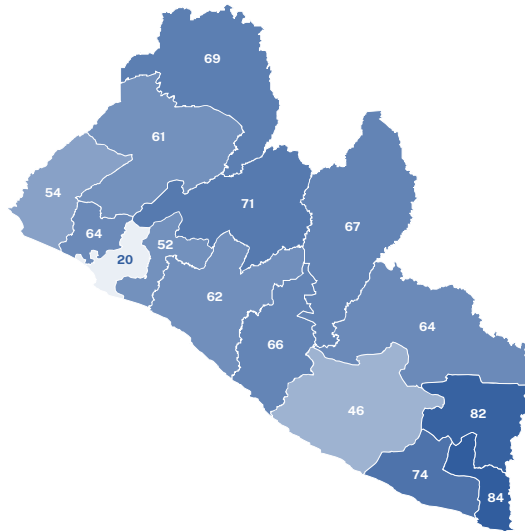
There is a shortage of data on social indicators. Many of the indicators analysed in this study are drawn from the demographic and health surveys (DHSs) that have been conducted regularly since 1986 and offer comparable data over time. Further data is obtained from the World Bank's (n.d.) World Development

Table 1.3 Selected social indicators, 2007–2019/2020

Percentage unless specified	Source	2007	2013	2020
Poverty rate	1	63.8	54.1 (2014)	55.9 (World Bank, 2020b)
Urbanization rate	1	46.7	49.0	52.1
Life expectancy at birth (years)	1	57.4	61.2	64.1
Illiteracy rate (F/M; 15–49)	2	40.8/70.3	47.9/71.4	52/75
Illiteracy rate (F/M; 15–24)	2		64.2/79	69.1/80.3
Under-5 with a birth certificate	2	3.6	24.6	30.3
Fertility rate (average number of children born alive per woman)	2	5.2	4.7	4.2
Adolescent childbearing	2	32.1	31.3	30.3
F married by 15 (20–24 y.o.)	2	10.8	8.8	5.8
F married by 18 (20–24 y.o.)	2	37.9	35.9	24.9
Stunting among children under 5	2	39	32	29.8
Under-5 mortality rate (per 1,000 live births)	2	110	94	93
Maternal mortality ratio (per 100,000 live births)	2	994	1072	742
Children under 18 not living with a biological parent	2	21.1	24.9	27
Child labour	2	n/a	n/a	31.7
Internet use among 15–19 y.o. (F/M)	2	n/a	n/a	16.8/28.4
Household with computer	2	0.8	5.1	6.6
Household with cell phone	2	28.7	64.6	69.7
Household with TV	2	7.0	14.1	20
Household with radio	2	51.5	58.9	48
Human development index	3	0.445	0.477	0.480

Source: (1) World Bank (n.d.) World Development Indicators; (2) LISGIS et al. (2008, 2014); LISGIS, Ministry of Health, and ICF (2021). (3) UN Population Division (2019).

Figure 1.6 Poverty rate, 2016



Source: HIES 2016 LISGIS (2017).

Note: The darker the colour, the higher the poverty rate.

Indicators database, with occasional additional sources including the Household Income and Expenditure Survey (HIES) 2016 (LISGIS, 2017).

While having recorded some improvements over the years, social indicators remain low and marked by sharp location disparities. They are also under major threat of severe deterioration following the COVID-19 pandemic, which might weaken the demand for education services.

Poverty

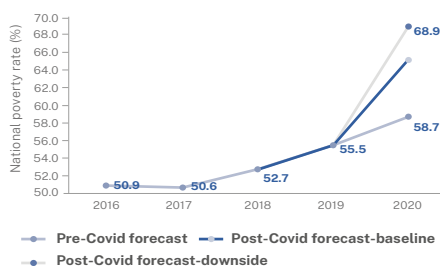
The population is overwhelmingly poor. According to the HIES 2016 and shown in Figure 1.6, 50.9 per cent of the popula-

tion lived below the poverty line in 2016 (71.6 per cent in rural; 31.5 per cent in urban), compared with 64 per cent in 2007 (LISGIS, 2017).¹¹ In 2019, the poverty rate increased to 55.5 per cent following negative per capita gross domestic product (GDP) growth rates and rising inflation, further eroding household purchasing power (World Bank, 2021c). The non-monetary poverty indicators by UNDP (2020b) based on household deprivation in education, health, and living standards further highlight the multi-dimensionality of poverty patterns with 63 per cent of the population multi-dimensionally poor, and 32 per cent severely multidimensionally poor.¹² Subnational disparities also prevail (See Figure 1.6).

¹¹ Poverty levels started to decline at the end of the conflict in 2005, but since 2014, following the Ebola virus disease outbreak, poverty has been on the rise (Liberia, 2018).

¹² Figures are based on 2013 data (UNDP, 2020b).

Figure 1.7 Projected increase in the national poverty rate, pre- and post-COVID-19 forecasts



Source: World Bank (2020b).

The effects of COVID-19 on both the population and the economy are expected to be particularly harsh in Liberia given the already fragile, weak public health¹³ and social protection systems and the high levels of food insecurity and malnutrition. Poverty rates are projected to increase by as much as 9.7 to 13.4 percentage points in 2020¹⁴ as per capita income contracts and food prices rise. This translates into poverty rates rising from 65.2 per cent to 68.9 per cent in 2020 under the baseline (downside) scenario (Figure 1.7). Under these projections, ‘an additional 335,000 to 526,000 Liberians are now at risk of falling into poverty’, entailing the total number of poor people accounting for 3.36 million to 3.55 million (Figure 1.8) (World Bank, 2020b, World Bank and Knomad, 2020).

The population still lacks access to basic utilities and facilities, although the situation is improving. In 2019/2020, 23.1 per cent of the population had access to elec-

Figure 1.8 Projected number of people living below the national poverty line, pre- and post-COVID19 forecast



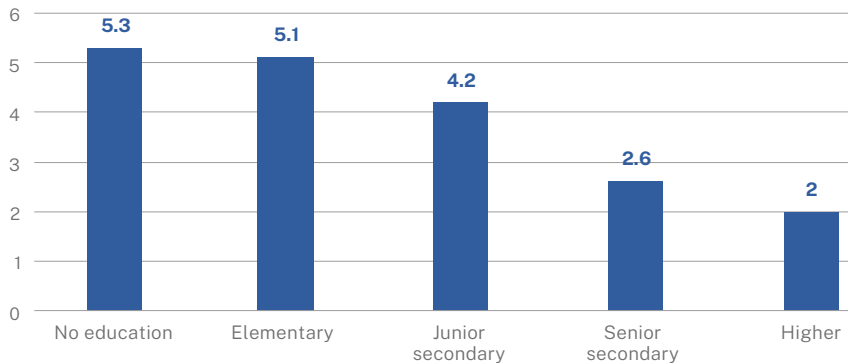
tricity and 84.6 per cent to an improved water source against, respectively, compared with 3.3 per cent and 66.1 per cent, respectively, in 2007. Of households, 69.7 per cent possessed a cell phone, 20 per cent a TV, and 48 per cent a radio in 2019/2020 against 28.7 per cent, 7.0 per cent, and 51.5 per cent, respectively, in 2007, highlighting much progress. Internet was used by 43.2 per cent of male adults and 22 per cent of female adults in 2019/2020. However, a solid urban–rural divide prevails with access to basic utilities and facilities much less prevalent in rural areas. Household wealth is also a major determinant of access to utilities and facilities. Important geographic disparities are observed by county (LISGIS et al., 2008; LISGIS et al., 2021).

Literacy

Many Liberian are illiterate, especially women. The literacy rate for males aged 15- to 49-year-old was 75 per cent

¹³ Critical gaps in the availability of essential inputs including drugs, equipment and medical supplies further weaken an efficient response.

¹⁴ The World Bank is proposing two scenarios depending on how long COVID-19 pandemic-related containment measures will persist, which ultimately will affect the pace of economic recovery related economic and welfare indicators. For more details, see World Bank (2020b: 35).

Figure 1.9 Fertility rate, by female level of education, 2019/2020

Source: LDHS 2019/2020 (LISGIS et al., 2021).

compared with 52 per cent for females in 2019/2020.¹⁵ Proportions have improved compared with 2007, when 70.3 per cent of adult males and 40.8 per cent of adult women were literate. The literacy rate was slightly better among the youth (15–24-year-old) with 81 per cent of males and 61 per cent of females being literate. While acknowledging progress in schooling over the years, the prevailing pattern also highlights the persistence of poor education opportunities, especially for women. Urban Liberians are more likely than their rural counterparts to be literate. Sixty-three per cent of urban women and 84 per cent of urban men are literate compared with 34 per cent of rural women and 61 per cent of rural men (LISGIS et al., 2008; LISGIS et al., 2021).

Illiteracy cannot be eradicated quickly as its root causes result from a complex interplay of cultural, socioeconomic, and educational factors. Adult literacy is critical not only for the ability of adults to

be literate and numerate for their own personal benefit, but also because illiterate parents may not recognize the importance of encouraging their children to learn to read and count. This, in turn, can affect the demand for education. More generally, the literacy of mothers directly determines the survival, growth, and development prospects of their children.

Young childbearing age

Women have many children and start childbearing at a young age. One-third (30 per cent) of women aged 15–19 had already begun childbearing in 2019/2020, and 34.4 per cent of 20- to 24-year-old women had a child by 18. The fertility rate in 2019/2020 was 4.2 children per woman – a sharp reduction compared with 2007 when it stood at 5.2. It drops heavily with the level of education of the mother: from 5.3 for uneducated women to 2.0 for women with post-secondary education (see *Figure 1.9*) (LISGIS et al., 2008; LISGIS

¹⁵ The HIES 2014/2015 provides a much higher figure with 66.7 per cent of adults aged 15–49 years literate (80.4 per cent among men and 54.8 per cent among women) (LISGIS, 2015). The different protocol used to assess literacy might explain the observed gap.

et al., 2021). Early marriage or union¹⁶ and unwanted pregnancies following lack of access to contraception¹⁷ entail that many young women begin childbearing early and, as a consequence of their family responsibilities (and stigma?), no longer attend school. Lower numbers of girls in schools lead to higher levels of female illiteracy, and feed a cycle of illiteracy and associated problems.

Gender-based violence

Gender-based violence (GBV) is pervasive. The 2019/2020 Liberia Demographic and Health Survey (LDHS) collected information on women and men's attitudes towards wife-beating in five separate circumstances (LISGIS et al., 2021).¹⁸ Overall, 37 per cent of women believe that a husband is justified beating his wife in at least one of five specified circumstances compared with 25 per cent of men. This proportion has declined substantially over time from 59 per cent in 2007. Agreeing with wife-beating is much lower among women with a senior secondary education (23 per cent) or a post-secondary education (12 per cent) than among women with no education or less education (41–49 per cent). It is also higher among women aged 15–19 (45 per cent) and 20–24 (38 per cent). Other statistics reveal that 46 per cent of women were subject to some sort of violence by a current or former partner over the past 12 months. The high preva-

lence of GBV, including SGBV, might be a legacy of the civil war that has seen a surge in GBV, especially sexual violence, with rape and other forms of sexual violence becoming an integral part of the pattern of violence inflicted upon targeted communities and creating a culture of impunity for SGBV (Liberia, 2018). COVID-19 has been associated worldwide with increased GBV following lock-down measures; Liberia might be well affected by this pattern as well.

Although article 11 of the Constitution of Liberia guarantees fundamental rights and freedoms for all, irrespective of sex, the institutional and legal framework for protecting women's rights is limited. There is no explicit definition of gender discrimination in either the Constitution or Liberian legislation. Liberia has also not ratified the Optional Protocol on Violence against Women. The progress report on the implementation of the National Gender Policy highlights the low-quality service provided by legal institutions (including for survivors of GBV), the underrepresentation of women in the justice sector, corruption, and the lack of protection of women's rights (Liberia, 2018).

Female decision power

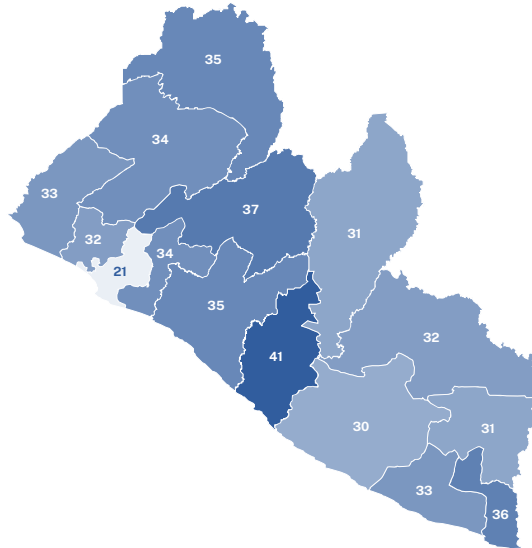
Female decision power is constrained as highlighted by the last LDHS report (LISGIS et al., 2021). Indeed, 31 per cent of

¹⁶ According to LDHS 2019/20 (LISGIS et al., 2021), 13.1 per cent of women aged 15–19 years were married or in a union in 2019/2020.

¹⁷ Of sexually active girls aged 15–19, 81.4 per cent reported not using any contraceptive methods. Among sexually active girls aged 15–19 and unmarried, 53 per cent expressed that their demand for family planning need was not met; this proportion mounting to 84 per cent among married teen girls (LISGIS et al., 2021).

¹⁸ This includes: she burns the food, she argues with him, she goes out without telling him, she neglects the children, and she refuses to have sex with him. If respondents answer 'yes' in at least one circumstance, they are considered to have attitudes justifying wife-beating.

Figure 1.10 Stunting among children under 5-years-old, 2019/2020



Source: LDHS 2019/2020 (LISGIS et al., 2021).

Note: The darker the colour, the higher the stunting rate.

women aged 15–49 do not make their own decisions regarding their health, household purchases, and visits to their family and relatives. Furthermore, 41 per cent of women do not make their own decisions regarding sexual relations, contraceptive use, or reproductive healthcare. While 61 per cent of men own a cell phone, only 47 per cent of females do, highlighting their limited access to the external sphere.

Effects of medical conditions

COVID-19 is expected to affect already poor health outcomes negatively. Pre-COVID-19, the health status of the population was already impoverished following years of civil war and the Ebola virus disease outbreak of 2014 that had further disrupted the already weakened healthcare system. The effects of COVID-19 are expected to further limit the government's ability to deliver essen-

tial health services. This situation, along with expected increases in food insecurity and malnutrition, may lead to a major rise of preventable deaths and morbidities causing severe deterioration of health-related outcomes.

Stunting measures and a child's nutritional status is an important indicator highlighting the prevalence of *chronic* malnutrition or other nutrition-related disorders. The consequences of stunting are quite detrimental and are often associated with impaired cognitive development and chronic diseases that could potentially translate into weak school performance (Walker et al., 2011). On average, around one-third (30 per cent) of children under 5 were stunted in Liberia in 2019/2020, and 10 per cent were severely stunted, with boys or rural children slightly more likely to be stunted (see *Figure 1.10*) (LISGIS et al., 2021). Conversely, the prevalence of

being overweight is higher among urban children (5 per cent) than rural children (4 per cent). Bad eating habits and lack of physical activities, especially in urban areas, are often the main reasons. While increasing slowly, obesity will need to be tracked adequately given its detrimental effects on health, increasing chronic diseases such as diabetes, high blood pressure, and coronary artery diseases.

In 2019/2020, the under-5 mortality rate was estimated at 93 per 1,000 live births (from 110 in 2007), while maternal mortality was estimated at 742 deaths per 1,000 live births (from 994 in 2007) (LISGIS et al., 2021). These figures indicate an overall poor quality health system and difficulty to access health services. For example, 46 per cent of men and 45 per cent of women in rural areas express access to healthcare services as being constrained by a lack of financial resources and distance. Low vaccination rates partly account for the high mortality rate of children under 5 as only half of the children aged 12–23 months have received all their basic vaccinations.

HIV/AIDS can have multiple and negative impacts on education, affecting demand, supply, and the quality and management of teaching. UNAIDS (2020) data indicate that 1.1 per cent of Liberian adults aged 15–49 years were infected with HIV/AIDS in 2019, providing an estimated figure of 35,000 infected adults. The number of children (aged up to 17 years) orphaned by AIDS was estimated at 36,000 in 2020 (UNAIDS, 2020). This is not a minor issue, and the high prevalence of children living in fragile family settings is of particular concern. In 2019/2020, **27 per cent** of children (under 18 years) were not living with a biological parent, and in the case of

9 per cent of children, one or both parents were deceased. Although fostering can be associated with some schooling strategies (children move in with close relatives where no school is available near the family home), it is nevertheless usually associated with a more fragile demand for schooling. There are also some presumptions that those children might be trafficked. It should be noted that only **66 per cent** of children had their birth registered by civilian authorities, and only 30.3 per cent of children had a birth certificate in 2019/2020 (LISGIS et al., 2021).

People living with disabilities are among the most vulnerable. Accurate statistics on the number of persons living with disabilities in Liberia are not available, with a wide variation being observed following underlying concepts and classifications used. The disability rate ranges from 3 per cent in the 2008 Census (LISGIS, 2011) to 20 per cent of the population in the PAPD (Liberia, 2018). A high level of disability among the population resulted from the civil war, endemic poverty, and the long-term effects of Ebola. Eye impairment was the first cause of disability recorded, affecting 30 per cent of persons with disability (LISGIS, 2011). Persons with disability are more likely than others to live in poverty and to face discrimination in Liberia even though the government has ratified several international treaties, conventions, and optional protocols, including the Convention on the Rights of Persons with Disabilities (CRPD) in 2012. In 2013, the government adopted a national strategy to implement the Convention. So far, 'primary, senior secondary and tertiary institutions do not have the necessary infrastructure to accommodate persons with physical or mental disabilities' (Milton, 2015). Health facilities are

Table 1.4 International HDI 2019/2020

	Liberia	Sub-Saharan Africa	Low- and low-middle-income countries
HDI (2019)	0.480 (175/189 countries)		
GDI (2019)	0.890		
HCI (2020)	0.31 (153/157 countries)	0.38	0.48

Source: UNDP (2020b); World Bank (2020c).

also often ill-equipped to deal with special needs (Liberia, 2018).

Persisting resource constraints and fragility fuelled by years of civil war and, more recently, by the Ebola virus disease outbreak, are believed to have hindered the government's ability to improve living standards. Various international indicators offering a synthetic measure of human development outcomes, such as the UNDP Human Development Index (HDI), the related Gender Development Index (GDI), and the World Bank's Human Capital Index (HCI), pinpoint overall poor human development outcomes of the Liberian population. Indices are lowest among the world and sub-Saharan Africa (see Table 1.4).

The HDI value for 2019 was 0.480, which put Liberia in the low human development category, positioning it at 175 of 189 countries and territories. The rank is shared with the Democratic Republic Congo and Guinea-Bissau. Between 2007 and 2019, the HDI value for Liberia increased from 0.435 to 0.480. When the value is discounted for inequality, the HDI falls to 0.325, which is a loss of 32.3 per cent due to an imbalance in the distribution of the HDI dimension indices. The 2019 female HDI value for Liberia was 0.453 in contrast with 0.509 for males, resulting in a GDI value of 0.890, placing it into Group 5, which comprises countries with low equality in HDI achievements between women and men (absolute deviation from gender parity of more than 10 per cent). On the HCI, Liberia ranks 153 of 157 countries with a score of 0.31 (UNDP, 2020b; World Bank, 2020c).

1.5 Macroeconomic and public financing performance and outlook

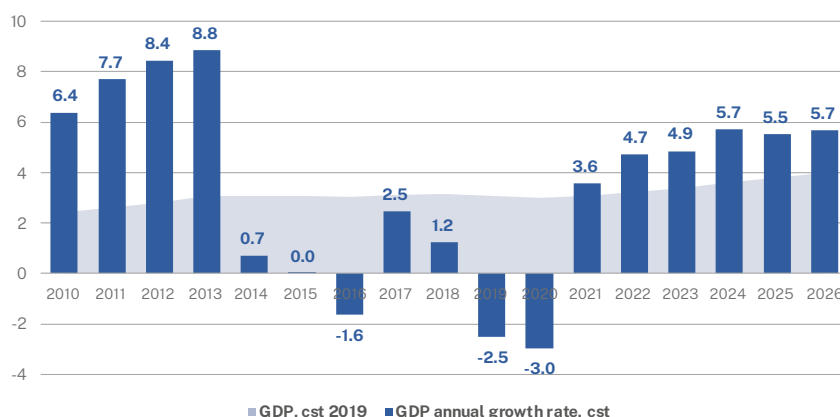
Evaluating the development perspectives of education systems requires knowledge of the macroeconomic constraints a country faces and some understanding of its budgetary room for manoeuvre. The analysis looks at past public expenditure and likely resources available in the future, and assesses the global level of resources allocated to education. Is the macroeconomic outlook (economic growth, public revenues, and financial priority for education) favourable for education spending?

Economic growth and policy

The analysis of the evolution of macroeconomic aggregate indicators such as GDP is important to understand a country's overall level of wealth and development. The state's capacity to levy a share of national wealth for the operation of public services is also crucial for identifying the additional resource mobilization opportunities for public services in general and education in particular.

Due to its small and undiversified economy, Liberia is extremely vulnerable to external shocks. *Figure 1.11* shows the evolution of GDP and GDP growth in constant terms from 2010 to 2026. The 2010 decade was marked by major external shocks related to the Ebola virus disease outbreak of 2014–2015 that were coupled with an important drop in global commodity prices and the COVID-19 pandemic that emerged in 2020. Before the 2014 Ebola virus disease outbreak, Liberia enjoyed high annual growth rates above 6 per cent (and up to 8.4 per cent and 8.8 per cent in 2012 and 2013, respectively) following favourable world prices for its key export commodities (e.g., rubber, iron ore, and gold) and large foreign direct investment and concessions, which boosted growth (USAID, 2016). The twin shocks of the Ebola virus disease outbreak and reduced international commodity prices of the key exports of Liberia (e.g., rubber and iron ore) reduced the growth rate to 0.7 per

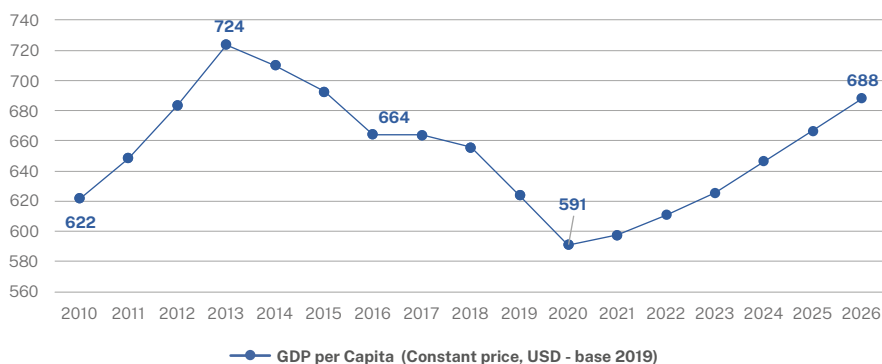
Figure 1.11 Evolution of GDP and GDP annual growth, 2019 constant price



Source: CBL (2010–2021) and World Economic Outlook Database, October 2021 (IMF, 2021b).

Note: Estimates started in 2016; billions of US\$ and percentage.

Figure 1.12 Trend in the GDP per capita (US\$), 2019 constant price, 2010–2026



Source: CBL (2010–2021) and World Economic Outlook Database, October 2021 (IMF, 2021b). GDP and United Nations Population Division (2019) data projections. GDP estimates started in 2016.

cent in 2014 and –1.6 per cent in 2016 before rebounding to 2.5 per cent in 2017 (CBL, 2010–2021; IMF, 2021b).

The COVID-19 pandemic is posing a new threat to an already very fragile economy that remains highly vulnerable to commodity price fluctuations of its major exports and imports, given its small size and limited economic diversification. Following a drop in global demand and supply, the country went into recession, registering a major contraction of its global production by 2.5 per cent and 3.0 per cent in 2019 and 2020, respectively.^{19,20} This was coupled with high inflation rates (27 per cent in 2019) and continuous depre-

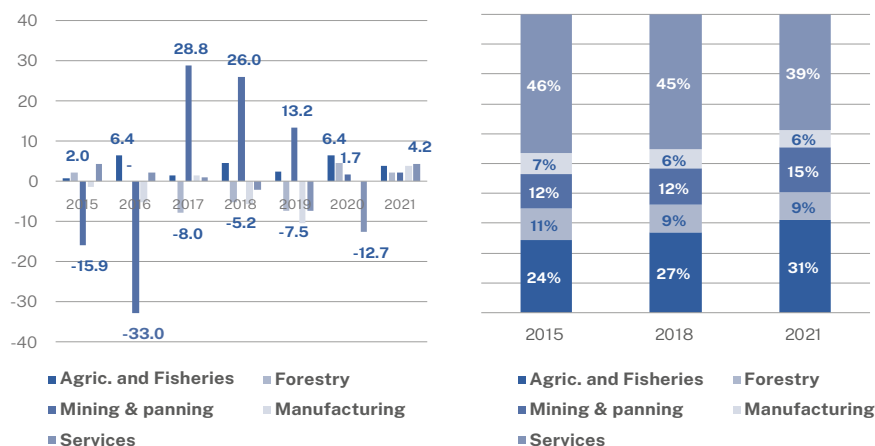
ciation of the Liberian dollar (29 per cent in 2019) that have further deteriorated the purchasing power and welfare of the Liberian population (See *Table A1* in the *Annex* for details).²¹ As COVID-19 restrictions are relaxed and economic activities resume, economic growth is expected to gradually increase with growth rate levels above 5 per cent projected to be recorded in the years to come, also pushing up the overall wealth per capita. In 2020, the GDP per capita was estimated at US\$591, down from US\$724 recorded in 2013 (*Figure 1.12*). The situation is alarming since a significant portion of Liberians are food insecure due to the country being a net importer of food (World Bank, 2021d).

¹⁹ The impacts of the shocks were compounded by the transition to a new political administration in 2018 as the relative inexperience of the incoming administration increased policy uncertainty and weakened economic management (World Bank, 2020e, World Bank and Knomad, 2020).

²⁰ Liberia's economy is more volatile and vulnerable to shocks and less to benefit from economic growth recovery than the ECOWAS average country – See *Figure A1* in the *Annex*.

²¹ The local currency shortage that has resurfaced in November 2020 is further hindering Liberians' purchasing power (EIU, 2021).

Figure 1.13 Trend in real GDP growth and GDP composition by economic sector, 2015–2021



Source: CBL (2015–2021) and World Economic Outlook Database, October 2021 (IMF, 2021b). Percentage and percentage of GDP

The economy is dominated by services that accounted for 44 per cent of GDP in 2021, followed by agriculture (39 per cent)²² and the industry sector (17 per cent). Over the period from 2015 to 2021, industrial activity has seen considerable swings in growth rates, registering mixed results since the service sector has often registered negative growth rates.²³ As a result, the GDP composition has gradually shifted from the tertiary sector towards the secondary and primary sectors (Figure 1.13). This trend is to be pursued in the years to come, illustrating major investments pursued in the agriculture, fishery, forestry, and mining subsectors. As COVID-19 restrictions are relaxed, activity in all sectors is expected to resume gradually, and objectives set in the PAPD will continue to guide policy reforms. Growth in the industry is expected to be fostered by higher levels of rubber

production, while large-scale infrastructure projects (e.g., hydropower plant in Nimba supported by African Development Bank, the Liberia Electricity Sector Strengthening and Access Project funded by the World Bank, and a modern inland commercial storage facility) will boost the construction sector. The services sector is expected to grow thereby following the more vibrant telecommunications, financial services, and transport subsectors (EUI, 2021; Liberia, 2018).

The World Bank (2021b) noted that the COVID-19 pandemic is expected to pass and that recovery is possible in 2021; however, the resultant negative economic impact on Liberia is expected to be significant. Liberia faces major structural and external binding economic constraints. The country is characterized by inadequate infrastructure, including roads, elec-

²² Including fishery, forestry, and panning and mining.

²³ With business and tourism travels and related services being particularly affected following several months of general lockdown.

Table 1.5 Fiscal indicators (on budget), 2014/2015–2019/2020

As a percentage of GDP	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Total government revenue	20.6	16.9	16.7	13.9	15.7	17.9
Domestic	14.1	13.9	14.0	12.9	15.3	14.3
Tax revenue	12.3	12.3	11.6	11.5	12.6	11.6
Non-tax revenue	1.8	1.6	2.4	1.4	2.6	2.8
External	6.5	3.0	2.7	0.9	0.4	3.6
Grants	1.9	2.1	2.2	0.3	0.0	0.0
Loans	4.6	0.9	0.5	0.6	0.4	3.6
Total government expenditure (on budget)	20.0	20.3	16.9	16.9	17.5	17.2
Recurrent	17.6	19.0	16.9	16.6	16.5	15.6
Development	2.4	1.3	0.0	0.3	1.0	1.6
Share of recurrent	88%	93%	100%	98%	94%	91%
Share of development	12%	7%	0%	2%	6%	9%
Deficit (excluding grants)	-5.9%	-6.4%	-2.9%	-4.0%	-2.3%	-2.8%

Source: National Budget (MFDP, 2013–2022), CBL (2014–2020), IMF (2021b), and World Bank (2021f).

Note: See Table A2 in the Annex for detailed data. Data are captured in the budget books. Most external funding is not captured, nor is most donor-funded development expenditure been spent off-budget.

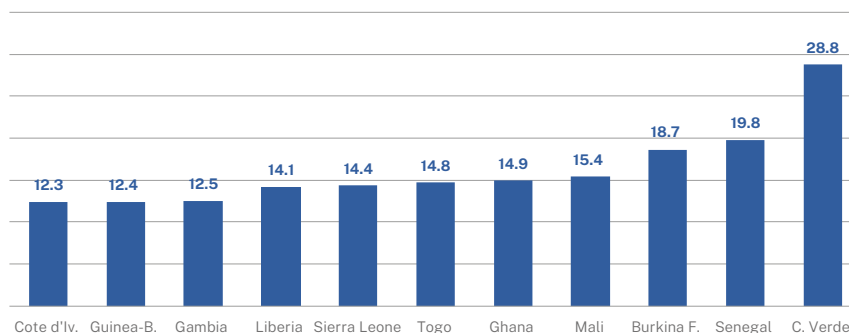
tricity, water supply, transport, and information and communications technology (ICT). Access to finance is limited, while tax regulations are cumbersome. The country is further marked by weak institutional capacity and limited skilled labour that impinge investments and entail high costs of doing business (Liberia, 2018; Liberia: Market overview, 2019). The relatively undiversified and limited economy makes Liberia both vulnerable to external price evolutions and dependent on external support (Liberia, 2018).

Most employment is informal (87 per cent of those aged 15–64 years), mainly as self-employment in agricultural or unregistered non-farm enterprises, where females and youth aged 15–24 are found

disproportionally (95 per cent and 97 per cent, respectively) (World Bank, 2021c). Agriculture²⁴ is the primary livelihood for many households and around 43 per cent of workers. It provides subsistence to many households farming with rice, cassava, pepper, bitter balls, okra, and green leaves. ‘Tree crops, especially rubber, oil palm, cocoa, and coffee, are an important source of cash for smallholders and contribute significantly to the economy’ (World Bank, 2021e). However, overall agricultural productivity is low. As a result, Liberia imports 50–60 per cent of its staple food requirements, which makes the country vulnerable to global food price volatility and food insecurity (World Bank, 2021e). See Chapter 5 for more details.

24 Including hunting, forestry and fishing.

Figure 1.14 Domestic revenue as a share of GDP, ECOWAS countries, 2019 or most recent year



Source: National Budget (MFDP, 2013–2022), CBL (2014–2020), and World Bank (2021f). ECOWAS: World Economic Outlook Database, April 2021, IMF (2021b).

Government revenue and expenditure

Table 1.5 captures government revenue and expenditure (expressed as a percentage of GDP) as available in CBL and MFDP budget books. These figures represent a partial overview of total revenue and expenditure as most donor support is not tracked adequately in the budget, and the related financial management information system is off budget.

The domestic revenue mobilization and high reliance on external funding make the fiscal position of Liberia fragile, jeopardizing the provision of quality social services. Domestic revenue (excluding grants) as a share of GDP has averaged 14 per cent over the 2015–2020 period. However, while low by regional standards with the Economic Community of West African States (ECOWAS) average standing at 16.2 per cent (Figure 1.14), this highlights potential room for improvement. In this vein, the government, through

its Domestic Resource Mobilization Strategy (2018–2022), is deploying strong efforts to increase domestic resources by expanding the revenue base, minimizing revenue loss, engendering financial deepening in the money and capital markets, and exploiting the nexus between domestic resource mobilization and overseas development assistance. Yet, low tax revenue mobilization heavily constrains fiscal space, thereby jeopardizing the provision of quality services. Indeed, as stated by Archer (2020), ‘UNCTAD²⁵ and Thomas Piketty concur that the bare minimum for building a viable social state is 20 per cent. More is needed to provide quality universal services’.

External revenue (mostly in the form of project support) is partly reflected in the budget. It is estimated to represent up to half of the total revenue. However, such external revenue indicates a high dependency on external funding and vulnerability to external shocks. External revenue

²⁵ United Nations Conference on Trade and Development.

Table 1.6 Distribution of recurrent government expenditure (actual), 2014/2015–2019/2020

Percentage	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Employee compensation	44.0	44.8	57.2	62.1	61.1	54.1
Good and services	39.0	44.3	37.8	26.3	22.5	13.0
Interest	1.5	1.5	2.3	4.7	5.1	11.9
Others	15.5	9.4	2.6	7.0	11.3	21.1
Total	100.0	100.0	100.0	100.0	100.0	100.0
Total (US\$ million)	619.1	619.1	528.3	535.4	540.2	513.0

Source: National Budget (MFDP, 2013–2022) and World Bank (2021f).

Table 1.7 Evolution of public debt, 2015–2020

Million US\$	2015	2016	2017	2018	2019	2020
Total public debt	655.4	771.2	878.2	1 039.9	1 270.6	1 596.8
Domestic	269.4	268.3	266.1	265.0	419.8	643.8
External	386.0	502.9	612.0	774.9	850.8	953.0
Share external	59%	65%	70%	75%	67%	60%
As percentage of GDP	21%	24%	26%	32%	41%	53%

Source: CBL (2015–2020) annual reports.

is expected to decrease over the medium term, partly compensated by an increase in domestic revenue following improved revenue collection efforts. This former trend will weaken the country's fiscal position and push the government to foster wiser and smarter spending.

Government expenditure has decreased slightly during the same period following measures taken to curb spending by capping the wage and salaries of top civil servants and cleaning up payroll by removing ghost workers (IMF, 2019). As a proportion of GDP, government expenditure decreased from 20 per cent in 2014/2015 to 17.2 per cent in 2019/2020 (Table 1.5). This level reflects part of the reality. According to the World Bank's (2021f) latest public expenditure review, on-budget spending represents less than

half (48.9 per cent) of the total expenditure, following a high level of off-budget spending. This leads to an incomplete picture of what is spent on what. Most on-budget expenditure is on recurrent activities (94 per cent over the studied period), with half being dedicated to staff compensation in 2019/2020 (Table 1.5). Development spending supported by the government is limited. Most development spending is off-budget and supported by donors (World Bank, 2021f).

Consequently, the fiscal deficit has been somewhat contained at an average of 4 per cent of GDP from 2014/2015 to 2019/2020, with a peak at 6.4 per cent of GDP in 2015/2016 following higher levels of expenditure as a result of rising needs in health care and social welfare due to Ebola virus disease. Projections

show a decreasing trend in fiscal deficits following containment of expenditure and improved revenues collection.

The public debt of Liberia was estimated at 1.6 billion dollars in 2020, representing 53 per cent of GDP. This level is 32 percentage points higher than 2015, when the debt/GDP ratio was 21 per cent. Today, Liberia is assessed as being at moderate risk of external debt distress while facing a high risk of overall public debt distress, with 'limited space to

accommodate shocks' (IMF, 2021a) and limited opportunity to borrow more to keep debt sustainable.

The government is receiving grant-based debt relief (extended until April 2022) under IMF's Catastrophe Containment and Relief Trust, which will help to ease the repayment burden following COVID-19. However, two consecutive years of economic contraction (2019–2020) will continue to weigh on debt suitability in the medium term. (EIU, 2021)

1.6 External funding

Liberia is currently confronted with volatile net remittance flows. Like other countries in sub-Saharan Africa, remittance flows in Liberia have been affected by the COVID-19 pandemic, following restricted mobility measures and slack employment situations in the main host countries (World Bank Group and Knomad, 2020). The remittances accounted for 11 per cent of GDP in 2020, which is 3 percentage points lower than in 2018 and 10 percentage points lower than in 2015 when it peaked (Figure 1.15). This decline in the flow of remittances during and after the COVID-19 crisis is expected to have further harmed the livelihoods of many Liberians.

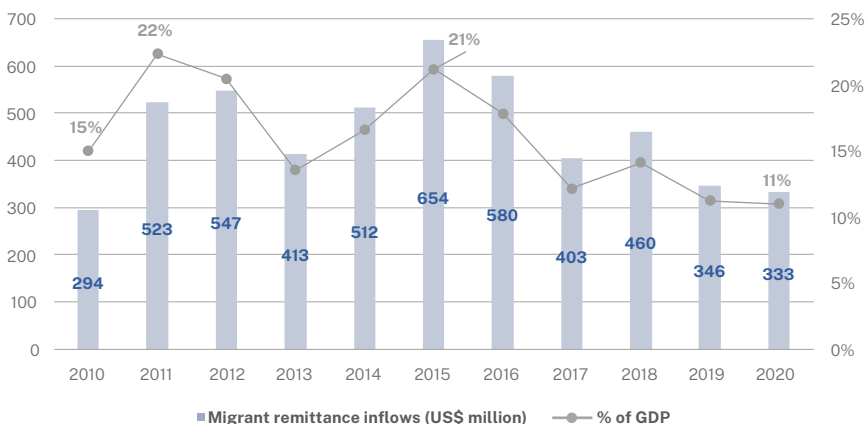
However, remittances remain an important source of revenue for many people in Liberia, exceeding foreign direct investments by a wider margin in 2019. As highlighted by the World Bank (2021f), remittances have ‘become an important consumption smoothing mechanism for the recipient households [...] and form an important (private) element of global

social protection systems’. This is all the truer in Liberia, where both foreign direct investment and official development assistance recipients have registered a volatile yet decreasing trend over the period, with a marked drop in inflows recorded during the post-Ebola virus disease Education Reform Act (ERA). From 2016 to 2019, foreign direct investments and official development assistance have dropped from 10 per cent to 3 per cent, and from 25 per cent to 19 per cent of GDP, respectively. The World Bank (2021f), in its last migration brief report, estimated remittance flows in sub-Saharan Africa to have risen by 2.6 per cent (US\$43 billion) and 1.6 per cent (US\$44 billion) in 2021 and 2022, respectively, following improvement in growth prospects in both the United States and other high-income host countries.

Education expenditure

Although some increases in government spending on education followed the Ebola virus disease crisis, the overall

Figure 1.15 Migrant remittance inflows



Source: Knomad (n.d.); World Bank (n.d.).

Note: US\$ million and as a percentage of GDP.

Table 1.8 Foreign direct investment and official development assistance disbursements, net inflows, 2010–2019

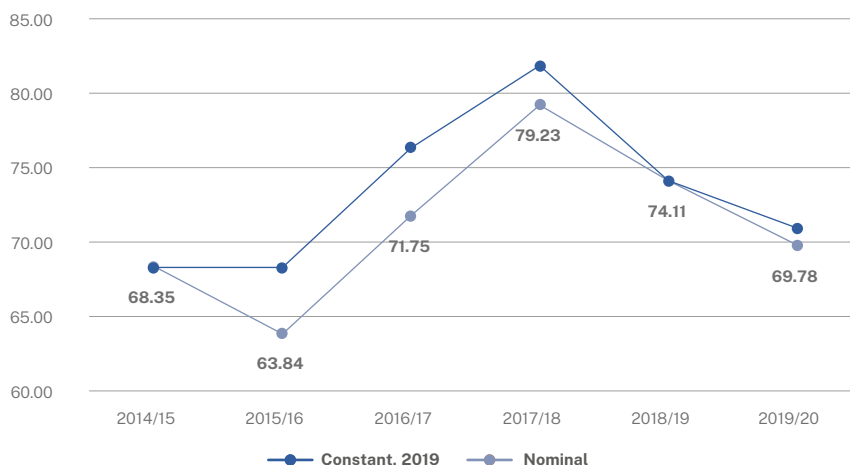
US\$ million and percentage of GDP	2010	2013	2015	2016	2017	2018	2019
Foreign direct investment, net inflows	2,064.7	1,998.7	232.7	311.7	247.8	129.1	86.7
As a percentage of GDP	105%	66%	8%	10%	7%	4%	3%
Net official development assistance received	1,416.1	535.9	1,094.4	819.2	631.6	573.2	597.3
As a percentage of GDP	72%	18%	35%	25%	19%	18%	19%
Total	3,480.8	2,534.6	1,327.1	1,130.9	879.4	702.4	684.0
As a percentage of GDP	177.0%	83.3%	42.9%	34.7%	26.5%	21.5%	22.2%

Source: World Bank (n.d.); World Development Indicators as at 30 June 2021; IMF (2021b) World Economic Outlook, October 2021.

level of education funding remains low. The sector continues to operate in a financially constrained environment due to low domestic revenue mobilization and the negative impacts of the COVID-19 pandemic. The spending devoted to education in 2019/2020 is close to its pre-Ebola level at US\$69.8 million (Figure 1.16).

As a share of overall national expenditure, the level of public funding going to education remains low, at 13.8 per cent in 2019/2020, placing education at the fourth position in terms of the level of expenditure after public administration (36.2 per cent), health (16.9 per cent), and security and law (15 per cent) (see Table 1.9 and Figure A3 in the Annex).

Figure 1.16 Evolution of education expenditure, constant (2019 prices) and nominal (2014/2015–2019/2020)



Source: National Budget (MFDP, 2013–2022) and World Bank (2021f).

Note: Million US\$.

Table 1.9 Distribution of expenditure by economic sectors, 2014/2015–2019/2020 (percentage)

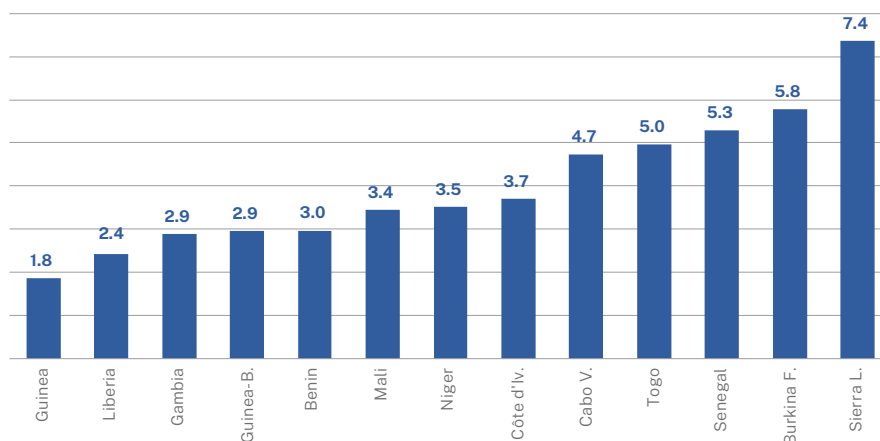
Percentage	2015/16	2016/17	2017/18	2018/19	2019/20
Public administration	38.1	34.2	32.7	37.2	36.2
Health	11.3	10.2	13.6	12	16.9
Security and rule of law	14.1	15.9	16.6	16.6	15
Education	11	14.4	15.3	13.7	13.8
Infrastructure and basic services	9	7.1	3.1	6.1	4.8
Transparency and accountability	4.8	6.3	8.4	4.5	4.2
Energy and environment	2.3	2.9	2.8	2.5	3.1
Municipal government	4.5	4	3.2	3.2	2.2
Industry and commerce	2.8	1.4	1.5	1.3	1.5
Social development services	1.3	2.4	1.8	2	1.4
Agriculture	0.9	1.2	0.9	1	0.8
Total	100	100	100	100	100

Source: National Budget (MFDP, 2013–2022) and World Bank (2021f).

The share of education expenditure in total national expenditure has fluctuated since 2015, but the sector seems to have been protected from external shocks, experiencing relative increases

during and after shocks. This is true for both the Ebola and COVID-19 outbreaks. While more resources were devoted to the health sector in 2019/2020 following the COVID-19 outbreak, the education sector

Figure 1.17 Education expenditure as a share of GDP, ECOWAS countries, circa 2019



Source: UIS (c2019) database.

was not particularly affected and has even seen its expenses increase from 2018/19 to 2019/2020.

However, despite efforts, the level of public funding devoted to education remains low and below the international benchmark of 20 **per cent** of total expenditure going to education. As a share of GDP, education expenditure represented 2.3 **per cent** of GDP from 2015 to 2020, which is below the ECOWAS average of

4 **per cent** (*Figure 1.17*) and the global benchmark that calls for 4–6 **per cent** of GDP to be allocated to education. These results indicate that Liberia is investing too little in its education system compared with its neighbours and international benchmarks. Efforts must continue to ensure adequate funding for the education system and its future expansion; there is some room for manoeuvre (i.e., improved resources mobilization and more efficient use of existing expenditure).

1.7 Chapter summary

The country is witnessing relative socio-political stability, but the challenging socioeconomic context, further amplified by COVID-19, may create tensions and fuel social unrest, especially among the youth. Although demographic pressure is easing, it still represents a heavy burden on the education system that will need to expand to accommodate all children.

Socioeconomic indicators are particularly low and often marked by sharp location disparities. Poor health status negatively affects physical and mental childhood development. GBV is pervasive, and women and adolescents are particularly vulnerable. Furthermore, early childbearing represents a major threat to girls' education. Social indicators are expected to worsen with COVID-19, which might strongly affect the demand for education.

The effects of climate change on the education system will become harsher and need to be tackled now.

The macroeconomic and public financing outlook is currently not favourable for education:

- The economy has been hit hard by the COVID-19 pandemic although it is recov-

ering rapidly (the economy being open, small, and undiversified, is extremely vulnerable to external shocks).

- Economic growth remains fragile as it is contingent on the evolution of global market prices of export commodities and COVID-19 containment measures (nationally and internationally).
- The domestic revenue mobilization and high yet decreasing reliance on external funding make the fiscal position of Liberia fragile, jeopardizing the provision of quality social services (note: the Domestic Resource Mobilization Strategy is in place to enhance domestic revenue collection).
- Much of the spending is off budget, making it difficult to track overall spending adequately (valid for all subsectors, including education).

Education seems to be protected in times of crisis, yet the government is investing less in its education system than its neighbours and international benchmarks. Efforts must be continued to ensure adequate funding for the education system and its future expansion; there is some room for manoeuvre (i.e., improved resources mobilization and more efficient use of existing expenditure).

Chapter 2

Early childhood development and education



2.1 The early childhood agenda

Early childhood development (ECD) and care forms a key domain of the Education Agenda 2030 through sustainable development goal (SDG) 4.2 that seeks to 'ensure that all girls and boys have access to quality ECD, care and pre-primary education so that they are ready for primary education' (United Nations, 2015a, 2015b). This is founded on the understanding that the first years of a child's life are crucially important for physical, cognitive, social-emotional and lifelong development. Additionally, it is recognized that investing in the early years of a child's education provides a higher rate of return in terms of human capital development than investing in later years (Heckman et al., 2009). However, despite widespread evidence, the ECE subsector remains underfunded, with an average of only 1.9 per cent of education budgets in low-income countries dedicated to pre-primary (UNICEF, 2019). In this way, the ECE subsector often receives less attention and prioritization than other education subsectors and, generally, less is known about how well country-level systems are functioning. To remedy the situation in Liberia, this chapter considers the ECE subsector specifically to diagnose the main issues facing children in terms of access and quality to identify areas for target intervention, which will benefit young children and the development of the education system as a whole.

This chapter considers early learning opportunities in Liberia with a specific focus on ECE instead of ECD due to the limited nature of ECD programmes in Liberia, which are predominantly offered by the private sector. As such, this chapter

first examines the national context for early learning and development, including at household and institutional levels. Thereafter, it examines the current state of ECE enrolment focusing on socio-economic and regional patterns in access and allocates particular attention to the issue of overaged enrolment. Subsequently, it turns its attention to the quality of ECE offered in Liberian classrooms, including the physical quality of classroom spaces, availability of teaching and learning materials, teacher qualification levels, and the use of child-centred and play-based teaching pedagogies. Finally, it examines skills development in ECE and assesses the linkages between learner and school characteristics and learning outcomes.

The analysis of quality adopts an analytical approach that links inputs, processes and outcomes, and functions together under the assumption that inputs would be transformed into outcomes given the existence of adequate processes. In the context of quality ECE, outcomes are examined in terms of learning outcomes; inputs consist of school resources, including safe learning environments and learning materials; and processes capture the use of positive teaching methods and the prevalence of qualified teaching staff. In this way, it is suggested that material inputs are only translated into positive learning outcomes if they are supported by positive pedagogy, including the use of child-centred and play-based methods. Additionally, this chapter looks beyond school-based inputs and processes to include the family environment, which serve as the basis for development in early learning.

2.1.1 Overview of the national ECE context: Strong levels of institutional support for early learning

ECE is a clear government priority at policy level, however, access in public schools still requires payment of fees. The prioritization of ECE was made clear in the ERA of 2011:

The Government of Liberia shall be committed to ensuring that provisions are made for all children to receive sound pre-first or ECE as being essential to the latter development and the rapid educational advancement of children to the level of primary education and beyond. (Liberia, 2011b)

The Act mandates the establishment of ECE services across the country while simultaneously recognizing the unique role of development partners in the subsector. The Act outlines the responsibility of the government in supporting the subsector, which includes procuring teachers and assisting teacher colleges as means may allow. Before this introduction into policy, ECE was mainly the responsibility of international actors and communities who still retain a prominent role in the subsector. However, despite this policy commitment, ECE is neither compulsory nor free in the country.

The policy environment for ECE in Liberia has developed substantially, beginning with ERA. The political and institutional arrangements of ECE were originally outlined in ERA, which established the Bureau of Early Childhood Education for the first time. The Bureau's core functions include designing, developing and implementing ECE programmes, issuing permits for ECE institutions, and maintaining relationships with schools and

teachers across all ownership types. These responsibilities mirror those of the Bureau of Basic and Secondary Education, albeit at ECE level. This makes developing and implementing the curriculum, ECE teaching training, and ECE infrastructure all the responsibility of other departments in the ministry, namely that of curriculum development and school environment, which distributes responsibility.

This institutional environment was augmented by the creation of the National Inter-Sectoral Policy on Early Childhood Development (NIPECD) in 2012, which sought to bring together the wide variety of actors and ministries necessary for providing access to integrated ECD services. As a mechanism of this cooperation, the NIPECD established the interministerial committee and parallel committees at the county, district and local levels. These committees are responsible for implementing the policy, coordinating partnerships, and monitoring progress across the various decentralized levels. As such, the NIPECD demonstrates the government's commitment to providing access to educational services for children under 5 in a holistic manner, encompassing both nutritional and health services.

Public ECE institutions receive limited financial support from the government. The ERA outlines the official ages for ECE attendance to be 3- to 5-years-old, thereby composing three total years of education. The Act labels these as Beginner (or Nursery II) for 3-year-olds, Kindergarten [or Kindergarten I (KGI)] for 4-year-olds, and Pre-first [or Kindergarten

II (KGII)] for 5-year-olds. However, it has been observed in practice that different class names are often used (such as prekindergarten, ABC, and Nursery III) with many schools also citing a Nursery I class, although this is not a part of the official three-year cycle. Due to the persistent issue of overaged enrolment in Liberia, a trend which often begins at pre-primary level, the government iterated the importance of enforcing the policy of age-appropriate enrolment in 2017, necessitating that any child aged 6 or over should not be enrolled in ECE, but be placed in the grade appropriate for their age or in alternative learning classrooms. Furthermore, the Bureau has clarified that ECE institu-

tions are permitted to charge an annual fee, capped at L\$3,500 per learner, to cover operational costs. The only form of financial support that public ECE institutions receive from the government is in the form of teachers who are on the civil service payroll, whereas other operational costs remain the responsibility of the school. While there are many public ECE institutions, this does not indicate that they are fee-free as ECE is currently not part of the basic education cycle which is free and compulsory. Accordingly, the subsector is composed of a high proportion of private ECE centres and those run by communities or faith-based providers.

2.1.2 Data usage and availability: External sources consulted

There is limited data available from the government in terms of ECE quality; as such, alternative data sources are also considered in this chapter. Currently, the government does assess learning outcomes regularly at ECE level. In the absence of evidence from national assessment data, this analysis draws on the results of research undertaken in 2018 under the Early Learning Partnership (ELP) programme. It is a multi-donor trust fund managed by the World Bank with activities in 26 countries. In Liberia, Early Learning Systems Research (ELSR) was carried out by Oxford Policy Management (OPM, 2018) to inform the second phase of the ELP programme. The research identified two key barriers to improving early learning: the high prevalence of overaged children in ECE classrooms and the low levels of teacher training in ECE, around which Phase 2 of the ELP programme was focused. Part of this research included using the Measuring Early Learning Quality and Outcomes (MELQO) tool. This

tool was developed by UNICEF, UNESCO, the World Bank, and the Brookings Institute to promote ‘the feasible, accurate and useful measurement of children’s development and learning at the start of primary, and the quality of their pre-primary learning environments’ (UNESCO, 2017: 7). MELQO is composed of two measurement modules: one aimed at measuring child development and early learning, entitled the MODEL, and the other focused on the quality of learning environments, entitled the MELE. The OPM (2018) research sampled 50 schools in eight counties, including 490 learner assessments, 278 parent interviews, 50 principal interviews, 50 teacher interviews, and 50 structured and 50 unstructured classroom observations. It is important to note that this is not a representative sample and, therefore, findings should not be considered with this in mind.

Secondly, this analysis considers research undertaken in 2021 using the Brief Early

Childhood Quality Inventory (BEQI) tool (Davis, Cassel, and Raikes, 2021). This is an observational and self-assessment tool of quality in a variety of early learning settings. BEQI includes both an observation tool and a teacher or provider self-assessment. The tool captures components of play-based learning and interactions between teachers and children. The

BEQI tool was implemented by a team of researchers from the University of Liberia and the University of Nebraska and considered 38 classrooms in three cities and included interviews with 31 teachers across government, private and faith-based centres. This research clearly has a smaller sample size than the ELSR and is not representative (Davis et al., 2021).

2.1.3 Household conditions for young learners: Less than ideal environments for early development

ECE-aged children in Liberia lack access to key household infrastructure and face various health-related challenges, including malaria and stunting. When considering the ECE system in Liberia, it is first essential to understand the char-

acteristics of the population it serves. This section considers characteristics such as the size of the population; health and nutrition indicators including stunting; wasting and access to vaccinations; and access to key infrastructure measures

Table 2.1 ECE-aged population by county and wealth status, 2019

	Total population aged 3–5	Poorest	Poorer	Middle	Richer	Richest	Urban	Rural
Bomi	12,366	21%	34%	36%	9%	1%	11%	89%
Bong	48,770	41%	19%	20%	15%	5%	45%	55%
Gbarpolu	10,688	61%	26%	10%	3%	0%	12%	88%
Grand Bassa	31,413	47%	17%	16%	12%	8%	29%	71%
Grand Cape Mount	18,466	24%	30%	32%	11%	3%	6%	94%
Grand Gedeh	12,785	41%	32%	15%	5%	8%	34%	66%
Grand Kru	8,039	50%	32%	13%	3%	1%	7%	93%
Lofa	39,006	28%	35%	26%	8%	2%	41%	59%
Margibi	27,056	15%	28%	24%	26%	7%	43%	57%
Maryland	17,153	27%	33%	24%	13%	3%	34%	66%
Montserrado	119,282	2%	5%	13%	33%	47%	89%	11%
Nimba	63,431	30%	40%	22%	8%	1%	58%	42%
River Cess	9,239	55%	25%	10%	7%	4%	5%	95%
River Gee	9,526	29%	32%	30%	6%	3%	38%	62%
Sinoe	14,034	37%	35%	15%	8%	5%	16%	84%
Total	441,254	24%	24%	19%	17%	16%	54%	46%

Source: Authors' calculations using United Nations Populations Division (2019) data and LDHS 2019/2020 (LISGIS et al., 2021) proportions.

at household level. This chapter seeks to create a profile of children and their home environments to identify their development needs better and assess the orientation of available ECE programming.

The ECE-aged population (aged 3 to 5) in Liberia was estimated at around 440,000 in 2020, with the largest concentrations of children seen in the Montserrado and Nimba counties. Urban populations are greater than rural populations at national level, representing 54 per cent of the total population. However, examining this trend at the country level reveals that only the Nimba and Montserrado counties

have a high proportion of their populations in urban areas, which demonstrates that most counties are rural in nature. This higher overall average is affected by the large population concentration in Montserrado. Additionally, almost 50 per cent of the population fall into the poorest or poorer wealth quintiles, presenting a young population who are concentrated in rural areas and who experience high levels of poverty (*Table 2.1*).

Households with children of ECE age lack access to household infrastructure across localities and wealth quintiles. Access to critical infrastructure such as electricity,

Table 2.2 Characteristics of households with children aged 0–8, 2019

Characteristics of households with children aged 0–8	Wealth quintile						Locality		Sex of household head	
	Overall	Poorest	Poorer	Middle	Richer	Richest	Urban	Rural	Male	Female
Female headed	35%	34%	32%	38%	40%	32%	38%	32%		
With access to iodized salt	99%	98%	99%	99%	99%	98%	99%	99%	99%	99%
With access to an improved water source	71%	54%	83%	86%	80%	50%	72%	69%	69%	75%
With access to improved toilet facilities	20%	1%	6%	16%	24%	58%	29%	7%	20%	18%
With access to electricity	21%	0%	2%	9%	33%	72%	35%	4%	20%	23%
With access to a TV	20%	0%	1%	5%	23%	78%	33%	3%	20%	19%
With access to handwashing facilities	20%	10%	10%	16%	27%	39%	26%	12%	20%	19%
Participating in more than 5 hours of household work per week	43%	41%	43%	42%	37%	54%	44%	42%	43%	43%
With a birth certificate	30%	23%	28%	33%	33%	38%	32%	28%	30%	30%

Source: Authors' calculations based on LDHS 2019/2020 (LISGIS et al., 2021).

Table 2.3 Infant and child mortality by wealth quintile and locality, 2019

Mortality per 1,000 live births		Wealth quintile					Locality	
		Poorest	Poorer	Middle	Richer	Richest	Urban	Rural
Infant mortality	63	67	67	73	70	52	57	59
Child mortality	33	38	38	36	43	9	30	36

Source: LDHS 2019/2020 (LISGIS et al., 2021).

toilet facilities and handwashing facilities is low, at an average of 21 per cent, 20 per cent, and 20 per cent, respectively, with access extremely low in the poorest and poorer wealth quintiles. Access to water facilities is higher across the board, with 71 per cent of all households with children aged 0 to 8 having access to an improved water source (Table 2.2). It must be noted that the proportion of the population in the wealthiest quintile with access to an improved water source is lower than the poorer wealth quintiles, which can be attributed to this population's reliance on bottled water, which does not fall under the WHO/UNICEF definition of an improved water source. Additionally, an average of 43 per cent of children do more than five hours of household work a week. This demonstrates that young children are not exempt from responsibilities in households, limiting their ability to engage in development or learning-oriented tasks at home. Furthermore, only 30 per cent of children aged 0 to 8 are found to have a birth certificate – an element particularly important to consider when discussing the prevalence of overaged children in the country (Table 2.2.).

Infant mortality remains higher than child mortality at 63 infant deaths per 1,000 live births. Infant and child mortality is higher among rural populations, with this most significant in children. The greatest

difference is seen between the richer and richest wealth quintiles among both infants and children, suggesting large levels of difference in accessible health care between the richest and all other wealth quintiles (Table 2.3).

Young children in Liberia are more likely to be stunted than wasted or underweight, indicating a lack of access to nutritious and diverse food. Stunting is further most strongly correlated with wealth status and locality, with more affluent and urban populations being less at risk. Of note, less than 50 per cent of children aged 0 to 5 slept under a mosquito net the night before the survey. In comparison, around 50 per cent had similarly been tested for malaria in the past two weeks, demonstrating the prevalence of the virus and lack of access to or use of preventative measures in the country (Table 2.4).

The proportion of children who have not received any vaccinations is relatively low, at 6 per cent and 7 per cent for the 12–23 months and 24–35 months age groups, respectively. Children are more likely to have had all basic vaccinations than all age-appropriate vaccinations, indicating late vaccinations in some cases (Table 2.5). The high vaccination rates demonstrate strong levels of protection for young children in Liberia against key childhood illnesses.

Table 2.4 Characteristics of children 0 to 5-years-old by wealth quintile and locality, 2019

	Wealth quintile						Locality	
	Overall	Poorest	Poorer	Middle	Richer	Richest	Urban	Rural
Stunted	30%	38%	35%	31%	24%	14%	25%	35%
Wasted	3%	2%	3%	5%	5%	2%	3%	3%
Underweight	11%	14%	10%	11%	12%	6%	9%	13%
Who received vitamin A supplement in the past 6 months	52%	46%	53%	48%	55%	58%	52%	52%
All slept under a mosquito net last night	40%	36%	50%	42%	39%	32%	39%	41%
With a fever in the last 2 weeks who had blood taken for testing (proxy measure of diagnostic testing for malaria)	49%	46%	54%	52%	51%	54%	47%	51%

Source: Authors' calculations based on LDHS 2019/2020 (LISGIS et al., 2021).

Table 2.5 Vaccinations in early childhood, 2019

	Children aged 12–23 months	Children aged 24–35 months
All basic vaccinations	51%	44%
All age-appropriate vaccinations	39%	31%
No vaccinations	6%	7%

Source: LDHS 2019/2020 (LISGIS et al., 2021).

2.1.4 Overall spending on ECE: No government spending outside teacher salaries

Government expenditure in ECE is seen only in the payment of teacher salaries, with parents responsible for paying a wide variety of fees. There are three main sources of funding for ECE in Liberia: the government, development partners, and households. While the government has committed to funding ECE services since ERA in 2011, the persistence of fees needed to access government institutions continue to necessitate high levels of household funding. Additionally, development partners are particularly relevant in this subsector, both in terms of on-budget and off-budget support.

The entire bureau's budget is allocated to recurrent expenditure. The Bureau of Early Childhood Education was allocated a separate line in the national budget for the first time in 2019. As displayed in Table 2.6, it did not include a budgetary allocation for teachers' salaries, which is captured elsewhere, with US\$184,600 allocated to educational materials and supplies. In this way, 100 per cent of the budget is assigned to recurrent expenditure, with no development expenditure seen. Additionally, budgets from 2020 demonstrate that none of the funding allocated in 2019 was spent, indicating weak budget utilization, which is a trend across all subsectors in the country.

Table 2.6 Bureau of ECE budget, 2019–2023

Line item	2019–2020 Projection	2019–2020 Outturn	2020–21 Budget	2021–22 Projection	2022–23 Projection
Total spending	184,600	0	184,601	197,018	196,348
Total recurrent spending	184,600		184,601	197,018	196,348
Domestic travel – means of travel	5,000	0	5,000	5,336	5,318
as percentage of total	3%		3%	3%	3%
Domestic travel-daily subsistence allowance	10,000	0	10,000	10,673	10,636
as percentage of total	5%		5%	5%	5%
Other rental and lease	20,000	0	20,000	21,345	21,273
as percentage of total	11%		11%	11%	11%
Fuel and lubricants – vehicles	9,600	0	9,600	10,246	10,211
as percentage of total	5%		5%	5%	5%
Stationery	10,000	0	10,000	10,673	10,636
as percentage of total	5%		5%	5%	5%
Educational materials and supplies	100,000	0	100,000	106,726	106,364
as percentage of total	54%		54%	54%	54%
Staff training – local	30,000	0	30,000	32,018	31,909
as percentage of total	16%		16%	16%	16%

Source: Authors' calculations, national budgets (MFDP, 2013–2022).

Table 2.7 Total ECE staff on government payroll, 2021

Position	Total allocated	Total on government payroll
Janitor	1,500	1
Principal	993,865	490
Teacher	3,231,348	1,726
Vice principal	498,674	256
Grand total	4,725,387	2,473

Source: Authors' calculations, MoE (2021b) payroll.

The government allocated US\$4.7 million to ECE salaries, representing 14 per cent of overall spending on salaries by the MoE. According to payroll data, there were 2,473 staff in the ECE subsector in 2021 who were paid by the government, dominated by 1,726 teachers. It was noted in conversations with ECE officials that

new ECE teachers are not currently being hired, but instead, the increase in teachers on the government payroll in recent years has been the result of incorporating volunteer teachers who were already working in government schools. As seen in Table 2.7, the remaining high proportion of volun-

Table 2.8 Expenditure and income by school type (US\$), 2018

	Average	Government	Private	Community
Total intended school income per academic year	7,233	4,028	8,057	5,442
Tuition income per academic year	1,689	240	3,190	1,682
Other fee income per academic year	349	1,328	4,819	376
Other school income per academic year	166	431	48	84
Government teacher salaries per academic year	2,029	2,029	–	–
Total income at 60% fee collection per academic year	3,023	941	4,805	3,215
Total school expenditure per academic year	2,253	2,274	2,174	2,277
Principal salary per academic year	241	480	205	120
All teacher salaries per academic year	1,079	1,448	1,367	720
All non-salary costs per academic year	931	341	600	1,435
Total number of children enrolled		1,076	1,382	2,014
Average number of children enrolled		83	106	84
Cost per learner per year	25.15	27.47	20.45	27.13

Source: ELSR data (OPM, 2018).

teer teachers working in the sector indicates the need to expand the budget if they all are to be accommodated.

Alongside its use of the MELQO, the ELSR study considered the functioning of the ECE institutions themselves, including their related costs. According to this research, the cost per learner allocated to children enrolled in ECE institutions is highest in government schools at US\$27.47. In comparison, community schools spend similarly at US\$27.13 per learner. Interestingly, despite receiving higher levels of income, private schools are seen to spend significantly less per learner at US\$20.45 – an element related to the larger school size of these institutions and the lower salaries allocated to principals and teachers (Table 2.8).

Wide variation exists in the level of fees charged according to institution type. Average tuition fees as reported by parents

were seen to be highest in faith-based and private institutions, which are around triple the average for government institutions and 1.5 times higher than community schools. The average of fees charged per annum in government schools is below the L\$3,500 maximum outlined by government directive, which reflects that only seven of the 13 government schools sampled in the study reported charging tuition fees (Table 2.9). In conversations with government officials around this point, it was highlighted that the practice of government schools not charging fees was due to a miscommunication of how the fee policy (as released in 2017, one year before the ELSR study) was meant to be implemented, which has now been rectified.

Most parents are required to pay fees outside tuition, including for school registration, transportation, and uniforms. As alluded to above, only 34 per cent of parents in public schools reported having

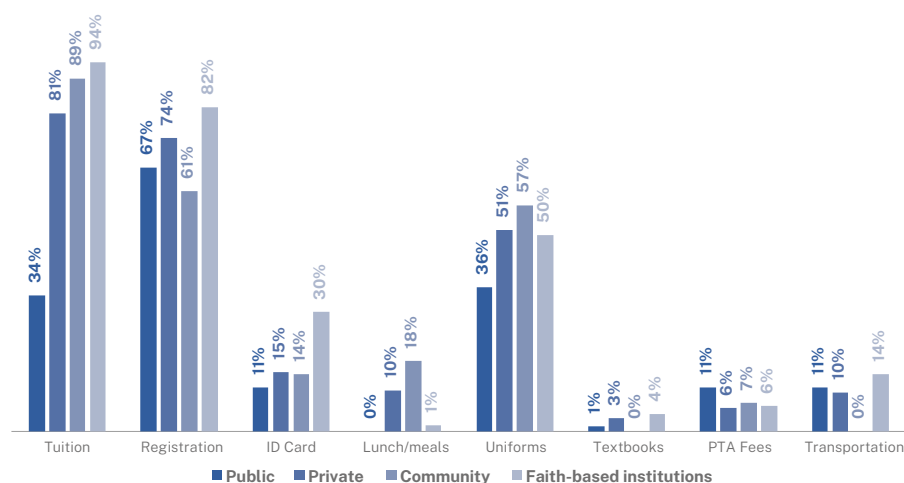
Table 2.9 Average tuition fees by school ownership, 2018

School ownership	Average tuition fees per year (L\$)
Public	2,408
Private	7,466
Community	4,262
Faith-based institutions	6,298

Source: Authors' calculations based on ELSR data (OPM, 2018).

to pay tuition fees, while 67 per cent cited having to pay a registration fee, and 36 per cent uniform fees. However, the proportion of parents reporting having to pay each fee type is still lowest for government schools, except for parent-teacher association fees and transportation. This demonstrates the vast financial barriers to accessing ECE that are present in both government and non-government institutions (Figure 2.1).

Figure 2.1 Proportion of parents reporting paying fees by type and school ownership, 2018



Source: Authors' calculations based on ELSR data (OPM, 2018)

2.1.5 The ECE landscape: School-based services dominate

Despite offering ECE services in three different modalities, school-based services remain the dominate form of ECE provision. ECE services are offered as three modalities in Liberia: school-based, community-based, and home-based. School-based services are provided in government, private or faith-based institutions for children aged between 3 and 5, or sometimes between 2 and 5. These centres can either be stand-alone or integrated into a primary or secondary insti-

tution, and they can offer both full-day and half-day programmes. Government ECE institutions in Global Partnership for Education (GPE) targeted countries are beneficiaries of World Bank and GPE support under the Getting to Best Education Sector Plan (G2B-ESP). Under this programme, ECE institutions in Bomi, River Cess, Sinoe, River Gee, Grand Kru, and Maryland receive school improvement grants according to the size of the institution. Schools are eligible to receive grants

if they: are a government institution, have an ECE class, commit to putting a school management committee in place, and have a functioning bank account. Schools receiving grants must cap their fees at L\$1,500 per child or L\$2,000 less than the cap in non-grant receiving public schools. In 2020, these grants were distributed to 523 schools benefiting more than 53,000 learners (MoE, 2021a).

Community-based ECE services are heavily supported by development partners and currently have a limited reach despite the intention to expand. ECE services are also offered in community-based centres, with this type of service first being offered under UNICEF support to Liberia beginning in 2013. Under this programme, UNICEF supported the establishment of 32 ECD centres in five counties in 40 communities and trained 257 caregivers. The programme identified communities without access to ECE institutions or those located far from institutions, rendering them difficult for young children to access. The minimum requirement was that the community had a population of 50 children of ECE age.

Communities were asked to identify an existing structure that could be used as an ECE centre, such as a church or a community centre. Thereafter, the project and community selected community members who could serve as ECD caregivers, who were trained according to Step 1 of the ECE professional development framework (as will be discussed further below). Initially, caregivers were

paid by UNICEF and the responsibility was turned over to the government at the end of UNICEF support in 2016. Since then, the programme has faced challenges. Interviews with members of the central administration revealed that many centres were no longer functioning, and that the government had struggled to bring caregivers onto official payroll. Community ECD centres were relaunched under the support of GPE to the G2B-ESP, which committed to establishing 20 new community-based ECE centres and training 60 community caregivers. As of 2020, 18 community-based centres have been established and all 60 caregivers have been trained (MoE, 2021a).

Home-based ECE services are the final model offered in the Liberian context and are still in their nascent stages of development. Home-based ECE services are currently being piloted in partnership with the WeCare Foundation. The programme trains parents on the foundation of early learning and development to better support the development of their young children at home. Home visits provide further support to parents and track their progress in delivering the newly learned techniques. This programme is conceptualized as an alternative to school and community-based programmes for those who continue to not have access to a physical centre. Thus far, the programme has been rolled out to 187 homes in Montserrado, with the success of this programme still to be evaluated and scale-up considered (MoE, 2021a).

Figure 2.2 Total proportion of schools by ownership type, 2020

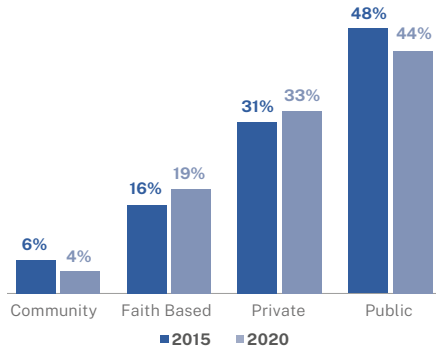
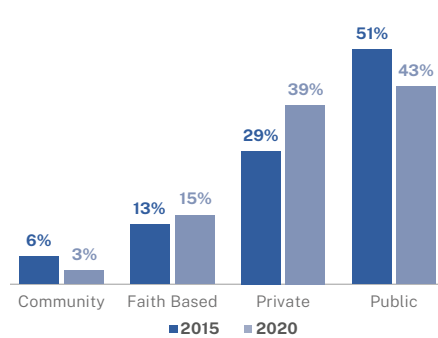


Figure 2.3 Total proportion of enrolment by ownership type, 2020



Source: Authors' calculations based on EMIS data (MoE, 2020a).

2.1.6 ECE service providers: Public providers still dominant despite growth in the private sector

Although the majority of ECE enrolment is in public schools, private institutions have witnessed growth in recent years. Public schools represent the largest proportion of ECE institutions in the country, however, their proportion of all schools has decreased from 48 per cent in 2015 to 44 per cent in 2020 (Figure 2.2). This decrease is even greater when considering enrolment by school type. The proportion of

learners enrolled in public school has decreased 8 percentage points since 2015. This favoured increased enrolment in private institutions, which grew from 29 per cent of all enrolment in 2015 to 39 per cent in 2020 (Figure 2.3). Interestingly, the proportion of private schools did not experience a similarly large increase, suggesting that private institutions are likely to be larger, with more learners enrolled.

2.2 Levels of access to ECE services: Decreases in enrolment observed

Liberia has one of the highest levels of gross enrolment in the region with wide variations at country level. This section examines the current levels of access to ECE services presently in Liberia. It considers how enrolment has grown over time and how various sociodemographic characteristics affect access. Additionally, it highlights the issue of overaged enrolment in ECE services and discusses the possible reasons for the continued dominance of this issue in the subsector. To analyse access, administrative data in the form of the 2019/2020 Education Management Information System (EMIS) is considered alongside household level data collected from the 2007, 2013 and 2019/2020 LDHS surveys, as well as the 2014/2015 HIES. It is important to note that the 2013 and 2019/2020 LDHS surveys did not consider the educational enrolment of children under the age of 5 despite the official pre-primary enrolment age being 3. As such, enrolment for 2013 and 2019 for the following tables consists only of those aged 5 and up.

When parents were asked the question, ‘Do most parents in your community enrol their children in pre-primary programmes?’, 74 per cent responded yes, indicating high levels of perceived access. When probed as to why they might not enrol their children, affordability of pre-primary was seen as the greatest barrier in enrolling their children (Table 2.10).

Absolute levels of enrolment have remained stagnant since 2015 while gross enrolment has decreased, suggesting enrolment is not expanding at the same rate as the ECE-aged population. According to administrative data, the total number of learners enrolled in ECE has remained relatively stable since 2015, with a slight increase of 1 per cent. This value includes decreases in overall enrolment in nursery and kindergarten and an increase of 11 per cent in the total number of learners enrolled in pre-kindergarten (Table 2.11).

Table 2.10 Parent perspectives of community pre-primary enrolment, 2018

Do most parents in your community enrol their children in pre-primary programmes?		If not, why?	
	Proportion		Proportion
Yes	74%	Not enough pre-primary centres	12%
No	10%	Cannot afford pre-primary	54%
Do not know	16%	Worried about young children being away from home	12%
		Worried about young children being bullied by older children	2%
		Enrolling in pre-primary is difficult	5%
		Do not think pre-primary is useful	15%

Source: Authors' calculations, ELSR data (OPM, 2018).

Table 2.11 Total enrolment by level and percentage change, 2015/2020

	2015	2020	Percentage change
Nursery	268,387	263,736	-2
Pre-kindergarten	141,218	158,927	11
Kindergarten	130,055	120,033	-8
Total	539,660	542,696	1

Source: Authors' calculation based on EMIS data (MoE, 2015a, 2020a).

While overall enrolment has remained stable, the gross enrolment ratio (GER) decreased from 134 per cent in 2015 to 123 per cent in 2020, indicating the population growth is outstripping that of enrolment growth (Table 2.12). Within the cycle, trends have remained similar with the GER highest at nursery level and then decreasing with each subsequent grade level. This can be attributed to the

overcrowding of nursery with overaged children who are deemed not eligible for primary education due to a lack of pre-existing knowledge. The practice is discussed in detail below.

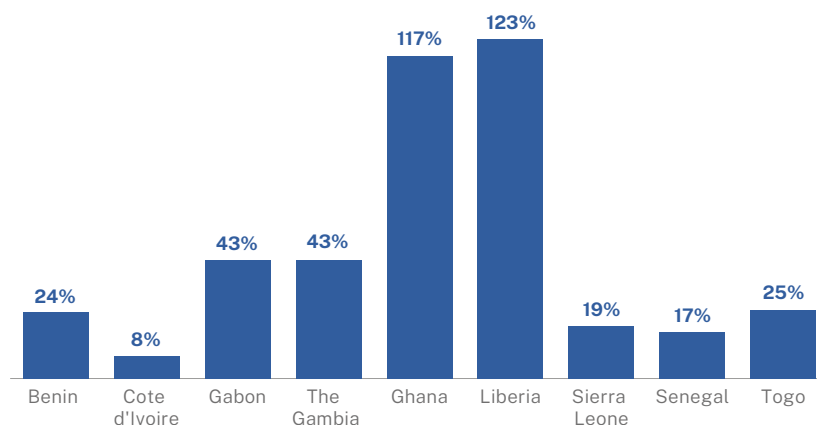
Liberia has the highest GER in regional comparisons. Its GER of 123 per cent is more than six times higher than neighbour Sierra Leone (Figure 2.4). While GER

Table 2.12: Total enrolment by level and GERs, 2015 and 2020

	2015	2020
Nursery		
Total enrolled	268,387	263,736
Total population	136,263	149,676
GER	197%	176%
Pre-kindergarten		
Total enrolled	141,218	158,927
Total population	133,804	147,015
GER	106%	108%
Kindergarten		
Total enrolled	130,055	120,033
Total population	131,308	144,525
GER	99%	83%
ECE		
Total enrolled	539,660	542,696
Total population	401,375	441,216
GER	134%	123%

Source: Authors' calculation based on EMIS data (MoE, 2015a, 2020a).

Figure 2.4 International comparison of gross enrolment rates of select West African countries, 2020



Source: Authors' calculations LDHS 2019/2020 (LISGIS et al., 2021) and World Development Indicator 2019 (World Bank, n.d.).

only measures those children enrolled in ECE and not those enrolled in day care or other preschool programmes, it reflects well for Liberia development towards SDG 4.2.2 – the participation rate in organized learning one year before primary.

Gross enrolment varies across counties, ranging from a high of 148 per cent in Bomi to a low of 96 per cent in River Gee. This indicates a situation of heterogeneity across the country in terms of access and enrolment in ECE and suggests a correlation between access and urbanity (Figure 2.5). Furthermore, this aligns with trends seen at the primary and secondary levels, indicating that access challenges in terms of location are similar across all levels of education.

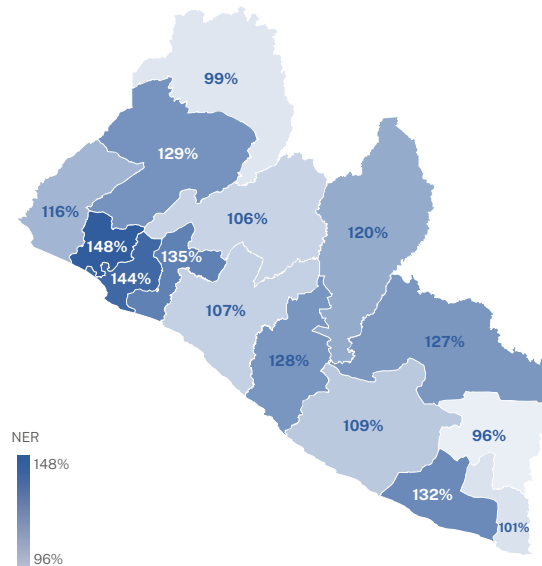
Net enrolment trends parallel those seen in gross enrolment, with urban areas such as Bomi and Montserrado evidencing the highest net enrolment ratios (NERs).

Across counties, net enrolment is between 77 and 51 percentage points lower than gross enrolment, indicating that a large population of learners enrolled are not of the appropriate age (Figure 2.6).

The gap between boys and girls in terms of gross enrolment has grown since 2015. Gross enrolment is 10 percentage points higher for girls than boys in pre-primary. Although this was also true in 2015, the gap was significantly smaller at just one percentage point. GER is seen to be almost parallel for male and female populations in both 2015 and 2020, with a decrease of 11 percentage points witnessed overall (Figure 2.7). This suggests decreasing levels of enrolment for both genders since 2015, but particularly for boy learners.

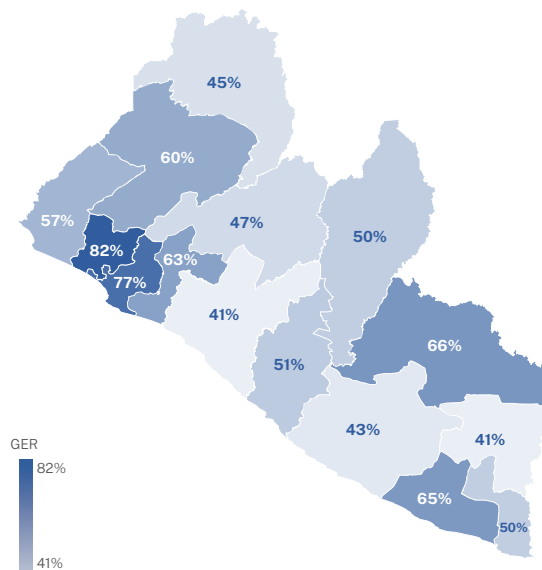
The low NER in comparison to GER observed is reflective of the high levels of overaged enrolment present in ECE. Net enrolment, which considers the proportion

Figure 2.5 Gross enrolment by county, 2020



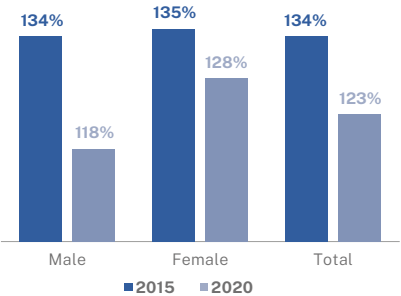
Source: Authors' calculations based on EMIS (MoE, 2020a).

Figure 2.6 Net enrolment by county, 2020



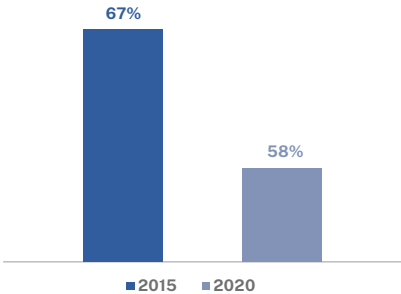
Source: Authors' calculations based on EMIS (MoE, 2020a).

Figure 2.7 Gross enrolment by sex, 2015 and 2020



Source: Authors' calculations based on EMIS (MoE, 2020a).

Figure 2.8 Net enrolment 2015 and 2020



Source: EMIS (MoE, 2020a).

of children enrolled of the appropriate age (3 to 5 in the case of ECE) in relation to the total population of appropriate age, is significantly lower than GER and has also dropped 9 percentage points since 2015 (Figure 2.8). This is indicative of a population who is not enrolled at the appropriate age, which in the case of Liberia, is mostly composed of overaged learners.

2.2.1 Complementary equity analysis

Wealth is seen as the most influential household characteristic affecting access to ECE. In order to deepen the analysis, data were drawn from the LDHS 2019/2020 (LISGIS et al., 2021). This data set allows us to consider the correlation between access and a wider range of characteristics, including wealth and locality, further permitting the identification of barriers to access while also acting as a barometer through which to access administrative data reliability.

When considered together, the decrease in GER is seen not to be caused by a decrease in the proportion of overaged children due to the parallel decrease in NER, and evidences an overall drop in levels of access.

The comparison between administrative and household survey data reveals large differences with LDHS data reporting lower gross and net enrolment. The greatest difference between the data sets is seen in gross enrolment, with the 2020 EMIS reporting a GER that is 27 percentage points higher than that of the 2019/2020 LDHS (Table 2.13). However, trends over time are observed to be more similar, with both LDHS and EMIS data evidencing a decline in GER.

Table 2.13 Enrolment comparison using different sources, 2013–2019

	LDHS 2013	LDHS 2019	EMIS 2015	EMIS 2020
GER	117%	96%	134%	123%
NER	52%	55%	67%	58%

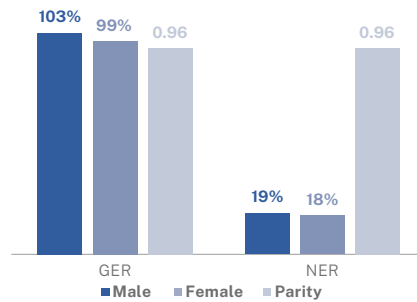
Source: Authors' calculations based on LDHS 2013 (LISGIS et al., 2014), LDHS 2019/2020 (LISGIS et al., 2021), and EMIS (MoE, 2015a, 2020a).

Trends are more mixed when it comes to NER, with EMIS data demonstrating a drop of 9 percentage points from 2015 to 2020, while the LDHS indicates a slight increase.

A comparison between GER, NER, and administrative data reveals that similar trends of parity are achieved between the sexes (Figure 2.9). Examining trends by locality, a characteristic not included in EMIS data, reveals high levels of parity in terms of GER (parity index = 1.02), which decreases to 0.65 for NER (Figure 2.10). This suggests that while overall access may not be affected significantly by the locality where a child lives, enrolment at the appropriate age is, with rural children being more likely to enrol overaged.

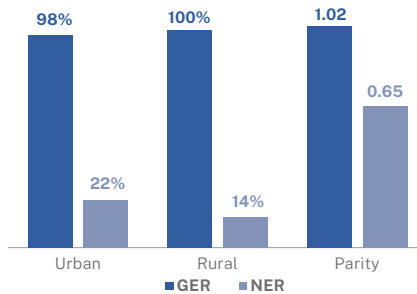
Gender parity is achieved in GER between the richest and poorest wealth quintiles, with NER conversely exhibiting wide disparities. There is a 14 percentage point gap between wealth groups in NER, with a parity index of 0.47 (Figure 2.11). However, it must be noted that at 25 per cent, the NER is still low for the wealthiest income groups, indicating that barriers to age-appropriate enrolment are not purely financial. Rather, it suggests the existence of structural and attitudinal impediments for parents to enrol their children in preprimary at the appropriate age.

Figure 2.9 Gross and net enrolment by sex and gender parity, 2019



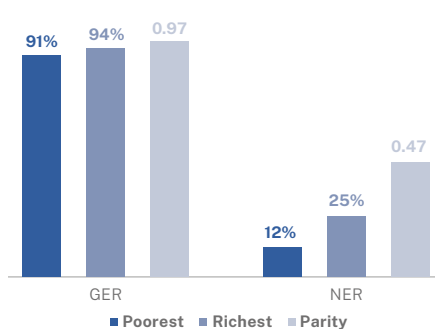
Source: Authors' calculations based on EMIS (MoE, 2020a).

Figure 2.10 Gross and net enrolment by locality and gender parity, 2019



Source: EMIS (MoE, 2020a)

Figure 2.11 ECE enrolment by wealth quintile and parity, 2019



Source: EMIS (MoE, 2020a)

2.2.2 Repetition and internal efficiency

Parity is seen in repetition between the two sexes, suggesting that sex does not influence the likelihood of grade repetition in pre-primary. There is a high proportion of repeaters across all levels in pre-primary, with the highest in the kindergarten at 10 per cent (*Figure 2.12*). This indicates that learners are most likely to be held back in the final year before transitioning to primary, suggesting that only learners deemed prepared for primary entry are permitted to progress.

Public schools have a significantly higher proportion of learners repeating pre-primary levels than all other types of school (*Figure 2.13*). Overarchingly, this demonstrates a lack of understanding or comprehension of the value of pre-primary, where emphasis should not purely be on academic achievement. Learners should not repeat pre-primary at all as

repetition suggests that learners must achieve a certain level of knowledge before progressing, which at the pre-primary level is not applicable in the same manner as in primary and secondary education. Furthermore, this worsens the issue of overaged enrolment by holding back generally already overaged learners, thereby increasing the number of years they are overaged. While it is not clear what policies exist for assessing the progression of pre-primary learners from one grade to another, it is clear that this needs to be considered moving forward if the proportion of overaged learners is to decrease.

Without two years of data it is difficult to determine dropout; however, learners repeating shows that resources are being wasted and there are low levels of efficiency.

Figure 2.12 Proportion of repeaters by grade level, 2020

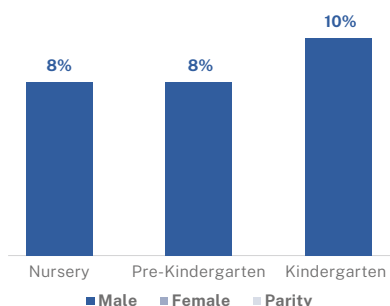
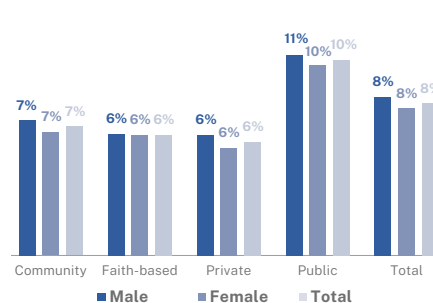


Figure 2.13 Proportion of repeaters by ownership and sex, 2020



Source: Authors' calculations based on EMIS data (MoE, 2020a).

2.2.3 Overaged enrolment: Systematic issues contribute to perpetuating the problem in ECE

Overaged enrolment is widespread in ECE, driven both by constraints at the household level in the form of fees in public schools and at the institutional level through a misconception regarding the value of ECE in early development. This leads a limited application of the age-appropriate enrolment policy.

Eighty-two per cent of all ECE learners are overaged for this level of education. Due to the issues with LDHS data not considering the educational attainment of children under 5, we are unable to analyse the proportion of overaged learners per grade level. Instead, *Table 2.14* considers learners over the age of 6, or the appropriate age to be enrolled in primary education, who are enrolled in any grade of pre-primary education. Using this framing, there are high rates of overaged populations across socio-demographic groups, with the poorest

wealth quintiles being more likely to have learners who are 4, 5 and 6 years too old for pre-primary than their wealthier counterparts. Rural populations are more likely to be overaged than their urban counterparts, demonstrating the disadvantage this population group faces.

Parents enrol their children in ECE later than the age they believe them to be ready, suggesting barriers to enrolment. ELSR data provide an insight into parental perceptions and causes of overaged enrolment (OPM, 2018). More than 50 per cent of parents surveyed reported enrolling their children over the age of 6, with only 12 per cent enrolling their children at the appropriate age of 3 (*Table 2.15*). However, most parents indicated that they believe their peers think their children are ready to start pre-primary at a younger age, suggesting the existence of barriers to achieving this (*Table 2.16*).

Table 2.14 Years overaged in ECE by various characteristics, 2019

Characteristic	1 year	2 years	3+ years	Total proportion overaged
Poorest	15%	19%	53%	87%
Poorer	16%	21%	49%	85%
Middle	19%	17%	46%	82%
Richer	28%	18%	32%	78%
Richest	25%	20%	29%	74%
Urban	23%	17%	38%	78%
Rural	16%	21%	49%	86%
Male	20%	18%	43%	82%
Female	20%	19%	43%	82%
Overall	20%	19%	43%	82%

Source: Authors' calculations, LDHS 2019/2020 (LISGIS et al., 2021).

Table 2.15 Age child was enrolled in pre-primary, 2019

Age	Percentage
1	0
2	3
3	12
4	17
5	17
6+	51

Source: Authors' calculations, ELSR data (OPM, 2018).

The greatest barrier to age-appropriate enrolment is fees, with 52 per cent of parents citing this as the reason for not enrolling their children in pre-primary earlier (Table 2.17). While the research was carried out before the introduction of the ECE school grants, it does suggest that a reduction in fees would have a positive influence on enrolment, and particularly on age-appropriate enrolment. However, it must be considered that many communities might only have access to faith-based or private institutions that, as seen above, have significantly higher fees than commu-

Table 2.16 Age that parents in the community think children are ready to start school, 2019

Age	Percentage
1	0
2	2
3	33
4	24
5	21
6+	20

nity and government institutions and are not supported by the school grant programme.

Interviews with officials reveal the systematic enrolment of overaged children in ECE despite the official age-appropriate policy. Overaged enrolment has been a major challenge to the education system in Liberia since the end of the civil war, with the highest proportion of overaged learners at the ECE level according to LDHS data (LISGIS et al., 2021). It is also perhaps most concerning at the ECE level, where mixing younger and older children

Table 2.17 Parental responses to 'Why did you not enrol your child in pre-primary earlier?', 2019

Reason	Percentage
No pre-primary centre at the time	8
This was the right age or time to enrol	10
School too far away	13
Child was needed at home	5
Could not afford fees	52
Safety concerns	8
School was not equipped to look after young children	4

Source: Authors' calculations, ELSR data (OPM, 2018).

may have adverse effects on children's learning and may jeopardize the safety of the younger children. While the ELSR study indicates that much of this issue has to do with fees (OPM, 2018), conversations with ECE officials further suggest that part of the problem may be at school level. According to officials, when a 6- or 7-year-old is brought to be enrolled in Grade 1 without previously having attended ECE, they are often tested to determine their current educational level. If they are not at an adequate level for what is expected of a Grade 1 learner, the child is instead placed into ECE, sometimes even in the first year, despite being overaged for this level and at the appropriate age for primary. In this way, schools are unofficially enforcing a minimum development level for primary enrolment and, therefore, are enrolling learners the appropriate age for Grade 1 in pre-primary classes. This can be seen as a contributing factor behind the high proportion of overaged learners in ECE, and helps to explain why overaged enrolment persists despite the government's efforts, especially regarding the age-appropriate enrolment policy. While the policy is a useful tool, it is clear that it is not being followed at school level. This discrepancy seems to arise from school officials' insistence on minimum levels of learning needed for learners to enrol in the year of their appropriate age.

The practice of schools mandating minimum academic competencies for

entering first grade, in a country where pre-primary education is not fee-free nor mandatory, perpetuates the cycle of disadvantage for learners from lower socioeconomic backgrounds. This statement is true as these populations are least likely to attend ECE due to the financial barriers in the form of fees persistent at this level. Therefore, they are more likely to be placed in ECE classrooms when trying to enrol at primary level. As will be discussed in *Chapter 3*, overaged learners are more likely to drop out, meaning that disadvantaged groups who are placed in ECE despite being the appropriate age for primary, are additionally more likely to not complete the full education cycle. Accordingly, this practice worsens the crisis of overaged enrolment in the country. If learners are overaged from the first year of ECE, they will continue to be throughout the education cycle. In this way, if overaged enrolment in Liberia is to be curtailed, it has to be stopped at the source. While there are clear difficulties associated with teaching Grade 1 classes that have a mix of learners who have and have not attended ECE, this is an issue that should be addressed in the Grade 1 classroom, and not by clogging the ECE system. While potential strategies to achieve this will be explored further, it must be recognized that the current system is unsustainable and further disadvantages and punishes learners who cannot access ECE services at the appropriate age.

2.3 Inputs and processes that drive quality ECE

The structure to support early learning in the classroom is weak in Liberia with limited play-based materials available, high pupil/teacher ratios, and low teacher qualification rates observed. In this section, we therefore turn our attention to the inputs and processes that contribute to the production of positive outputs in terms of early learning and development. Importantly, this considers both inputs at the school and household level, including the availability of materials that support early learning in both settings. It further considers the existence of processes that translate these material inputs into quality outputs, specifically the level of teacher qualifications as well as the pedagogy and teaching methods used in the classroom.

2.3.1 The home learning environment: Lack of materials that support early development and negative discipline techniques observed

Liberian households lack supports for early development and learning. At the household level, the ELSR study found that over 50 per cent of households with learners enrolled in ECE reported having no access to books at home. This indicates the constraints on the ability of parents to support the development of early literacy skills in the home and underlines the importance of ECE services and providing reading materials. Furthermore, playing with toys was cited by 54 per cent

of parents, although playing with objects other than toys was more frequent at 70 per cent (Table 2.18).

Parents frequently use physical or negative discipline techniques in the household. There is a high prevalence of physical discipline methods in households of children aged 1–8, which has very little correlation to wealth, locality, or sex of the household head. Non-physical discipline techniques such as explaining the

Table 2.18 Access to books and toys at home, 2019

County	Avg. numbers of books at home	Proportion of parents citing zero books at home	Proportion of parents reporting child plays with toys at home	Proportion of parents reporting child plays with household objects at home
Bomi	0.6	72%	56%	70%
Grand Kru	0.8	60%	70%	65%
Maryland	0.8	60%	52%	72%
Montserrado	1.9	17%	55%	51%
Nimba	1.0	41%	53%	76%
River Gee	1.0	66%	50%	80%
River Cess	0.8	66%	50%	65%
Sinoe	0.3	80%	53%	71%
Average	0.9	55%	54%	70%

Source: Author's calculations, ELSR data (OPM, 2018).

Table 2.19 Discipline techniques reported by household members for children aged 1–8, 2019

	Overall	Wealth quintile					Locality		Sex of household head	
		Poorest	Poorer	Middle	Richer	Richest	Urban	Rural	Male	Female
Took away privileges	58%	55%	56%	57%	64%	59%	61%	55%	57%	61%
Explained wrong behaviour	75%	72%	73%	76%	77%	78%	76%	74%	75%	75%
Shook him/her	34%	33%	33%	36%	34%	34%	34%	34%	33%	35%
Shouted, yelled, screamed	77%	78%	76%	79%	78%	74%	77%	78%	76%	80%
Gave something else to do	45%	42%	43%	44%	48%	50%	48%	42%	44%	46%
Hit on bottom with bare hands	52%	51%	52%	47%	57%	52%	52%	51%	49%	57%
Hit with hard object (belt, stick, hairbrush)	35%	32%	32%	36%	36%	40%	37%	32%	33%	38%
Called dumb, lazy or other names	36%	38%	35%	35%	39%	30%	36%	36%	34%	38%
Hit on face, head, ears	13%	12%	11%	14%	14%	12%	13%	12%	11%	16%
Hit on arm, hand, leg	32%	34%	32%	33%	29%	29%	29%	34%	30%	36%
Beat him/her up	12%	12%	11%	13%	12%	14%	13%	11%	12%	13%
Agreed with the statement 'child should be punished to bring him/her up, raise or educate'	63%	63%	63%	62%	64%	62%	64%	62%	62%	66%

Source: Authors' calculations, LDHS 2019/2020 (LISGIS et al., 2021).

wrong behaviour, taking away privileges, or giving children something else to do were seen to have relatively similar levels of prevalence, with the richer and richest wealth quintiles slightly more likely to use these methods (Table 2.19).

Overarchingly, this data suggest the need for wider parental education campaigns

regarding the harm of using physical discipline methods, especially with young children. It further paints a picture of the home learning environment for many young children in the country as not being conducive to positive early development, again underlining the need for ECE services.

2.3.2 The classroom environment: Lack of developmentally appropriate learning materials, and safety hazards are present

ECE classrooms in Liberia lack access to materials that support play-based learning and are not equipped for young children. Teachers use traditional learning materials as opposed to play-based materials in the classroom. Turning our attention to the classroom environment, the ELSR study found that most teachers use lesson plans or textbooks in their classrooms. However, few play-based learning materials such as toys were reported to be used, suggesting more limited opportunities for play in the classroom (Table 2.20). Given that learners are also seen not to have access to toys at home, it is clear that they have limited opportunities to learn through play, an essential element of ECD.

Children further have limited access to materials beyond those of a traditional style. The materials most frequently used by teachers in the ELSR study were a blackboard or whiteboard and chalk or markers, while learners were seen to use workbooks or copybooks, and pens or pencils most frequently. This combination demonstrates the types of rote learning technique used in the classroom as will be discussed further below. Toys, counters, and block or building materials were not observed in any classrooms, which forms a barrier for teachers to promote play-based learning. Additionally, where elements such as children's books or arts and class supplies were available, they were used mostly by teachers and not by the learners themselves (Table 2.21). Overarchingly, this paints a picture of undersupplied ECE classrooms with only traditional learning materials being available, and an underutilization of materials when they are available.

Table 2.20 Teacher responses to 'What type of materials or teaching guides do you currently use for your lessons?', 2018

Materials	Percentage teachers
None	14
Syllabus/curriculum	20
Lesson plan	56
Textbooks	56
Material from the internet	0
Flashcards	24
Toys	4
Posters	32

Source: Authors' calculations, ELSR data (OPM, 2018).

ECE classrooms in Liberia can be dangerous to young children. Alongside inputs in terms of learning materials, we also consider the physical quality and safety of the classroom environment itself. According to BEQI data, access to sanitary toilets was relatively high in the schools surveyed at 78 per cent, while access to water and handwashing facilities was less frequent, at 65 per cent and 49 per cent, respectively (Davis et al., 2021). Furthermore, only 19 per cent of classrooms were identified to have enough learning space and 46 per cent to have adequate outdoor space (Figure 2.14). This suggests a situation where many ECE classrooms lack access to basic infrastructure, particularly handwashing facilities, and have limited spaces both indoors and outdoors, limiting children's ability to engage in play-based activities.

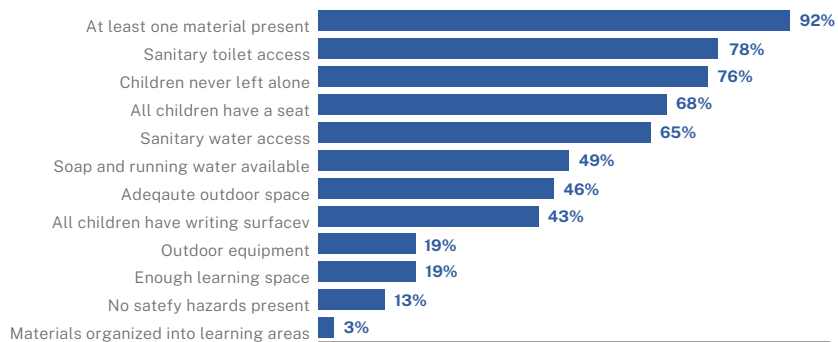
Many safety hazards were present at the ECE schools surveyed in the BEQI, with 77 per cent of all schools having at least one safety hazard evident. The most prev-

Table 2.21 Observed materials used in the classroom, 2018

Learning material	Used by teachers	Used by learners	Available in the classroom
Printed lesson plan	0%	–	8%
Handwritten plan or notes	32%	2%	36%
New ECE curriculum	0%	–	2%
Old nursery ABC curriculum	10%	–	16%
Basic primary curriculum	n/a	n/a	n/a
Blackboard or whiteboard	100%	82%	100%
Chalk or markers	96%	58%	98%
Workbook/copybook	46%	86%	90%
Paper	–	4%	14%
Pens or pencils	60%	86%	94%
Arts and craft supplies	2%	–	2%
Blocks or building materials	n/a	n/a	n/a
Counters	n/a	n/a	n/a
Puzzles or games	2%	2%	2%
Toys	n/a	n/a	n/a
Children's books	14%	–	18%

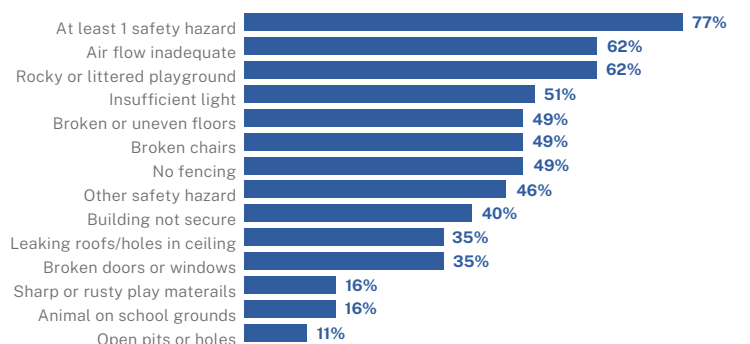
Source: Authors' calculations, ELSR data (OPM, 2018).

Figure 2.14 Schools with access to key measures of a safe and stimulating environment, 2021



Source: BEQI data (Davis et al., 2021).

Figure 2.15 Percentage of classrooms that scored 'yes' on safety hazard items, 2021



Source: BEQI data (Davis et al., 2021).

alent safety hazards were inadequate air flow, rocky or littered playground, and insufficient light (Figure 2.15). This further supports the notion that current ECE

classrooms may not be the ideal environments for early learning – both in terms of the quality of classrooms themselves and the learning materials available.

2.3.3 Characteristics of teaching staff and training opportunities: High levels of trained teachers with limited ECE-specific training

An undersupply of ECE teachers is seen in the high pupil/teacher ratios observed; furthermore, many public school teachers are not on the official payroll. A final input that contributes to the quality of ECE services being offered and the associated production of learning outcomes is the teachers themselves, including their experience and qualification levels. This section considers and describes the current offerings of ECE teacher training in the country, as well the proportion of teachers who can be regarded as trained. Preprimary teachers considered in the ELSR study were seen to have relatively little experience, with the majority citing between zero and four years (Table 2.22).

This may reflect the recent expansion and institutionalization of ECE in the country, which began in earnest in 2015.

The ECE teaching profession is dominated by women. Administrative data from 2020 identified almost 14,700 teachers working

Table 2.22 Years worked as a pre-primary teacher

Number of years	Proportion of teachers
0–4	50%
5–9	22%
10–14	14%
15+	14%

Source: Authors' calculations, ELSR data (OPM, 2018).

Table 2.23 Total teachers by school ownership and sex, 2020

	Total teachers	Percentage male	Percentage female
Community	484	41	59
Faith-based	2,806	28	72
Private	5,447	33	67
Public	5,987	35	65
Overall	14,724	33	67

Source: Authors' calculations based on EMIS (MoE, 2020a).

at the pre-primary level in all school types across the country, composed of 33 per cent male and 67 per cent female teachers (Table 2.23). The sex distribution of teachers is consistent across ownership types, with all types of school having a higher proportion of female teachers than male teachers.

Pupil/teacher ratios are high, indicating an undersupply. To put the number of teachers in context with the learner population, there is an average of one teacher per 37 learners in preprimary classrooms. This represents a large number of learners per teacher, especially when considering the young age of pre-primary children who require more supervision. Pupil/teacher ratios vary across counties – ranging from a higher ratio of 1:49 in Grand Cape Mount to a low ratio of 1:31 in Grand Gedeh, suggesting an uneven distribution of teachers. This further aligns with evidence from Phase 2 of the ELSR study wherein teachers averaged a mean score of 3.61 on a scale of 1–5 in agreement with the statement ‘there are too many students in my classroom’ (OPM, 2018).

More than half of ECE teachers in public schools are not paid by the government. Across the education system in Liberia, public schools teacher are not always on the government payroll. As will be discussed further in Chapter 4, many teachers in

government schools function as ‘volunteer teachers’ – either completely not drawing a salary or having their salary supplemented through donations from parents of school children. While great progress has been made in the government's efforts to accommodate more teachers on the payroll in recent years, 59 per cent of pre-primary teachers working in public schools were not paid by the government in 2020.

Table 2.24 Pupil/teacher ratios by county, 2020

County	Pupil/teacher ratio
Bomi	1:39
Bong	1:39
Gbarpolu	1:38
Grand Bassa	1:49
Grand Cape Mount	1:38
Grand Gedeh	1:31
Grand Kru	1:32
Lofa	1:42
Margibi	1:42
Maryland	1:39
Montserrado	1:33
Nimba	1:35
River Gee	1:30
River Cess	1:45
Sinoe	1:31
Average	1:37

Source: Authors calculation based on EMIS (MoE, 2020a).

Table 2.25 Pre-primary teachers on government payroll, 2020

Total teachers in public schools	Total teachers on payroll	Proportion on payroll
5,987	2,472	41%

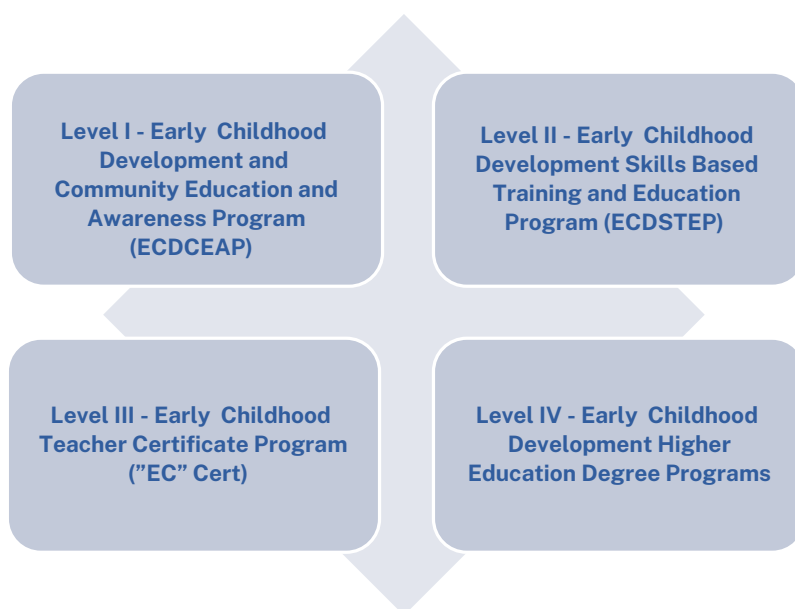
Source: Authors' calculations based on EMIS (MoE, 2020a).

As part of the institutionalization of ECE in Liberia, the government introduced the ECD National Professional Development Framework in March 2016 (MoE, 2016a). Under this structure, four levels were defined as presented in Figure 2.16 – each with associated training and curriculum attached. Level I, or the Community Education and Awareness Programme, is targeted at the community level. It is appropriate for those who have not completed secondary school. In contrast, Level II, or the Skills-based Training and Education Programme, requires a minimum of a secondary school educa-

tion. The Bureau of Early Childhood Education carries out in-service training using these two curricula for teachers currently working in public preschools.

For the first time, the framework established a specific ECE level teacher qualification known as the ECE C certificate. Prior to this, a C level certificate, or the same minimum qualification as for teachers in primary institutions, was considered the minimum requirement for teaching ECE. However, this meant that teachers who were considered 'qualified' at the ECE level had not received

Figure 2.16 ECD National Professional Development Framework, 2016



Source: MoE (2016a).

Table 2.26 Proportion of trained ECE teachers, 2020

County	Trained	Untrained	Proportion trained
Bomi	351	114	75%
Bong	447	878	34%
Gbarpolu	54	229	19%
Grand Bassa	320	316	50%
Grand Cape Mount	78	409	16%
Grand Gedeh	63	350	15%
Grand Kru	91	239	28%
Lofa	350	565	38%
Margibi	491	377	57%
Maryland	212	236	47%
Montserrado 1	923	2,160	30%
Montserrado 2	984	1,233	44%
Nimba	557	1,635	25%
River Gee	61	244	20%
River Cess	133	130	51%
Sinoe	92	402	19%
Total	5,207	9,517	35%

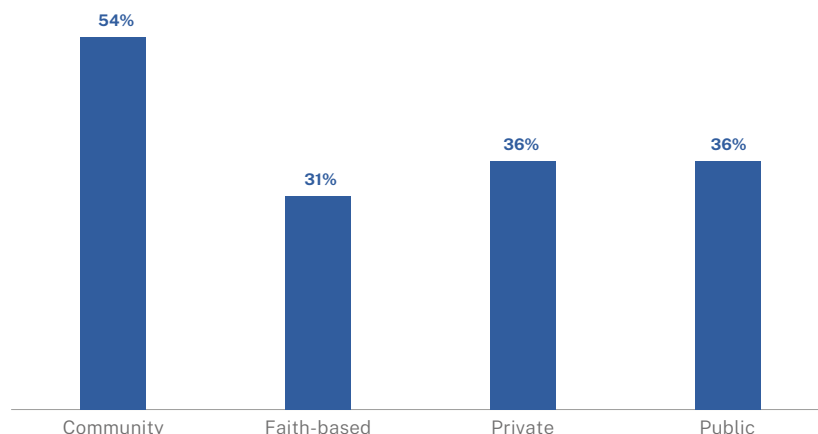
Source: EMIS (MoE, 2020a).

any training in early grade pedagogy or working with young children. The ECE C certificate was introduced to fill this gap. It includes elements of pedagogy and content specifically tailored to early learning and school readiness, as well as training on the use of the national ECE curriculum. Currently, the certificate has only been rolled out as in-service rather than pre-service training with support from the GPE under the G2B-ESP. Through this support, the programme seeks to target 700 unqualified ECE teachers in GPE target counties over a four-year period. They will be trained in their off months at existing rural teacher training institutes (RTTIs). However, the project faced difficulties due to the COVID-19 pandemic. Currently, 174 teachers have graduated from the programme, which is

87 per cent of the target of 200 for the first year (MoE, 2021a). The fourth level of the National Professional Development Framework, the degree level qualification in ECE teaching, is currently still in development.

While the intention is for all teachers to have the minimum of an ECE C certificate, this is not the case at present. Since the certificate is currently not being offered as pre-service training, any new teachers entering the system have to be trained once recruited. Furthermore, it is a massive undertaking for the government to attempt to train all existing ECE teachers in this programme. Due to the newness of this certificate and its limited roll-out, it is more appropriate to consider ECE teachers as untrained rather than

Figure 2.17 Proportion of trained ECE teachers, 2020



Source: EMIS (MoE, 2020a).

unqualified. The exception is the 174 teachers who have been qualified at the ECE C level as all other teachers in the system do not have the new minimum requirement for working in pre-primary schools.

Low proportions of ECE teachers are trained across the country. Using this definition, 35 per cent of all ECE teachers are considered trained, or in other words, possess a minimum of a C certificate. This ranges from a low of 19 per cent of teachers in Sinoe county to a high of 75 per cent in Bomi county (*Table 2.26*). Thus, while these teachers may not have qualifications in early learning pedagogy, they have largely attended some form of post-secondary education.

The proportion of trained teachers is evenly distributed across school ownership type, with only community schools standing out as having a higher proportion of trained teachers than others. Public and private ECE schools are observed to have

the same proportion of trained teachers at 36 per cent (*Figure 2.17*).

Teachers may have received ECE pedagogical training from alternative sources including short courses. A surprisingly high proportion of the 50 teachers considered in the ELSR study cited having a qualification specifically in ECE, which was higher among male than female teachers (*Table 2.27*). When asked regarding the specific type of qualification, most teachers cited having received this training from non-governmental organizations, with only 10 per cent cited having received this training from the government, presumably as Level I or Level II training (*Table 2.28*). This is generally a positive indicator, suggesting that while teachers may not have received pre-service training in early learning, in-service opportunities are more widely available.

ECE teachers receive similar salaries as primary teachers, demonstrating an incentive for new recruits to train for this

Table 2.27 Qualification in ECE

Sex	Yes	No
Male	50%	50%
Female	39%	61%

Table 2.28 If so, type of qualification

Type of qualification	Percentage of teachers
MoE ECE Bureau Certification	10
Non-governmental organization ECE short course (BRAC, EPAG, etc.)	57
Other	33

Source: Authors' calculations based on ELSR data (OPM, 2018).

level. Average salaries for ECE teachers are highest in Montserrado and Margibi counties, which is understandable as these are the two urban counties. The lowest salaries are seen in Grand Bassa, with a difference of US\$443 between their average salaries versus the salaries for teachers in Montserrado (Table 2.29). While official policy dictates that

the salaries of pre-primary and primary teachers should be the same, the average salary of primary teachers is higher than those of ECE teachers in almost all counties, with significant differences in Montserrado and Grand Bassa. It is not clear what can account for this variation given that all these teachers are on government payroll.

Table 2.29 Average ECE teacher salary compared with average primary teacher salary by county (US\$/year), 2021

County	Average ECE salary	Average primary salary	Difference
Bomi	1,979	2,002	22
Bong	1,857	2,061	204
Gbarpolu	1,875	2,032	157
Grand Bassa	1,627	1,942	315
Grand Cape Mount	2,018	2,147	129
Grand Gedeh	1,964	2,104	140
Grand Kru	1,952	1,939	-14
Lofa	1,832	1,924	93
Margibi	2,057	2,236	179
Maryland	1,881	2,127	247
Montserrado	2,070	2,488	419
Nimba	1,870	2,042	172
River Cess	1,825	2,060	236
River Gee	1,873	1,998	124
Sinoe	1,758	1,889	131

Source: Authors' calculations based on MoE (2021b) payroll data.

2.4 Classroom practices: Teaching practices and interactions with learners

This section turns its attention towards processes and examines how well practices in the classrooms help to translate the inputs identified above into outputs. Specifically, it discusses the national ECE curriculum and the delivery thereof in the classroom, including the use of child-centred and play-based teaching methods, as well as the prevalence of qualified teachers and pupil/teacher ratios to consider the levels of individualized support provided.

2.4.1 The national ECE curriculum and its use in the classroom: Mixed evidence among limited distribution

While Liberia has a standardized, national ECE curriculum, the distribution thereof at school level has been limited. As part of the formalization and prioritization of ECE since 2011, a standardized curriculum and teacher planners were developed in 2015, with the contents covering seven thematic areas. A circular published by the Bureau of Early Childhood Education further clarified that this curriculum is to be implemented by private providers of ECE programmes, including community institutions, faith-based institutions, and government schools. The bureau threatened to implement fines and sanctions for those found not to be following it (OPM, 2018).

The curriculum is framed by the Liberian Early Learning Framework that outlines 11 domains of development and domain indicators deemed to be relevant for children aged 2 to 5 to acquire to prepare them adequately for primary school. The domains encompass both traditional hard skills, such as language development and mathematical knowledge and skills, as well as social and emotional development and physical development health, indicating a commitment to a more holistic ECE environment. The ECE curriculum guide emphasizes the importance of play as a teaching method, citing that the syllabus 'is based upon a child-centred approach' (MoE, 2015b). It further reiterates the importance of a stimulating environment,

including the use of learning materials to enhance learners' understanding of key concepts. Given the limited availability of learning materials outside traditional writing support tools as demonstrated above, this suggests that classrooms are not currently adequately equipped to implement the curriculum as intended.

Funding challenges have negatively affected the widespread distribution of the curriculum. While the curriculum design process was finished in 2015, the curriculum was neither printed nor distributed until 2017. Furthermore, the MoE has not made a systematic effort to distribute the curriculum to all providers, and distribution has thus far been linked to teacher training. In this way, curriculum packages have been distributed at refresher and ECE C training to all teachers present to take back to their schools. While the exact extent of these training activities is not clear, it can be assumed to have not reached all pre-primary institutions in the country since 2017, and additionally, have not intentionally been distributed to private or faith-based institutions. Conversations with ECE officials revealed that mass distribution has been hindered by a lack of financial support, with development partners supporting the printing and distribution of previous copies. It must be noted that a standardized curriculum is particularly important at ECE level

Table 2.30 Do you have a copy of the ECE curriculum?, 2018

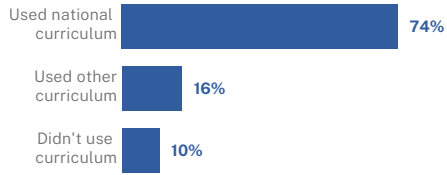
Response	Percentage teachers
Yes	14
No	86

Source: Authors' calculations, ELSR data (OPM, 2018).

where it has been designed specifically to prepare learners adequately for primary school. Accordingly, if most learners are attending schools that are not utilizing this curriculum, it may indicate that they are not reaping the full benefits of ECE attendance, namely being prepared for success at the primary level.

It is not clear what proportion of schools currently have access to the curriculum. Evidence regarding the use of the national ECE curriculum from our two main data sources is mixed, with ELSR data from 2018 demonstrating limited access and the associated use of the curriculum, while the BEQI data from 2021 demonstrate strong in-class usage. This may result from the time gap of three years between the two studies, which potentially has allowed for the wider dissemination of the curriculum; however, it must be noted that the BEQI research also had a much smaller sample size (Davis et al., 2021). On a more promising note, in the 2019/2020 ELSR study, 93 per cent of teachers used the curriculum on a daily or weekly basis if they had it. This demonstrates that if it is distributed and teachers are supported properly, the curriculum will be implemented. While it may be challenging to determine to what extent the ECE curriculum has been distributed and integrated at school level, the lack of a systematized approach to its distri-

Figure 2.18 Observed use of ECE curriculum, 2021



Source: BEQI data (Davis et al., 2021).

bution suggests limited implementation; therefore, demonstrating a need for the government to prioritize its dissemination if all learners are to enter primary school with similar competency levels.

2.4.1.1 Teaching activities and learner–teacher interactions

The ECE classroom environment in Liberia is not seen to be conducive to early learning and development. An emphasis on academically oriented subjects is observed in ECE classrooms. In ELSR observations, language/literacy and mathematics/numeracy – the two subjects taught most frequently in observed ECE classrooms – indicate a more traditional, academically focused orientation of ECE lessons. This is at the expense of more play-based activities, with art or drama lessons not being observed in any classrooms in the ELSR, for example (Table 2.31). It further confirms the lack of implementation of the national curriculum in these classrooms as the curriculum prescribes the implementation of art, blocks and dramatic play learning centres. Additionally, this academic orientation was further reflected in the second phase of the ELSR study wherein teachers scored a mean of 4.44 on a scale of 1–5 in agreement with the statement ‘it is more important for a young child to study for the future than to enjoy today’ (OPM, 2018).

This demonstrates the strongly internalized notion and misunderstanding among ECE teachers themselves about the value of early learning and education.

Traditional teaching techniques are dominant in the classroom. Alongside determining which subjects are being taught, the ELSR study considered the techniques used in their delivery. The study found that teachers spent the greatest proportion of time in the classroom instructing and explaining to learners at 21 per cent, followed by drilling learners and practising concepts at 19 per cent (*Table 2.32*). This is paralleled with learners who spent the largest proportion of their time copying at 23 per cent or drilling and practising at 22 per cent. Play-based elements such as reading stories, singing or, telling rhymes, and child-centred techniques such as asking and answering open questions and discussing with the teacher or learner received far less attention, again indicating a lack of alignment with the curriculum (*Table 2.33*).

Table 2.31 Observed topics covered in class

Topics	Proportion of classrooms observed
Language/literacy	80%
Maths/numeracy	48%
Science/nature	12%
Art/drama	0%
Social studies/culture	8%
Religious education	10%
Health/nutrition/hygiene	6%
Music	12%
Physical education	2%

Table 2.32 Time spent on various activities in the classroom, teachers

Activity	Percentage of total time spent
Asking closed questions (yes/no)	5
Asking/answering open questions	2
Classroom management	3
Demonstrating with learning materials/objects	7
Disciplining	6
Discussing with children	3
Drill and practice	19
In disarray	0
Instructing/explaining	21
Interacting with adults	2
Lunch	0
No interaction	6
Observing or inspecting	18
Out of classroom	5
Reading stories	0
Singing or telling rhymes	3
Taking roll call	0

Table 2.33 Time spent on various activities in the classroom, learners

Activity	Percentage of total time spent
Answering closed questions (yes/no)	4
Asking/answering open questions	2
Being disciplined	5
Copying	23
Discussing with the teacher or other children	3
Disengaged	12
Drill and practice	22
Having lunch	0
In disarray	1
Listening to instructions/explanations	15
Listening to stories	2
Presenting assignment for teacher inspection	1
Responding to roll call	1
Singing or rhymes	3
Socially interacting among themselves	1
Using or playing with materials/objects	8
Watching blackboard, as learners write on board	1

Source: Authors' calculations, ELSR data (OPM, 2018).

Table 2.34 Observed teacher supervision types

Supervision type	Total
Children are left without an adult 5–10 minutes	16%
Children are left without an adult for less than 5 minutes	34%
Children are left without an adult for more than 10 minutes	8%
Children are never left alone (without an adult)	42%

Source: Authors' calculations based on ELSR data (OPM, 2018).

Table 2.35 Proportion of time spent by learner grouping arrangement

Grouping	Percentage of time spent
Individual (children alone)	21
Pairs (two children)	0
Small groups (three or more)	1
Whole group (entire class)	71

Source: Authors' calculations using ELSR data (OPM, 2018).

Supervision in ECE classrooms is lacking. Fifty-eight per cent of learners in the ELSR study were observed to be left without adult supervision at some point during the day (Table 2.34). This is particularly concerning given the age of these children, which necessitates constant supervision to ensure their safety and well-being.

Learners were observed to either spend most of their time in the classroom either alone or as an entire class group. Small group activities or those in pairs occupied less than 1 per cent of the time observed (Table 2.35). This is contrary to both play-

based and learner-centred teaching pedagogies that recommend small group activity as an important strategy for early learning and development.

While learners were seen to work alone frequently, no teachers were observed to use individualized instruction regularly with learners, and 60 per cent were observed to never use this technique. This suggests that time is often spent working entirely independently without teacher support. Additionally, 28 per cent of teachers used negative physical or verbal interactions frequently (Table 2.36).

Table 2.36 Observed learner-teacher interactions

	Teacher uses negative physical or verbal interaction	Teacher uses individualized instruction
Frequently	28%	n/a
Sometimes	6%	28%
Rarely	34%	12%
Never	34%	60%

Source: Authors' calculations based on ELSR data (OPM, 2018).

Table 2.37 Observed teacher discipline strategies

Strategy	Total
Negative physical technique used with children	18%
Negative verbal technique used with children	42%
Teacher redirects children	34%
Teacher uses positive techniques	6%

Source: Authors' calculations, ELSR data (OPM, 2018).

Teachers rarely use positive discipline techniques. As mentioned above, negative discipline techniques dominate those used by teachers, with 42 per cent of teachers observed to use negative verbal techniques with children at some point, and 18 per cent to use negative physical discipline methods. Conversely, positive techniques were observed to be used by only 6 per cent of teachers (Table 2.37). This was further confirmed in Phase 2 of the ELSR study wherein teachers scored a mean of 4.21 on a scale of 1–5 in agreement with the statement ‘the most important thing to teach children is absolute obedience to whoever is in the authority’ (OPM, 2018). This suggests that teachers place a high

priority on obedience, which explains why they may turn to negative or physical discipline techniques.

The BEQI research from 2021 observed more positive types of interaction and discipline technique, with 73 per cent of teachers demonstrating mostly positive interactions, and 79 per cent assessing misbehaviour rather than jumping directly to disciplining (Davis et al., 2021). However, physical punishment was used by 38 per cent of teachers (Figure 2.19). When taken in conjunction with ELSR evidence, this indicates a need for sensitizing and training teachers on the harm of corporal punishment, especially with young children.

Figure 2.19 Observed learner–teacher interactions



Source: BEQI data (Davis et al., 2021).

2.4.1.2 Use of child-centred and play-based teaching techniques

Teachers rarely use play-based techniques in the classroom and rely on more traditional techniques less suited to early learning. Repetition and rote learning dominate teaching methods across subject areas. The majority of the five early development skills as outlined in the ELSR study were found to either not be taught or were taught using repetitive teaching techniques only. Teaching methods using one, or two or more play-based learning elements were observed in only 2–4 per cent of learning activities, with the highest proportion in expressive language skills at 10 per cent (*Table 2.38*). This again suggests a lack of implementation of play-based learning methods, which may be

partially due to the absence of adequate learning materials that support these techniques as identified above.

In addition to the absence of play-based techniques when teaching early development skills, free play or open choice activities were not noted in any of the classrooms observed despite these being a key element of play-based learning. A teacher reading a story was not observed in 94 per cent of classrooms—an element that is particularly concerning when considering that most households did not have access to books in the home. Furthermore, while music or movement activities were observed in 26 per cent of classrooms, 20 per cent of learners were taught using repetition only, limiting the value of these more creative and active-learning subjects (*Table 2.39*).

Table 2.38 Observed use of play-based techniques to support the development of early development skills

	Math skills	Literacy skills	Expressive language skills	Gross motor activities	Fine motor activities
Does not occur	48%	42%	38%	72%	34%
Taught using repetition only	48%	52%	50%	24%	62%
Taught using one element of play-based learning	4%	2%	10%	2%	2%
Taught using two or more elements of play-based learning	–	4%	2%	2%	2%

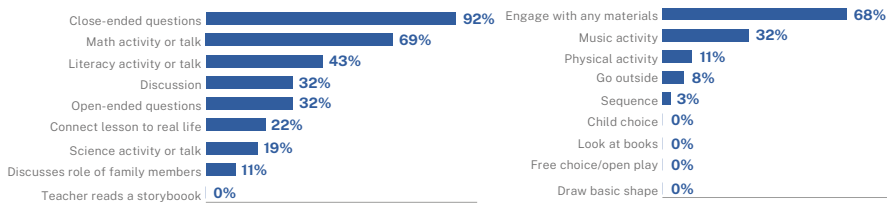
Source: Authors' calculations based on ELSR data (OPM, 2018).

Table 2.39 Observed use of play-based techniques and activities

	Free play or open choice	Music/movement activities	Teacher reading a story
Does not occur	100%	74%	94%
Taught using repetition only	n/a	20%	4%
Taught using one element of play-based learning	n/a	4%	2%
Taught using two or more elements of play-based learning	n/a	2%	n/a

Source: Authors' calculations based on ELSR data (OPM, 2018).

Figure 2.20 Observed learning activities



Source: BEQI data (Davis et al., 2021).

The engagement of ECE learners in child-centred activities is limited. BEQI data paints a similar picture regarding the use of play-based activities in the classroom, with the most frequently observed teaching activities being asking close-ended questions or activities and instruction (Davis et al., 2021). Free choice, open play, child choice, and children looking at books were similarly not observed in any classrooms considered in the BEQI analysis (Figure 2.20). Taken together, the data suggest that play-based learning techniques are not being applied in ECE classrooms in Liberia, indicating the practice is not aligned with the curriculum which requires the use of these methodologies. This focus on more academic skills using traditional teaching methods may result from the dominance of over-aged children in ECE classrooms, for whom these methods are more appropriate. However, this is at the detriment of appropriately aged ECE learners who may not be receiving the full benefits of early learning programming that incorporates the development of socio-emotional skills alongside early literacy and numeracy.

2.4.1.3 Scores teachers according to their use of techniques in the classroom

In order to provide a more in-depth analysis of teacher quality, the author gener-

ated teacher scores according to their use of play-based and child-centred learning techniques as observed in the structured and unstructured classroom observation data from the MELQO analysis of 50 pre-primary teachers (OPM, 2018). Using the structured tool, teachers were given a score of either 0 or 1 for each five-minute time slot observed by enumerators, with 1 representing the occurrence of a play-based or learner-centred activity. In this case, it included discussing with children, asking and answering open questions, using or playing with materials and objects, playing or learning outside, listening to stories, and singing or saying rhymes. Teachers received a score of 0 if they were instructing or explaining, drilling or practising, asking closed questions, observing or inspecting, conducting classroom management, disciplining, keeping silent, interacting with adults, being out of the classroom, or having no interaction with learners.

For the unstructured observation tool, teachers were again given a score of 0 or 1 according to the types of learning opportunity they created to support the development of various skills. When skills were taught using one or two elements of play-based learning, teachers were given a score of 1. When learners were taught using repetition only, teachers

Table 2.40 Teacher demonstration of play-based and child-centred techniques score distribution

Quantile	Total teachers	Percentage of teachers
1	22	44
2	19	38
3	7	14
4	2	4

Source: Author's calculations based on ELSR data (OPM, 2018).

were given a score of 0. Combining the structured and unstructured observation scores produced an overall score that was divided into four performance quantiles to better reflect the unique distribution of the scores themselves. Accordingly, the fourth quantile represents the strongest performance, with these teachers having consistently demonstrated child-centred and play-based learning techniques, while the first quintile is the lowest quantile, indicating teachers who exhibited none of these teaching practices.

Low teacher scores in the use of play-based and child-centred techniques were observed. Overall, 44 per cent of teachers scored in the lowest quantile, with a further 38 per cent scoring in the second-lowest grouping. Conversely, only 18 per cent of teachers scored in the highest two quantiles, suggesting an overall low use of play-based and learner-centred teaching techniques across the board (Table 2.40).

ECE-specific training does not necessarily result in improved teacher scores. Table 2.41 considers teacher score distributions according to training background, with 'trained' referring to teachers with a minimum of a C certificate. There is a weak correlation between teachers' use of play-based methods and their training. Untrained teachers scored higher proportionally in the first quantile at 50 per cent than trained teachers at 31 per cent (Table 2.41). Furthermore, as discussed below, while teachers might be considered trained, a smaller proportion have qualifications specifically in early childhood.

However, examining Table 2.42 reveals that this qualification has little impact on teachers' use of play-based and child-centred learning techniques. In fact, no teachers with an ECE qualification were seen to score in the fourth quantile, compared with 7 per cent of unqualified teachers. This suggests that currently

Table 2.41 Teacher score distribution by training

Quantile	Trained	Untrained
1	31%	50%
2	50%	32%
3	19%	12%
4	0%	6%

Table 2.42 Teacher score distribution by ECE qualification

Quantile	ECE qualification	No ECE qualification
1	43%	45%
2	43%	34%
3	14%	14%
4	0%	7%

Source: Authors' calculations based on ELSR data (OPM, 2018).

Table 2.43 Teacher score distribution by school type

School type	1	2	3	4	Total teachers
Government	23%	54%	15%	8%	13
Community	56%	22%	11%	11%	9
Private	47%	29%	24%	–	17
Church	60%	40%	–	–	10
Mission	–	100%	–	–	1

Table 2.44 Teacher score distribution by county

County	1	2	3	4	Total teachers
Bomi	36%	64%	–	–	11
Grand Bassa	50%	50%	–	–	2
Maryland	60%	20%	13%	7%	15
Montserrado	80%	–	20%	–	5
Nimba	20%	60%	20%	–	5
River Cess	–	50%	50%	–	2
River Gee	–	40%	40%	20%	5
Sinoe	60%	40%	–	–	5

Source: Authors' calculations based on ELSR data (OPM, 2018).

available training programmes do not provide sufficient skills in play-based and learner-centred teaching methods, which negates the value of obtaining an ECE-specific qualification. Thus, it cannot be assumed that just because a teacher has obtained an ECE qualification, they will deliver high-quality lessons. However, the ELSR study was conducted before the first round of teachers trained under the new qualification framework, so it is not known how effective this programme is in ensuring high-quality classroom practices.

This analysis further considered whether there was any correlation between school characteristics and teaching quality. First, looking at school ownership type revealed that community schools had the highest proportion of teachers scoring in the highest quantile at 11 per cent, and they also had the highest proportion of teachers scoring in the lowest category at 56 per cent (Table 2.43). This demon-

strates the mixed trends seen according to school ownership type, with no type having significantly stronger teacher performance than others. Examining trends by county reveals similarly mixed trends. Montserrado had the highest proportion of teachers falling into the lowest category at 80 per cent, and River Gee had the strongest performing teachers with 20 per cent performing at the highest level, and none at the lowest (Table 2.44).

The evidence suggests that teaching quality with reference to play-based and child-centred methods is consistently poor across ownership types and counties. This, in combination with the classroom observation data as discussed above, demonstrates that the quality of teaching received in ECE classrooms is low, suggesting that learners are not receiving the full benefits of early learning including preparation for primary school.

2.5 Skills development in ECE: To what extent are ECE learners prepared for primary progression?

Poor learning outcomes among ECE children are observed, with the benefit of ECE in terms of preparation for primary entry largely being lost. The difficulties in evaluating levels of learning in ECE in Liberia are twofold: first arising as a result of a lack of data on ECE evaluations in the country and, second, as a result of the broader consensus that learning in pre-primary must be evaluated differently than at other levels due to the unique holistic nature of child development in the early years. While the ECE curriculum provides a sample report card – including areas of evaluation in maths, writing, arts, physical abilities and social-emotional skills – there is no evidence that this is being implemented with no data about summative or inclass learning assessments being provided.

In the absence of evidence from national assessments, this analysis draws on the

results of the Measure of Development and Early Learning (MODEL) Module of the MELQO administered as part of the ELSR study (OPM, 2018). The MODEL evaluated three domains: social-emotional development, early mathematics skills, and early literacy skills while also capturing information about the learner's health and family background. The MODEL is not graded according to a pass/fail system and does not define which children are developmentally on track or ready for school. Rather the scores:

Should only be used to examine results in the aggregate and to understand influences on children's development and learning, differences among groups and the extent to which children's learning aligns with the government standards in place for pre-primary and early primary grades. (UNESCO, 2017: 50)

2.5.1 Learners' performance in early mathematics and literacy

Mixed levels of performance are observed in learner proficiency in early mathematic and literacy skills. The MODEL module is made up of a series of questions referred to as 'items' which are scored according to a child's ability to demonstrate a selected skill. Some questions are not scored only as correct or incorrect according to the child's ability to perform the skill, but also considers the quality of performance. For example, learners are awarded a score according to the quality of a circle drawn. *Table 2.45* presents learners' scores on all items in the literacy and mathematic portions of the MODEL.

In early numeracy, learners performed best in working memory (remembering

a sequence of numbers), measurement vocabulary (shorter, longer), and shape identification. The weakest performance was seen in inhibitory control (reversing a set of numbers) with only 1 per cent of learners being able to reverse the number set 4, 8, 2, and 7. Learners further demonstrated weak performance in their spatial vocabulary and struggled to identify what shape could be made when given two puzzle pieces (*Table 2.45*).

In literacy, learners performed best in oral vocabulary (identifying parts of the body) and identifying capital letters. However, scores tended to be weaker across literacy items, with no child able to read the more difficult words, namely

Table 2.45 Percentage of learners successfully responding to select items (MELQO)

Numeracy		Literacy	
Item	Score	Item	Score
Highest number counted from 1 (avg.)	23.30	Says B	89%
Highest number counted from 50 (avg.)	62.56	Says A	90%
		Says D	77%
Gives 3 stones	81%	Says K	68%
Gives 6 stones	72%	Says L	60%
Gives 14 stones	52%	Says D	26%
		Says E	51%
Identifies number 2	70%	Says C	71%
Identifies number 7	46%	Says N	41%
Identifies number 10	48%	Says H	39%
Identifies number 5	59%		
Identifies number 13	24%	Says the sound of N	2%
Identifies number 17	20%	Says the sound of S	4%
Identifies number 12	19%	Says the sound of B	5%
Identifies number 14	22%	Says the sound of F	4%
Identifies number 20	24%		
		Identifies words beginning with H	1%
Identifies larger number	60%	Identifies words beginning with S	0%
Identifies smaller number	56%	Identifies words beginning with F	1%
Identifies bigger number	35%		
Identifies smaller number	34%	Identifies eye	97%
		Identifies mouth	99%
Adds 2 + 1	64%	Identifies ear	98%
Adds 3 + 2	50%	Identifies hand	95%
Subtracts 3 – 2	40%	Identifies elbow	38%
Added 6 + 4	23%		
Subtracts 12 – 4	15%	Average number of food items listed (max 8)	7.72
Add 16 + 4	14%	Average number of animals listed (max 8)	5.82
Subtracts 20 – 3	10%		
Adds 3 + 5	19%	Identifies who stole the cat's hat	73%
Subtracts 6 – 3	17%	Identifies hat colour	51%
Adds 10 + 4	11%	Identifies where the cat trapped the rat	44%
Subtracts 10 – 4	11%	Identifies why the cat did not eat the rat	32%
Identifies taller	95%	Draws X (average out of 3)	2.20
Identifies longer	91%	Draws circle (average out of 3)	2.39
		Draws rectangle (average out of 3)	2.12
Identifies circle	51%		
Identifies triangle	47%	Writes name	45%
Identifies on	83%	Writes A	89%
Identifies under	73%	Writes D	64%
Identifies in front of	73%	Writes F	56%
Identifies next to	72%	Writes name	45%
		Writes H	57%
Correctly identifies shape	11%	Writes cat	39%
Correctly identifies shape	27%	Writes fish	13%
Correctly identifies shape	12%	Writes chicken	2%

Numeracy		Literacy	
Item	Score	Item	Score
Correctly identifies shape	17%	Writes sentence	2%
Remembers 1 to 6	92%	Reads map	7%
Remembers 5, 2, 8	87%	Reads canoe	0%
Remembers 8, 3, 1, 4	80%	Reads watermelon	0%
Remembers 1, 2, 4, 7, 3	61%	Reads sentence	1%
Reverses 1 to 4	17%		
Reverses 2, 8, 8	7%		
Reverses 4, 8, 2, 7	1%		
Reverses 8, 3, 6, 1, 5	1%		

Source: Authors' calculations, MELQO data, ELSR data (OPM, 2018).

'canoe' and 'watermelon'. Scores were also low in learners' ability to pronounce and identify letter sounds (Table 2.45). This indicates that even when learners

have knowledge of letters, it may often just be memorization and children are unable to translate this knowledge to oral literacy skills.

2.5.2 Using item response theory to analyse scores

Item response theory (IRT) was used to calculate three test scores in literacy, numeracy and socio-emotional skills. Thereafter, the three scores were used to compute an overall global score using a two-parameter IRT model (namely, item difficulty and discrimination). Using IRT scores improves the measurement reliability as compared with scores that measure the percentage of correct answers since they consider the variability in difficulty of items. The scale of each score was standardized to have a mean of 100 and a standard deviation of 10. Thus, any score above 100 indicates performance above the mean, while a score lower than 100 indicates below average performance.

Variations in learner performance according to school ownership type are observed. Considering IRT scores according to school ownership, mission schools perform consistently well across

subjects; however, only one school of this type was surveyed in the ELSR study. Private schools are seen to have averages above the mean in all subjects, while community and church schools have averages below the mean. Results in government schools are more mixed with variability seen between subjects and the overall average score slightly above the mean (Table 2.46).

Regional variations in learner performance are observed. Examining results by county, Nimba, Bomi and Montserrado all stand out with averages lower than the mean in all subject areas. Conversely, Sinoe, Grand Bassa and Maryland counties exceed the mean in all subjects (Table 2.47). Overarchingly, this demonstrates the existence of variability across counties, which paints a heterogeneous picture of learner performance. Furthermore, it is particularly interesting that learners in River Gee performed

Table 2.46 IRT scores by school ownership

	Government	Community	Mission	Private	Church	All
Literacy	99.99	99.01	100.93	101.40	98.62	100
Numeracy	100.73	98.06	103.87	100.90	98.95	100
Socio-emotional	99.96	98.73	98.96	100.79	99.96	100
Overall	100.40	98.61	103.47	101.06	98.70	100

Source: Authors' calculations using MELQO data, ELSR data (OPM, 2018).

Table 2.47 IRT scores by county

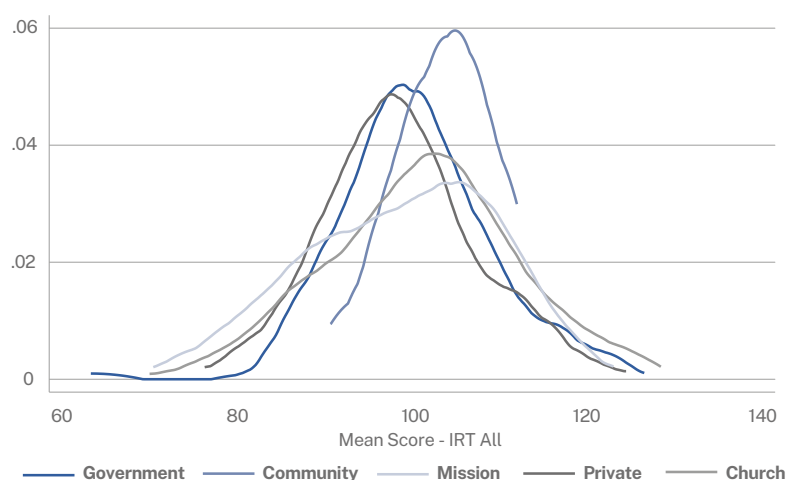
	Bomi	Grand Bassa	Maryland	Montserrat	Nimba	River Cess	River Gee	Sinoe
Literacy	99.04	101.50	102.90	97.78	96.94	103.12	94.73	102.42
Numeracy	99.03	100.57	100.57	99.70	97.21	106.64	96.95	103.48
Socio-emotional	99.56	101.42	100.85	98.92	99.19	98.58	100.11	100.15
Overall	98.71	102.27	101.76	98.75	97.16	105.97	95.43	103.12

Source: Authors' calculations, ELSR data (OPM, 2018).

the poorest while the highest proportion of teachers in this county scored in the highest performance quantile.

Private and government schools demonstrate overall lower scores. Examining the distribution of all scores, the curve for

Figure 2.21 Global IRT score distribution by ownership type



Source: Authors' calculations, MELQO data, ELSR data (OPM, 2018).

private and government schools is skewed towards the left, indicating a higher concentration of learners scoring below the mean. The peaks of mission, church and community schools are to the right of the mean, demonstrating that more chil-

dren are reaching high scores. However, scores vary greatly within all ownership types except for mission schools, with government schools seeing the greatest difference between the highest and lowest scores achieved (*Figure 2.21*).

2.5.3 Proficiency levels and primary readiness

To deepen the analysis and highlight school readiness, arguably the greatest measure of quality ECE services, proficiency levels were calculated to identify learning patterns and create a more tangible unit for evaluating readiness for primary school. Examining the pattern of responses and distribution of scores, four proficiency levels were created that ranged from the lowest

achieving in proficiency level 1 to the highest in proficiency level 4. Those learners who were identified to belong to proficiency level 4 have mastered most items in the various domains tested and as such, they are identified as being ready to transition to primary school. On the other hand, learners who fall in proficiency level 1 have barely mastered basic requirements.

Table 2.48 Distribution of proficiency level by subdomain and ownership

Subdomain	Proficiency level	Government	Community	Mission	Private	Church
Literacy	1	4%	7%	–	8%	13%
	2	40%	35%	20%	26%	29%
	3	39%	47%	80%	43%	43%
	4	18%	11%	–	23%	15%
Numeracy	1	14%	26%	–	20%	29%
	2	24%	34%	10%	22%	19%
	3	50%	29%	80%	40%	40%
	4	12%	11%	10%	18%	12%
Socio-emotional	1	11%	10%	–	8%	12%
	2	1%	–	–	1%	–
	3	61%	66%	70%	61%	57%
	4	27%	24%	30%	31%	31%
Overall	1	2%	7%	–	9%	15%
	2	41%	44%	10%	27%	30%
	3	43%	38%	70%	43%	39%
	4	13%	12%	20%	21%	16%

Source: Author's calculations, MELQO data, ELSR data (OPM, 2018).

Table 2.49 Proficiency levels of global score by county

Proficiency level	Bomi	Grand Bassa	Maryland	Montserrado	Nimba	River Cess	River Gee	Sinoe
1	17%	–	1%	16%	2%	–	14%	6%
2	28%	35%	33%	27%	60%	10%	42%	33%
3	39%	50%	51%	41%	32%	55%	34%	31%
4	17%	15%	15%	16%	6%	35%	10%	31%

Source: Authors' calculations based on MELQO data, ELSR data (OPM, 2018).

Learner proficiency levels vary greatly according to subject and school ownership. The socio-emotional subdomain has the highest proportion of learners scoring in the highest proficiency level with all school ownership types having around 27–30 per cent of learners scoring in this category. Numeracy has the highest proportion of learners scoring in the lowest proficiency level, ranging from a low of 14 per cent in government schools to 29 per cent in church schools. In overall scores, government, community, and church schools have similar proportions of learners scoring in the third and four proficiency levels, while private and mission schools have significantly higher proportions scoring in the fourth proficiency level. Private schools have a greater proportion of learners scoring in the highest proficiency level than both government and community schools across all subdomains (Table 2.48).

Examining proficiency levels by county reveals the same degree of variation as observed in IRT scores and teacher's performance; for example, River Cess and Sinoe counties have high proportions of learners scoring in the two highest proficiency levels compared with Nimba country that has 62 per cent of its learners scoring in the first two levels (Table 2.49).

Learners of the appropriate age for primary school entry are not considered adequately prepared according to learning outcomes. Due to the high prevalence of overaged learners in Liberian ECE institutions, age provides an additional dimension for examining learning outcomes. There is a correlation between age and proficiency levels, with older learners having higher levels of proficiency. However, if only those learners who are the appropriate age for pre-primary schools are examined, very low

Table 2.50 Proficiency levels of global score by age

Proficiency level	Age							
	3	4	5	6	7	8	9	10+
1	65%	35%	6%	5%	–	–	–	–
2	30%	52%	57%	33%	22%	24%	21%	24%
3	50%	10%	31%	55%	49%	53%	46%	46%
4	–	2%	6%	8%	29%	24%	33%	30%

Source: Authors' calculations based on MELQO data, ELSR data (OPM, 2018).

Table 2.51 Learner proficiency levels by ECE grade, 2018

Proficiency level	Day care	Nursery or ABC	Nursery I	Nursery II	Kindergarten	Kindergarten I	Kindergarten II
1	0%	17%	36%	0%	3%	1%	1%
2	100%	63%	48%	60%	17%	26%	22%
3	0%	20%	15%	20%	64%	56%	43%
4	0%	0%	0%	20%	16%	17%	33%

Source: Authors' calculations based on MELQO data, ELSR data (OPM, 2018).

levels of proficiency are exhibited, with 57 per cent of learners aged 5 scoring in the second proficiency level. Additionally, if level 4 is considered to be equivalent to primary school readiness, only 8 per cent of learners aged 6, or the appropriate age for primary entry, are considered prepared for primary education (Table 2.50).

Learners in the final grade of ECE do not possess sufficient skills to be considered ready to progress to primary school. Finally, examining proficiency levels by currently enrolled grade again demonstrates the low levels of preparedness for primary entry and the mixed naming nomenclature of pre-primary programmes as discussed earlier. Firstly, the ELSR study identified seven different types of pre-primary classroom, while the official system has three, or sometimes four, types of classroom. It is not clear what the difference between kindergarten and Kindergarten I and I are, as well as the difference between day care, nursery or ABC, and Nursery I and II.

Standardization of the terminology used for pre-primary classes is a necessary step moving forward for more robust data analysis, especially those seeking to identify trends over time.

Assuming Kindergarten II is the final grade of pre-primary, only 33 per cent of learners graduating from ECE, or those scoring in proficiency level 4, have the appropriate skills to transfer to Grade 1 (Table 2.51). However, given that only 8 per cent of 6-year-olds were deemed primary-school-ready (Table 2.50) suggests that many children leaving Kindergarten II are overaged. This arguably makes these results more concerning as it indicates that even overaged learners are not prepared to enter primary school even though they should, in theory, have a better grasp of the academic skills necessary. It suggests that many of the benefits of pre-primary education in terms of school readiness are being lost in Liberian preschools due to low-quality teaching and learning.

2.6 Chapter summary

Although Liberia has one of the highest ECE enrolment rates in the region, it is declining. Additionally, enrolment is driven by the high proportion of overaged children observed in preprimary classrooms, which has knock-on effects on the rest of the education system. Gross enrolment is relatively consistent across sociodemographic characteristics, with only NER varying greatly by wealth. This signals the existence of financial barriers to enrolling in ECE at the appropriate age. The analysis further revealed the structural elements that contribute to the widespread issue of overaged enrolment, specifically using tests to determine appropriateness for primary entry. It indicates widespread levels of misunderstanding of the value of ECE, which goes beyond academic skills. Furthermore, unless ECE is made free and accessible, these practices work against the spirit of education for all by denying learners access to primary education at the appropriate age because of a lack of ECE attendance, which only contributes to weakening the system by perpetuating overaged enrolment. The tests, fees associated with ECE, and perception of the necessity of ECE as academic preparation for primary attendance need to be revised if the issue of overaged enrolment is to be addressed in the country.

Considering inputs, processes and outputs in totality, there are weak-

nesses across all levels that contribute to the low learning outcomes seen in the MELQO. At the input level, schools lack access to learning materials that support play-based learning, while also often presenting safety hazards themselves. Despite the existence of a national curriculum with a focus on play-based learning, these skills are not observed in the classroom. Most teachers scored in the first or second category in their ranking of these and child-centred teaching techniques. This can arguably be connected to the absence of learning materials that support these techniques, yet can also be related to the fact that most teachers lack specific training for working with young children. In this way, there are both weaknesses in the input and process levels that can be linked to the low levels of learning and preparation for primary school seen across all counties and school ownership types. Accordingly, there is an evident need to strengthen both inputs in terms of teaching and learning materials, particularly play-based materials more suited to the needs of young children and upskilling of existing teachers. This will strengthen processes, particularly the use of play-based teaching methods, and support the delivery of the curriculum as intended. These investments will help ensure that learners reap the full benefits of ECE in terms of both school readiness and socio-emotional development.

Chapter 3

Evolution of enrolment and capacity of primary and secondary

This chapter considers the current intake and participation in basic and secondary education systems in order to outline the current levels of access and associated performance of the subsectors in Liberia. It works to identify the access, retention and dropout patterns according to various sociodemographic characteristics, thereby identifying the areas of greatest disadvantage and need. The chapter begins by introducing the structure of the Liberian system, including specialized programming through alternative learning and inclusive education. It continues by examining the evolution of gross enrolment rates across basic and secondary education by comparing evidence from various data sources and considering issues of equity in access. This equity analysis is firstly complemented by the presentation of cross-sectional schooling profiles that provide a more in-depth discussion of system efficiency in terms of dropout, retention and progression. Thereafter, repetition and school life expectancy are examined, with particular attention given to the issue of overaged enrolment due to its relevance and widespread nature in Liberia. Thirdly, generational access to education is considered, exhibiting how access levels have changed over time and how they relate to various household characteristics. Lastly, the OOSC population is examined and risk factors associated with OOSC status are identified.

3.1 Structure of education in Liberia

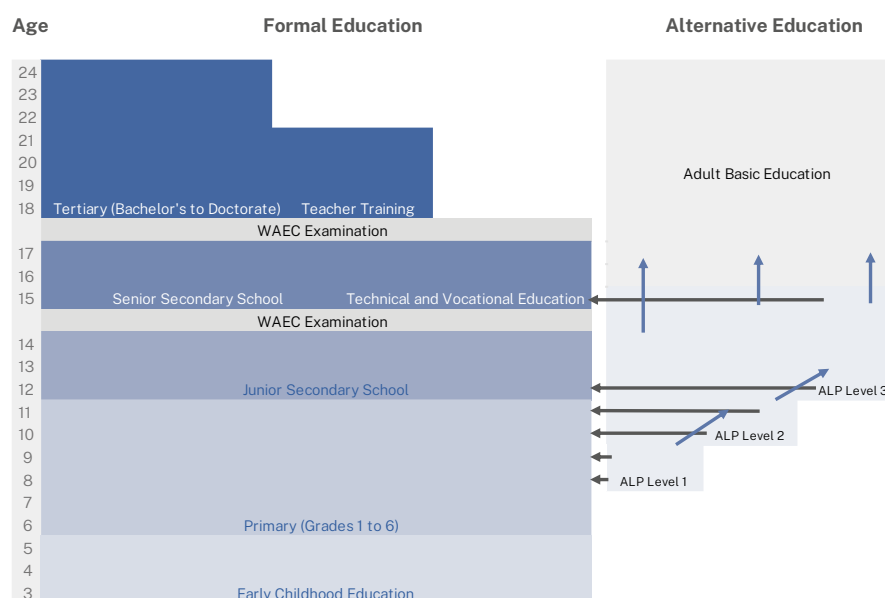
3.1.1 Formal education

Basic education is offered fee-free in Liberia. The Liberian education system is split into six subsectors: (i) ECE; (ii) basic education (comprising primary, junior secondary, continuing and adult education); (iii) senior secondary school (comprising academic and technical education); (iv) junior college and other post-secondary institutions; (v) colleges and universities; and (vi) intermediate institutions of learning (comprising teachers' education and vocational training).

The structure follows a 3–9–3–4 system composed of three years of ECE, nine years of basic education (consisting of six years of primary and three years of

junior secondary), followed by three years of senior secondary or technical or vocational education, and finally four years of university or another tertiary education programme. This structure is spelled out in the ERA of 2011, which replaced the Education Law of 2001. The ERA departed from the 2001 Law by redefining basic education to include both primary and junior secondary and expanding its provision of free and compulsory education to include both levels (Liberia, 2011b). The system further stipulates exams at the Grade 9 and Grade 12 levels to determine promotion to higher educational levels as shown in *Figure 3.1*. The exams are administered by the West Africa Examination

Figure 3.1 The education ladder in Liberia, 2021



Source: Authors creation based on the education sector analysis (ESA) (MoE, 2016b)

Council (WAEC). In practice, there is also an exam at the end of the primary cycle; however, it is not reflected in the ERA

and a passing grade on this exam is not required to progress from primary to junior secondary school (Liberia, 2011b).

3.1.2 Alternative learning programmes

Formal and alternative structures function in parallel in Liberia. Alternative learning opportunities were particularly important government efforts after the end of the civil war to help learners whose education was disrupted. Now, more than 15 years since the end of the war, Liberia is no longer operating in an emergency context, and alternative education programmes have been transferred from transitional to foundational programmes (MoE, 2017a).

Alternative learning programmes (ALPs) target a wide range of learners including overaged and adult learners. Alternative learning is split into three different programmes: alternative basic education, ALPs, and adult education (Figure 3.1). Alternative basic education targets older learners, aged 15–25 and already in the workplace, and combines lower basic education with leadership and livelihood development. While, ALPs target learners aged 8–15 who are already enrolled in basic education, but who are more than two years overaged for the class in which they are enrolled. This programme provides lower primary education in a three-year condensed cycle, which enables learners to transition back into the formal system or into the world of work. Adult education provides both primary and secondary education for adults over 18 and is generally administered through night school programmes.

ALPs address the pervasive issue of over-aged enrolment in Liberia. At the heart of an ALP is the transition back into the

formal education system, whether this be into the appropriate grade level for their age or to technical and vocational education and training (TVET) options. Learner eligibility, assessment and certification guidelines outline this process, which is based on both age and ability. At the end of each ALP level, learners are expected to do a summative assessment. If learners pass this assessment and are fewer than two years overaged for the next grade level (Grade 3 for Level 1; Grade 5 for Level 2; and Grade 7 for Level 3), they are expected to transition into the formal system. If learners are more than two years overaged for the appropriate grade level after passing the summative assessment, they progress to the next ALP level. Learners who graduate from Level 3 and are aged 15 or older are given the opportunity to transition into adult education or a TVET programme, or are supported with transition into the workplace.

An issue arises when there are 15-year-old learners in Level 1 or Level 2 programmes. Although they are not permitted under the learning eligibility guidelines to progress to a higher level, they also do not have the appropriate skills to transition into TVET programmes. Furthermore, adult education programmes are often less widespread than ALPs. Thus, learners over the age of 15 who want to complete the basic education cycle may find it difficult to access ALPs. During conversations with officials in the alternative education department, the problem of age restrictions in ALP was raised, with one official

stating, ‘What do we do with the 16-year-olds? Are we meant to take them out of school?’ Thus, there is a need to accommodate older overaged children and ensure they have the same access to education as their appropriately aged counterparts.

ALPs represent a very small proportion of overall enrolment. Despite an extensive policy and support from partners, overall enrolment in ALPs remains relatively low in Liberia at just under 13,000 learners in 2020, representing just over 2 per cent of primary enrolment. The proportion has remained stable since 2015, indicating that enrolment is stagnating and that ALPs are not expanding effectively. On a more promising note, the ALP has recently been adapted, which will allow for an expansion of implementation in the 2022/2023 academic year.

Table 3.1 Total enrolment in ALPs by county, 2015 and 2020

	2015	2020
Bomi	157	13
Bong	1,548	1,762
Gbarpolu	0	39
Grand Bassa	581	1,238
Grand Gedeh	272	0
Lofa	2,092	1,778
Margibi	1,463	2,200
Maryland	482	0
Montserrado	4,325	2,713
Nimba	1,972	3,568
Sinoe	60	0
Total	12,952	13,311

Source: Authors' calculations based on EMIS (MoE, 2015a, 2020a).

3.2 The evolution of enrolment and enrolment capacity

This subsection examines access rates – including retention and transition, both over time – according to various sociodemographic characteristics. It further presents the education landscape in Liberia according to school ownership type and regional variations. Evidence is drawn from the 2015 and 2020 administrative data collected during the Liberian EMIS (MoE, 2020a) and is complemented by data from the 2019/2020 LDHS (LISGIS et al., 2021) to add an additional equity lens.

3.2.1 Schools and enrolment rates: Proportion of public schools and enrolment declining

Public schools are only the dominant education provider at primary level. Education services in Liberia are provided by four types of institutions: government, faith-based, community, and private. Public schools are the most prevalent at the primary level, representing 46 per cent of all enrolment and 44 per cent of all schools (*Figure 3.2*). Community schools represent the smallest proportion of enrolment, ranging from a low of 2 per cent at the senior secondary level to 4 per cent at primary level. At junior (*Figure 3.3*) and senior secondary (*Figure 3.4*) levels, public institutions are surpassed by private institutions both in terms of enrolment and total proportion of schools.

At the senior secondary level, the proportion of public schools is parallel with the proportion of faith-based schools, while faith-based schools represent a greater proportion of enrolment (*Figure 3.4*). This suggests that the government is not the primary provider of education at the secondary level in the country. It is particularly concerning at the junior secondary level where public junior secondary schools operate fee-free, while private schools charge fees. This implies that learners might face financial barriers in accessing secondary education, and highlights an undersupply of government institutions at this level.

Figure 3.2 Proportion of enrolment and schools by ownership type, primary, 2020

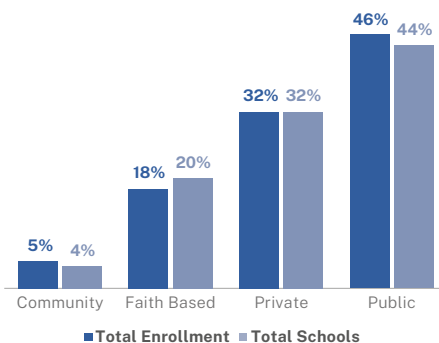
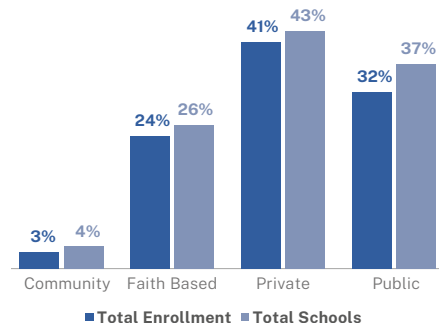
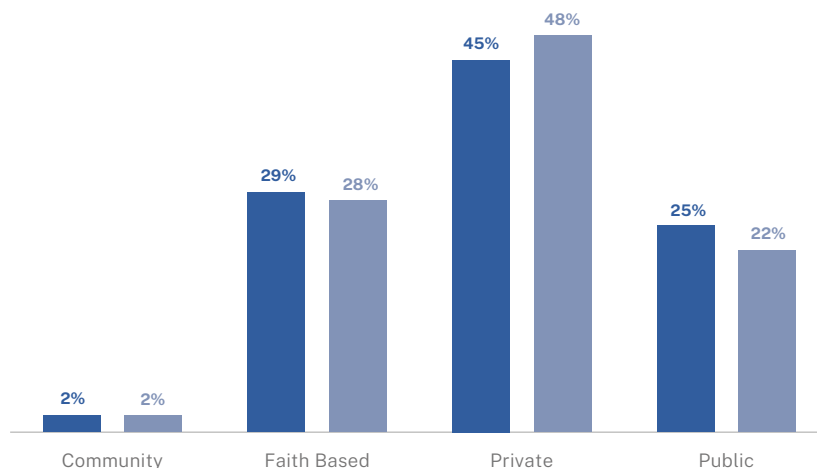


Figure 3.3 Proportion of enrolment and schools by ownership type, junior secondary, 2020



Source: Authors' calculations based on EMIS data (MoE, 2020a).

Figure 3.4 Proportion of enrolment and schools by ownership type, senior secondary, 2020



Source: Authors' calculations based on EMIS data (MoE, 2020a).

3.2.2 Enrolment rates: Decreasing enrolment across all levels of education

Both overall enrolment and the proportion of learners in public schools have been seen to decrease. According to the 2015 and 2020 administrative EMIS data, total enrolment has decreased by over 50,000 learners at the primary level. It is accompanied by the proportion of primary learners enrolled in public institutions decreasing from 52 per cent to 46 per cent (*Table 3.2*), which comes at the expense of the expansion of both private and faith-based institutions. The greatest gains since 2015 are at the junior secondary level, with enrolment growing by over 10,000 learners. However, the same trend is observed for public schools, where the proportion enrolled is decreasing. Senior secondary has remained stagnant in terms of overall enrolment, and there has been a less dramatic decrease in the proportion of learners enrolled in public institutions at this level.

Gross enrolment has stalled or declined in recent years. Paralleled with a decrease in overall enrolment, the GER in primary has dropped 5 percentage points from 87 per cent in 2015 to 82 per cent in 2020. At the secondary level, the GER remains relatively stagnant at 54 per cent in junior secondary, and decreases one percentage point from 39 per cent to 38 per cent in senior secondary (*Table 3.3*).

Net enrolment is significantly lower than gross enrolment largely due to over-aged enrolment. Net enrolment, which considers the proportion of the population of the appropriate age enrolled as a proportion of the total population of the appropriate age, has decreased at the primary level from 49 per cent in 2015 to 43 per cent in 2020. However, it has remained stagnant at both the junior and senior secondary school levels.

Table 3.2 Total enrolment by level and provider type, 2015 and 2020

		2015	2020
Primary school	Total	655,049	607,558
	Community	37,159	27,937
	Faith-based	86,472	107,916
	Private	194,042	193,612
	Public	337,376	278,093
	Percentage of public	52%	46%
Jnr secondary school	Total	166,957	168,379
	Community	5,114	5,669
	Faith-based	31,435	40,802
	Private	61,415	68,743
	Public	68,957	53,165
	Percentage of public	41%	32%
Snr secondary school	Total	105,875	106,194
	Community	2,035	1,734
	Faith-based	30,037	30,714
	Private	41,125	47,680
	Public	32,678	26,066
	Percentage of public	31%	25%

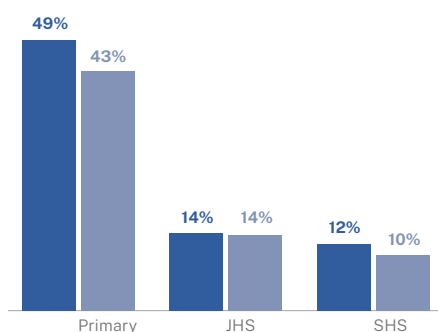
Source: Authors' calculations based on EMIS data (MoE, 2015a, 2020a).

Table 3.3 GER by level, 2015 and 2020

		2015	2020
Primary school	Learners	655,049	607,558
	School-aged population	752,930	741,291
	GER	87%	82%
Jnr secondary school	Learners	166,921	168,379
	School-aged population	309,020	312,412
	GER	54%	54%
Snr secondary school	Learners	105,875	106,194
	School-aged population	271,474	281,499
	GER	39%	38%

Source: Authors' calculations based on EMIS data (MoE, 2020a)

Figure 3.5 Net enrolment by level, 2015 and 2020



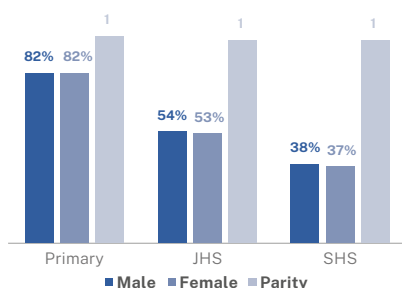
Source: EMIS data (MoE, 2015a, 2020a).

(Figure 3.5). In 2020, the NER was observed to be 14 per cent and 10 per cent in junior and senior secondary school, respectively, which is significantly lower than the GERs of 54 per cent and 38 per cent for junior and senior secondary school, respectively. This suggests a high prevalence of learners enrolled in grades that are not appropriate for their age according to the official school structure. In Liberia, as will be discussed further below, this low NER is driven by an extremely high proportion of overaged learners.

Sex is a determinant of enrolment across all subsectors. Administrative data show gender parity in gross and net enrolment across all levels of education in 2020 (Figure 3.6 and Figure 3.7). While this indicates similar levels of access among female and male populations, it does not indicate equal levels of retention or progression as will be discussed further below.

Enrolment is highly variable across counties. At county level, gross enrolment is more heterogeneous at primary level, with greater differences at secondary level. GER ranges from a 62 per cent to 98 per cent in primary (Figure 3.8), 13 per cent to 83 per cent in junior secondary (Figure 3.9), and 3 per cent to 66 per cent in senior secondary (Figure 3.10). This suggests that the characteristics related to locality, such as rurality and socioeconomic status, play a larger role in educational access at the secondary level than primary level. For example, Margibi and Montserrado have the highest GERs across all levels, which can be correlated to their wealthy and urban nature. At the same time, River Cess, which is largely rural in composition, consistently has the lowest GER.

Figure 3.6 Gross enrolment and gender parity by level, 2020



Source: EMIS data (MoE, 2020a).

Figure 3.7 Net enrolment and parity by sex and level, 2020

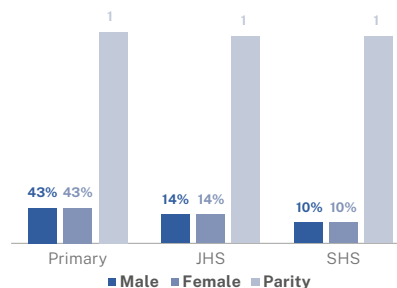


Figure 3.8 Gross enrolment by county, primary, 2020

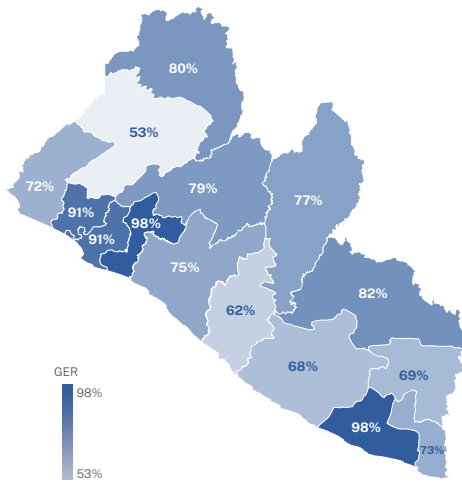


Figure 3.9 Gross enrolment by county, junior secondary, 2020

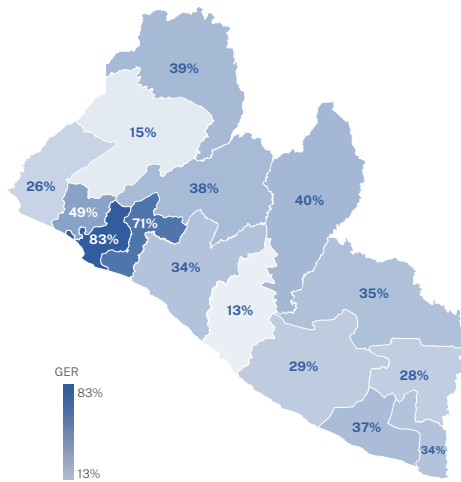
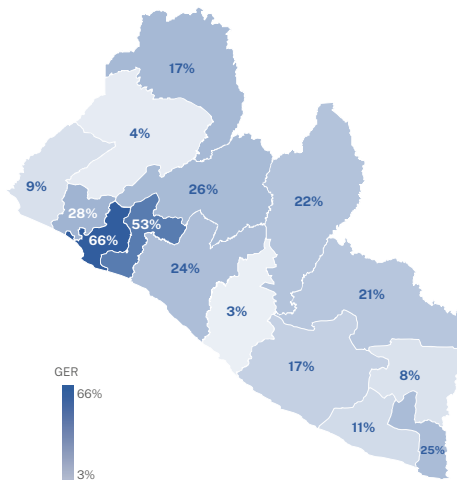


Figure 3.10 Gross enrolment rate by county, senior secondary, 2020



Source: Authors' calculations based on EMIS data (MoE, 2020a).

3.2.3 Complementary equity analysis

According to administrative data, the greatest differences in enrolment are between the wealth quintiles, while low levels of parity between rural and urban populations are also observed. An examination of administrative data demonstrates similar GERs and NERs between male and female populations, but at the same time it also shows wide variations according to county. However, it does not disclose why these trends are occurring or what types of intersectionality are contributing factors. As such, data from the 2019/2020 LDHS is used to deepen the analysis of equity in enrolment. Specifically, the LDHS provides an alternative source through which to benchmark the reliability of administrative data. It further provides two other important learner characteristics, namely locality and wealth, which can be used to examine enrolment trends through a strong equity lens.

When comparing enrolment from administrative data to those observed in the LDHS, the latter has higher GERs in primary and senior secondary, while NERs are almost parallel. The greatest difference is seen at the senior secondary level, with an 11 percentage point difference in the GER between the LDHS and EMIS data from 2019/2020 and 2020, respectively (Table

3.4). Despite this difference, LDHS data confirm the low levels of age-appropriate enrolment in junior and senior secondary through its parallel low NERs.

Low levels of parity are observed in enrolment rates across all subsectors. When considering locality and wealth characteristics as determinants for enrolment and access, similar patterns are seen across primary and secondary levels. In all cases, urban populations have higher GERs and NERs than rural populations. This difference is the greatest at the senior secondary level, leading to parity index of 0.24 and 0.12 in GER and NER, respectively (Figure 3.11). However, income status has the most dramatic effect on enrolment across all levels, with populations in the richest wealth quintile exhibiting a primary GER 56 percentage points higher than those from the poorest quintile. This gap is widest at the senior secondary level, with a GER parity rate of 0.09 and NER parity rate of 0.03, while at junior secondary it is similarly low at 0.31 and 0.07, respectively (Figure 3.12).

The extreme levels of disparity at the secondary levels can be explained by the fact that private and faith-based institutions dominate the secondary provision

Table 3.4 Gross and net enrolment by level, EMIS and LDHS comparison, 2019 and 2020

	GER		NER	
	LDHS 2019/20	EMIS 2020	LDHS 2019/20	EMIS 2020
Primary	91%	82%	41%	43%
Jnr secondary school	51%	54%	13%	14%
Snr secondary school	49%	38%	10%	10%

Source: EMIS data (MoE, 2020a) and LDHS 2019/2020 (LISGIS et al., 2021).

Figure 3.11 GER and NER by locality, all levels, 2020

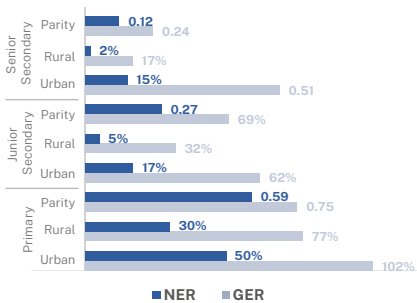
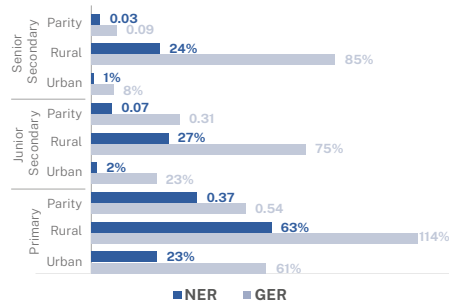


Figure 3.12 GER and NER by wealth, all levels, 2020



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

landscape. Thus, the most accessible secondary schools in terms of distance may be private, rendering them out of reach for learners who do not have the means to pay tuition fees. It is, however, interesting to note that NERs remain relatively low even among the richest quintiles, at 63 per cent, 27 per cent and

24 per cent for primary, junior and senior secondary, respectively. This demonstrates that while wealth may have a positive effect on enrolment, enrolling learners at the appropriate age remains a challenge even for the most privileged groups, exhibiting the widespread nature of this issue in Liberia.

3.2.4 Inclusive education

Despite a strong institutional framework supporting inclusive education, the majority of children with disabilities remain out of school in Liberia. The Children's Law of 2011 enshrined children with disabilities' right to education in Liberia:

Every child with disabilities shall access and benefit from an inclusive education system offering education that is responsive and supportive to the child's learning needs and talents in a participative and non-discriminatory manner. (Liberia, 2011a)

The ERA further committed to initiate and develop special programmes to allow individuals with physical and develop-

mental challenges to gain the appropriate skills and knowledge at their own pace without prejudice. The commitment to providing children with disabilities with equal educational opportunities came to a head with the development of the Inclusive Education Policy in 2018 (MoE, 2018). The policy commits to an approach that promotes the attendance of children with disabilities as well as other marginalized and vulnerable children in age-appropriate classes in local schools. The policy acknowledges 'that when children are not accessing, participating in or achieving in education, it is not their fault, rather it is a problem with the system' (MoE, 2018). In this way, the policy commits to realign the system itself, including teaching prac-

tices, resource allocation and curriculum, so that it is flexible and adaptable to the varying needs of children, including children with disabilities.

Development partners are the most prevalent provider of accessible education. In practical terms, the Inclusive Education Policy commits to several adaptations for children with disabilities specifically including: adapting school facilities to ensure accessibility, providing learners with assistive devices, reviewing and adapting the national curriculum, creating and implementing both in-service and pre-service teacher training modules on inclusive education, and sensitizing the local community and community leaders to help dispel myths and stigma surrounding children with disabilities (MoE, 2018). Despite these commitments, the policy recognizes that a large set of activities will not be funded under the G2B-ESP, and the associated operational plan has no budget allocated to the main inclusive-education-related activities around teacher training and curriculum review. Thus, while the intentions of the government are clear regarding including children with disabilities in the formal education system, the lack of funding has hampered efforts to operationalize these commitments. As such, educational services for children with disabilities are largely delivered either by development partners or through government grants allocated to institutions for learners with specific disabilities. Just over US\$90,000 was spent on these institutions in 2019, representing less than 1 per cent of the overall education budget.

Less than 1 per cent of learners are reported to have a disability. In 2014, it was estimated that 92,000 of the 600,000

school-aged children (or 15.3 per cent) had disabilities (Sida, 2015). If this proportion is applied to the population of school-aged children in 2020, there are an estimated 200,000 children with disabilities. However, as seen in *Table 3.5*, less than 1 per cent, or a total of 6,725 learners, enrolled in 2020 were reported to have a disability. Using the projected number of learners with disabilities, this would suggest that 96.7 per cent of children with disabilities are out of school in Liberia.

The type of disability does not seem to have a significant effect on enrolment. In terms of disability type, there is an even spread between children with visual, physical, and hearing impairments as well as learning difficulties across levels. The proportion of children with learning difficulties decreases from 31 per cent in primary to 19 per cent in senior secondary, suggesting that these learners are more likely to drop out as they proceed through the levels (*Table 3.6*). Overarchingly, the small proportion of learners with disabilities observed across all levels suggests an underrepresentation in the learner population, indicating continued barriers to enrolment.

Access is only half of the challenge that learners with disabilities continue to face in school. Even when learners are enrolled, a recent study of the experiences of learners with disabilities in public secondary schools in the country revealed that 78 per cent of learners were unaware of their entitlements, such as assistive devices, as enshrined in the Inclusive Education Policy (Collins, Masiga, and Ngugi, 2021). Furthermore, limited accessibility adaptations were seen in institutions, with only 26 per cent of schools having ramps for wheel-

Table 3.5 Total and proportion of learners with disabilities by level, 2020

Level	Total learners	Proportion of total
Primary	5,019	0.83%
Jnr secondary school	1,245	0.74%
Snr secondary school	461	0.43%

Table 3.6 Composition of disabled population by disability type, 2020

	Visually impaired	Physical handicap	Hearing impaired	Learning difficulty
Primary	24%	22%	24%	31%
Jnr secondary school	22%	27%	31%	20%
Snr secondary school	28%	33%	21%	19%

Source: Authors' calculations based on EMIS data (MoE, 2020a).

chair access, and none of the surveyed learners citing access to any type of assistive devices (Collins et al., 2021). The greatest barrier or challenge experienced by learners with disabilities was found to be a lack of acceptance by non-disabled learners, as cited by 23 per cent of male learners and 31 per cent of female

learners (Collins et al., 2021). While the government has demonstrated a rhetorical commitment to provide inclusive education and accessible education for children with disabilities, its translation to the classroom has been limited and programmes are severely constrained due to funding challenges.

Box 3.1: Identifying and supporting children with visual disabilities

The Liberian government in partnership with EYElliance has been working to provide universal school eye health. Under the current programme, teachers or nurses screen children for vision problems on-site at schools. When learners with a vision problem are identified, they are examined by an eye health professional who determines the appropriate course of treatment. Children who require glasses are provided with a pair. Under the current programme, over 100,000 learners and 2,500 teachers have been screened, thereby supporting learners with visual disabilities to stay in school longer and improve their performance. The government has been highly supportive of this programme. Plans to scale it nationally are under development.

Source: EYElliance (2021).

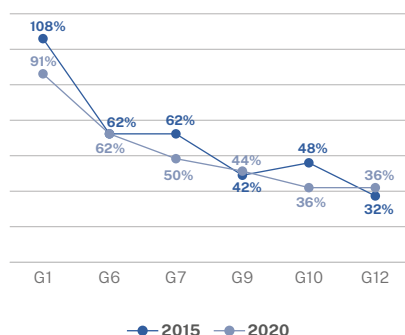
3.2.5 School coverage, schooling profiles and internal efficiency

Intra-cycle dropout is more prevalent than inter-cycle dropout, with retention rates much lower than transition rates. Due to a lack of consecutive years of data on enrolment, it is not possible to examine dropout in detail or calculate the coefficient of internal efficiency. Instead, two cross-sectional schooling profiles are used to represent the patterns of inter-cycle dropout and retention. These act as a visual representation of schooling careers, indicating the level of enrolment for each grade, which highlights trends regarding access and retention. The first profile draws on EMIS data and examines intake rates per grade, which are calculated by examining the total enrolment of non-repeaters in each grade as a proportion of the total population of the appropriate age for that grade. This is contrasted with the probabilistic schooling profile constructed using EMIS data. It does not use intake rates due to a lack of data on repetition, but instead considers access probability rates calcu-

lated by examining the proportion of individuals aged 5–24 who have accessed each grade.

Access to the first grade of primary school is seen to have increased from 2015 to 2020, with it exceeding 100 per cent in 2020. Similarly, improved levels of access for the first grade of junior and senior secondary are observed, while access to terminal grades in each subcycle has remained stagnant and has decreased slightly (*Figure 3.13*). Accordingly, transition rates have improved, increasing from 82 per cent to 99 per cent in primary to junior secondary, and from 82 per cent to 114 per cent in transition from junior to senior secondary (*Figure 3.14*). However, the improvements in access to the first grades of each cycle were accompanied by a stagnation in access to terminal grades, which led to an overall decrease in retention rates, with the most dramatic drop seen in senior secondary.

Figure 3.13 Evolution of cross-sectional schooling profiles, 2015 and 2020



Source: Authors' calculations based on EMIS data (MoE, 2020a).
Note: JSS – Junior secondary school; SSS – Senior secondary school.

Figure 3.14 Retention and transition rates, 2015 and 2020

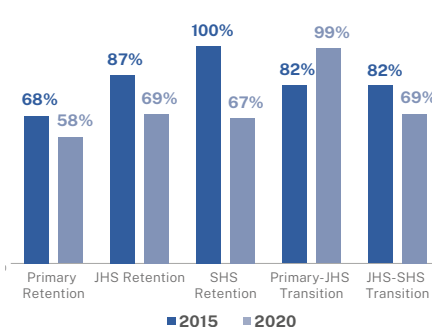
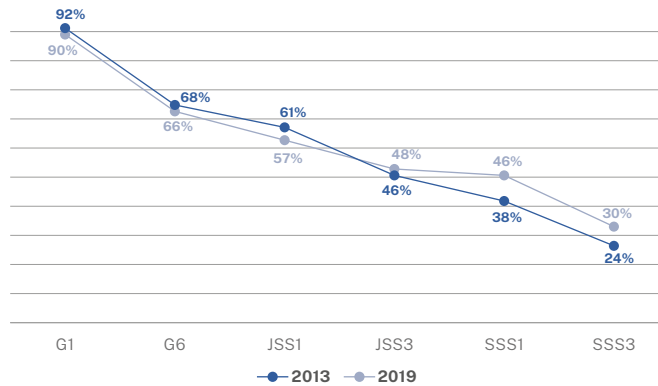


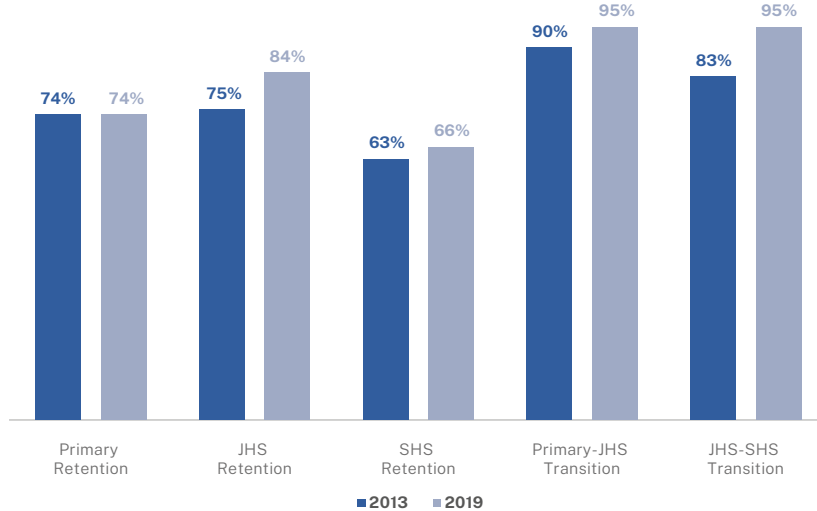
Figure 3.15 Probabilistic cross-sectional schooling profiles, 2019



Source: LDHS 2013 (LISGIS et al., 2014) and LDHS 2019/2020 (LISGIS et al., 2021).

Note: JSS – Junior secondary school; SSS – Senior secondary school.

Figure 3.16 Retention and access, 2013 and 2019



Source: Authors' calculations based on LDHS 2013 (LISGIS et al., 2014) and LDHS 2019/2020 (LISGIS et al., 2021).

Note: JSS – Junior secondary school; SSS – Senior secondary school.

Household data further reflect the issue of intra-cycle retention. Contrasting this with the profile that emerges from the LDHS data, access in 2013 and 2019 are seen to be similar to what is observed in the EMIS data, with access declining with ascending grade level in all data sets.

Relative stagnation is observed in access rates between 2013 and 2019, as is also broadly observed between the 2015 and 2020 EMIS data sets. In LDHS data, the greatest gains are at senior secondary level, including a 6 percentage point growth in access to Grade 12 (Figure 3.15).

Table 3.7 International comparisons of completion rates by subsector, various years

	Primary	Junior secondary	Senior secondary
Burkina Faso (2018)	65%	43%	6%
Côte d'Ivoire (2017)	72%	49%	12%
Ghana (2018)	94%	78%	36%
Liberia (2019)	62%	42%	32%
Sierra Leone (2019)	82%	72%	46%
Togo (2018)	91%	48%	18%

Source: Liberia: EMIS data (MoE, 2020a); Other countries: IIEP-UNESCO (c2017) database.

Administrative data demonstrate improved retention rates, although they remain significantly lower than transition rates. Comparing transition and retention between 2013 and 2019, rates at the primary level have remained stagnant while they have increased at both the junior and senior secondary levels. Transition has also increased, reaching 95 per cent for both primary to junior secondary, and junior secondary to senior secondary (Figure 3.16). The high transition rates are similar to those observed in the EMIS data, with these general positive trends also observed in both data sets. However,

the improvement and stagnation in retention rates observed in the LDHS are markedly different from the dramatic decreases seen in the EMIS data.

Completion rates are lowest at the senior secondary level. Liberia has lower levels of primary and junior secondary completion than comparative West African countries, while Liberia has higher senior secondary completion rates (Table 3.7). This suggests that retention in primary school in Liberia is comparatively lower than in other states, while it is comparatively higher in senior secondary.

3.2.6 Equity in access and retention: The role of gender, locality and income

While parallel levels of access are seen between genders, retention and transition are lower among girls than boys across all levels of education. The use of cross-sectional schooling profiles further allows us to examine issues of equity in access and retention. In this way, it provides additional detail on how the trends identified above affect certain groups differently. Drawing on these disaggregated schooling profiles, this section analyses how gender, locality and income affect

learners' likelihood to remain in school and transition between educational levels.

Despite similar access at primary level, girls are seen to drop out more than boys. Male and female learners have parallel levels of access to the first grade of primary, while a gap grows between the genders with ascending grades. This gap is greatest in senior secondary, with boys 14 percentage points more likely to access the final year of senior secondary

Figure 3.17 Cross-sectional schooling profile by sex, 2019

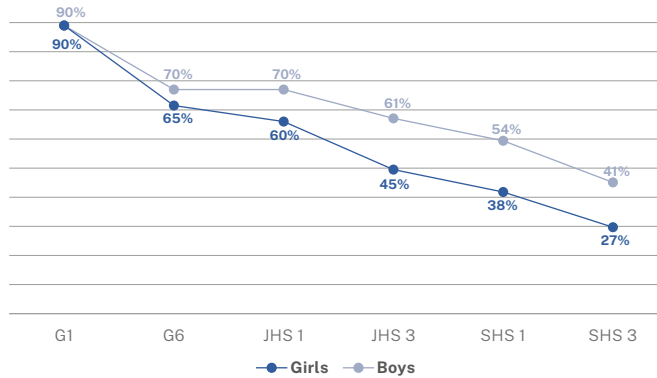
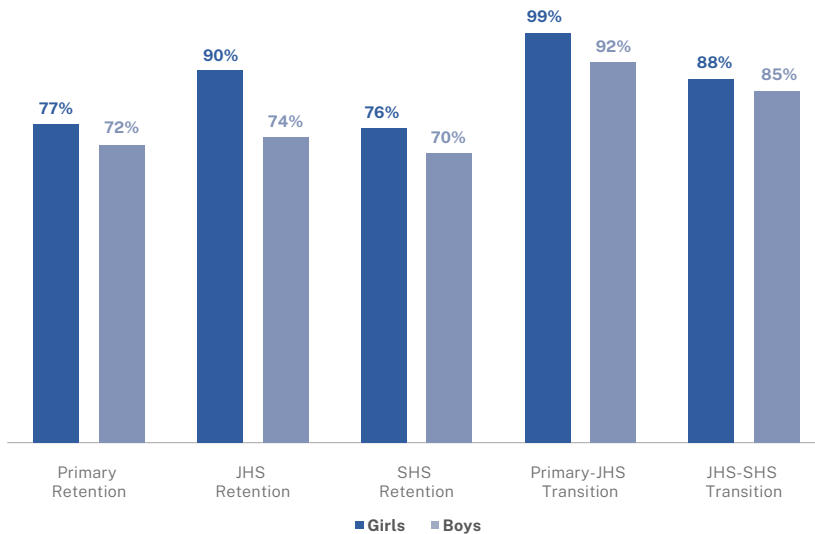


Figure 3.18 Retention and transition by sex, 2019



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021)

Note: JSS – Junior secondary school; SSS – Senior secondary school.

than girls (Figure 3.17). As a result, girls have lower retention and transition rates than boys across all levels (Figure 3.18). This suggests that girls are at a disadvantage both in terms of access and retention in that they are both less likely to enrol in secondary education and more likely to drop out across all cycles.

Locality is seen to be a strong determinant of access. Rural learners are 11 per cent less likely to access the first grade of primary. This gap similarly widens with higher grades, growing to a difference of 25 percentage points between the two population groups for the final year of senior secondary, leading to a parity

Figure 3.19 Cross-sectional schooling profile by locality, 2019

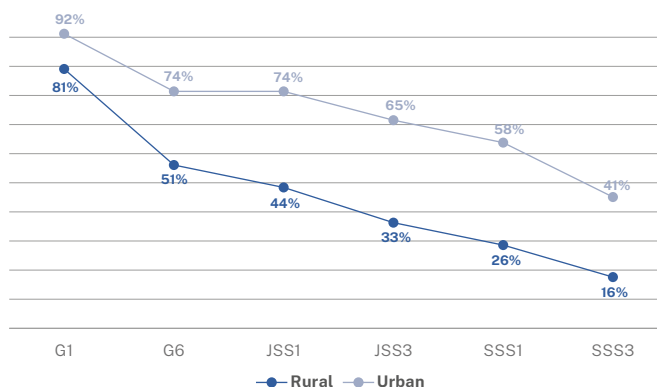
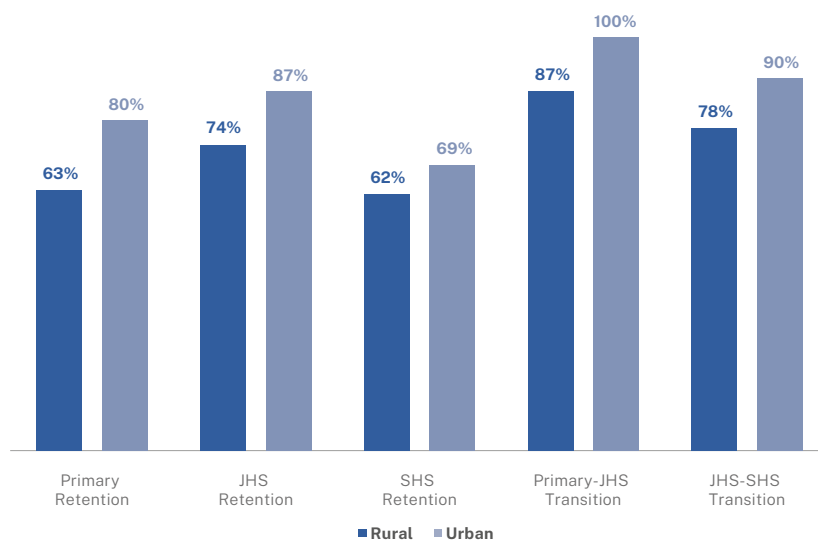


Figure 3.20 Retention and transition by locality, 2019



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

Note: JSS – Junior secondary school; SSS – Senior secondary school.

index of 0.39 in Grade 12 (Figure 3.19). The disadvantage of the rural population is further reflected in the transition and retention rates, indicating that alongside initial lower access for the rural population, they also are also more likely to drop out (Figure 3.20).

Children from the poorest backgrounds are 21 percentage points less likely to access Grade 1 than children from the richest families. This gap widens over time, with the greatest drop seen between the first and final grade of primary, leading to a 60 percentage point gap in the final

Figure 3.21 Cross-sectional schooling profile by wealth

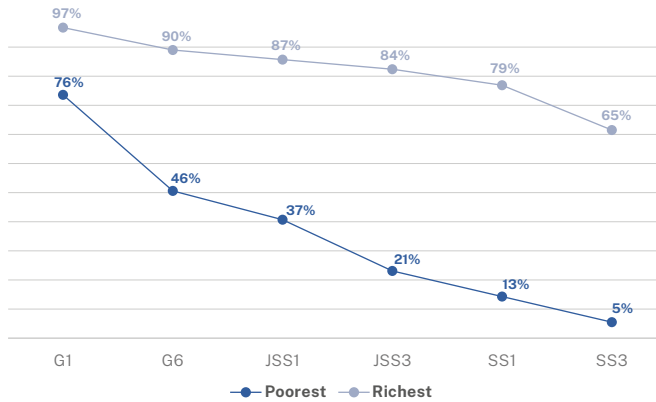
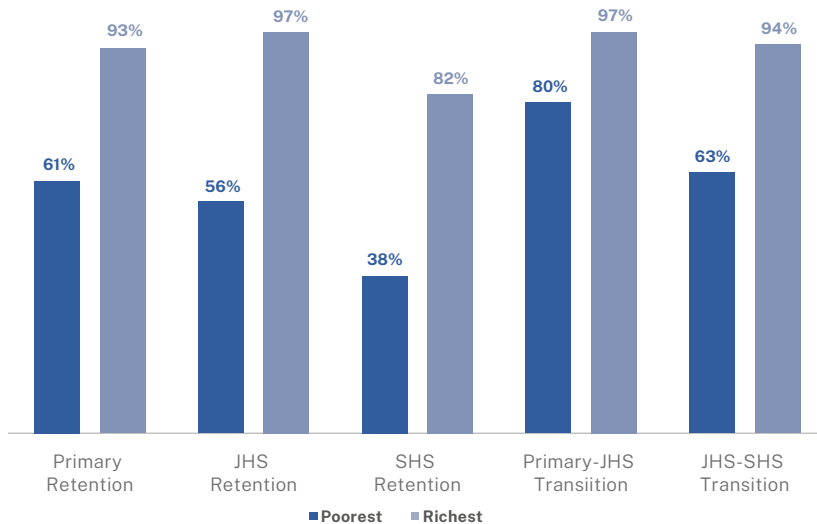


Figure 3.22 Transition and retention by wealth, 2019



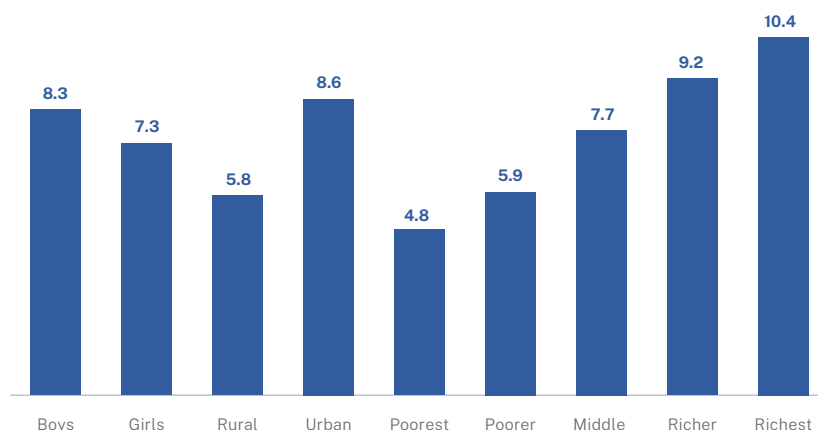
Source: LDHS 2019/2020 (LISGIS et al., 2021).

Note: JSS – Junior secondary school; SSS – Senior secondary school.

year of senior secondary (Figure 3.21). Retention in cycles is lower among the poorer populations across all levels. The difference is the most significant at the senior secondary level, suggesting that financial barriers may be the most onerous for families at this level. More promisingly,

despite having disadvantages in terms of access, transition from primary to junior secondary is still relatively high at 80 per cent among poorest populations (Figure 3.22), indicating that the greatest barriers are found most in initial access and intra-level retention.

Figure 3.23 School life expectancy (in years) by sex, locality and wealth quintile, 2019



Source: Author's calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

Boys are expected to spend a year longer in school than girls. School life expectancy reflects the total number of years a learner is expected to study and is calculated through the summation of probabilistic access rates for each grade. In Liberia, the complete school life cycle is 12 years, which is achieved by any sociodemographic groups, even those from the richest wealth quintile. However, there are trends in groups where the school life expectancy is seen to be a year longer for male populations than their female counterparts. It is also observed that urban populations stay in school almost three years longer than rural populations (Figure 3.23). The richest wealth quintile is seen to spend almost six more years in school than the poorest, with

the poorest and poorer quintiles life expectancy being less than the six years of the primary cycle.

The proportion of learners observed to repeat a grade has decreased since 2015. The greatest decrease is seen in Grade 1, with the proportion of repeaters decreasing from 18 per cent to 6 per cent (Table 3.8). This is particularly relevant as the high proportion of repeaters in Grade 1 clogs this entrance year, contributing to increased class sizes and higher rates of overaged enrolment across the system. Examining repeaters by sex reveals parity across the sexes in all levels (Table 3.9). This suggests that sex is not the premier cause or driver for grade repetition.

Table 3.8 Proportion of repeaters by grade, 2015/2020

	Grade	2015	2020
Primary	Grade 1	18%	6%
	Grade 2	12%	8%
	Grade 3	12%	6%
	Grade 4	11%	6%
	Grade 5	10%	5%
	Grade 6	9%	5%
Jnr secondary	Grade 7	14%	6%
	Grade 8	10%	6%
	Grade 9	12%	5%
Snr secondary	Grade 10	11%	4%
	Grade 11	9%	5%
	Grade 12	11%	3%

Source: Authors' calculations, EMIS data (MoE, 2015a, 2020a).

In comparison to other countries in the region, Liberia has relatively low repetition rates. At the primary level, the 6 per cent repetition is at the lower end of the average of the countries displayed here, while it is significantly lower in junior and senior secondary (Table 3.10). These low levels of repetition suggest that the greatest challenge facing internal effi-

Table 3.9 Proportion of repeaters by sex, 2020

	Female	Male	Total
Primary	6%	6%	6%
Jnr high	6%	6%	6%
Snr high	4%	4%	4%

ciency in Liberia is dropout rather than repetition. High levels of dropout such as observed in Liberia is a waste of resources since learners never achieve the total expected years of completed schooling. Thus, the system is investing more years and associated resources into learners than it is producing in terms of graduates.

Table 3.10 International comparison of proportion of repeaters by subsector, various years

	Primary	Jnr secondary	Snr secondary
Benin (2015)	11%	23%	23%
Cabo Verde (2017)	8%	22%	24%
Côte d'Ivoire (2017)	11%	13%	35%
Gambia (2016)	5%	3%	3%
Liberia (2019)	6%	6%	4%
Senegal (2017)	14%	21%	17%
Sierra Leone (2017)	2%	1%	1%
Togo (2017)	8%	24%	30%

Source: Liberia: EMIS data (MoE, 2020a); Other counties: IIEP-UNESCO (c2017) database.

3.3 Generational access to education and overaged populations

Overaged enrolment continues to be widespread in Liberia with severe levels of overaged enrolment most prevalent among rural populations and those from the poorest wealth quintiles. Overaged enrolment has been a persistent issue in Liberia since the end of the civil war due to the disruption of the educational system, which saw many children unable to access school at the appropriate age. Despite it being more than 15 years from the end of the civil war, the issue of overaged enrolment persists at an alarming rate as exhibited above with the low NERs in comparison to GERs. As discussed in *Chapter 2*, this trends often begins in ECE, which has knock-on effects for the rest of the system. In this section, we explore the trends related to overaged enrolment across subsectors, including its correlation with various sociodemographic characteristics.

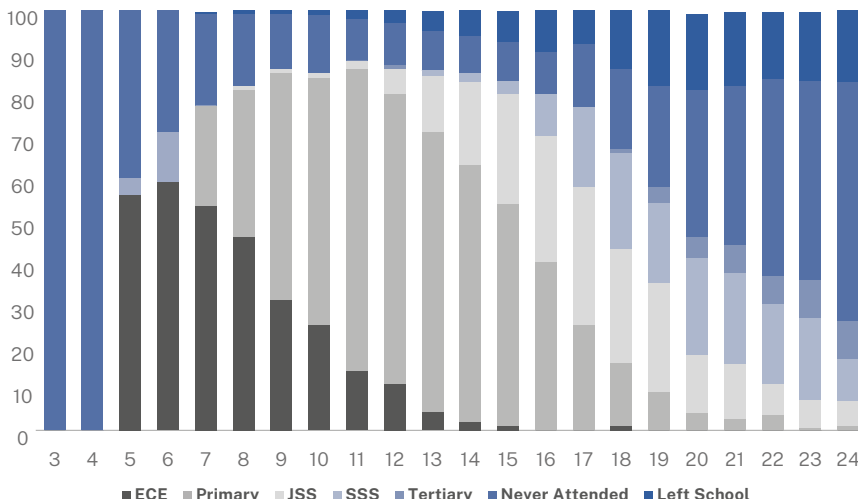
It is important to note that the reasons why these extreme levels of overaged enrolment persist in Liberia are largely understudied. With the data available, we examined the relationship between various socioeconomic characteristics and the likelihood of being overaged, but were unable to establish causality between these factors. However, we do understand from our analysis in *Chapter 2* that this issue often begins at ECE level, which has knock-on effects for the rest of the system. Furthermore, there is the suggestion in Liberia that late enrolment in primary is related to the prevalence of ‘bush schools’ or traditional schools where parents send their children before deeming them ready for primary entry past the official age. We can further hypothesize that when schools are presented with overaged learners attempting to enrol in Grade 1, they may feel that they have no other choice but to allow them due to the limited nature of alternative learning options. This creates a situation wherein, despite the existence of a strong age-appropriate enrolment policy, the reality on the ground means enrolling overaged learners at the inappropriate grade or denying them the chance to pursue any level of education.

3.3.1 Learners overaged at grade level

Overaged enrolment in the first grade of primary has a domino effect on proportions of overaged learners across grades. As the LDHS data does not consider the enrolment status of children under the age of 5, we only consider enrolment from this age onwards. Almost 60 per cent of children aged 6 are seen to be enrolled in ECE despite being the appropriate age to enrol in Grade 1. This has knock-on effects for primary entry, with the highest concentration of learners enrolled in primary being at ages 11–13, despite 11 being the official age of primary exit. Similar trends are seen in junior and senior secondary school as the majority

of learners are above the official age range for each level. Despite the government emphasizing the age-appropriate school policy, this evidence suggests that many learners are entering ECE above the official enrolment age rather than being placed in the appropriate grade or alternative education. Extreme overaged enrolment is further seen in older age groups, with a significant proportion of 20- to 24-year-olds enrolled in both junior and senior secondary school (*Figure 3.24*), despite the official age ranges being 12–14 and 15–17, respectively. This indicates that 13-year-olds and 20-year-olds can be found in the same classroom, which inher-

Figure 3.24 Current status of school attendance



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

Note: JSS – Junior secondary school; SSS – Senior secondary school.

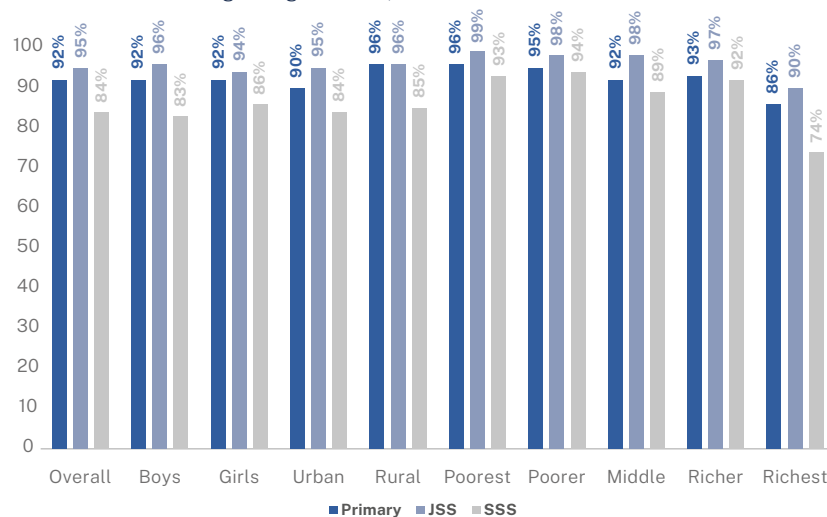
ently has negative effects on providing a safe learning environment and age-appropriate learning.

The majority of learners across all levels of education are at least one year overaged. Ninety-two per cent of primary learners, 95 per cent of junior secondary learners, and 84 per cent of senior secondary learners are overaged for the grade in which they are enrolled. Lower rates of overaged learners at the senior secondary level are regarded as an outcome of the lower levels of enrolment seen at this level more generally, which is coupled with the idea that overaged learners are more likely to drop out before reaching this terminal level. Examining the phenomenon of overaged enrolment according to various population groups reveals the universality of the issue across Liberia. The only significant difference between girls and boys, and urban and rural populations are seen at primary level. This aligns with previous observations which have identified that

rural populations are more likely to enrol late. Wealth is seen to have a limited impact on the likelihood of learners being overaged for the first four quintiles, with a dramatic decrease observed among the richest populations (*Figure 3.25*).

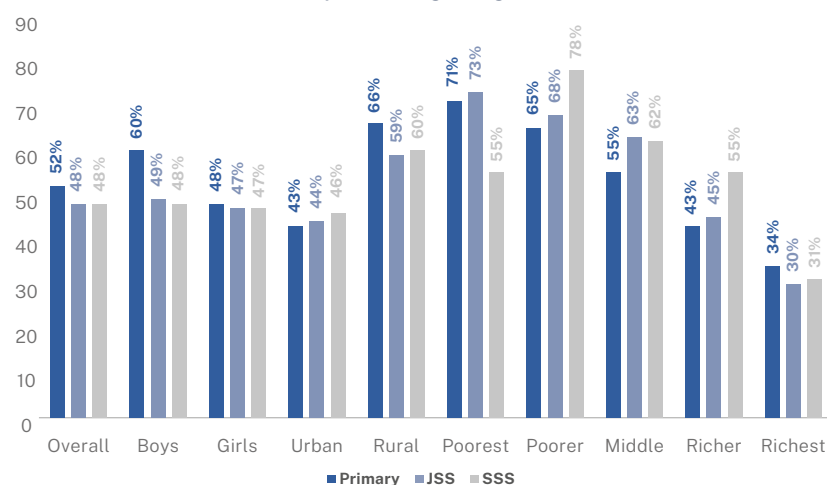
Children from poor backgrounds and rural populations are more likely to be more than three years overaged. Differences among population groups are more distinct when examining the proportion of learners more than three years above the official age for their grade. For instance, the gap between urban and rural population is observed at 26 percentage points for primary learners, 15 percentage points for junior secondary school learners, and 14 percentage points for senior secondary school learners. These are all significantly higher disparities than what are observed when examining the proportion of learners overaged by at least one year. Furthermore, trends according to wealth are more evident in *Figure 3.26*, with the proportion of over-

Figure 3.25 Learners overaged at grade level, 2019



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

Figure 3.26 Learners more than three years overaged at grade level, 2019



Source: LDHS 2019/2020 (LISGIS et al., 2021).

aged learners decreasing consistently from the poorest to the richest populations. As such, while the overaged problem is seen to be universal, it is clearly more explicit among poorer and rural populations as these groups are more likely to

enrol three or more years above the official primary entrance age. This suggests the existence of economic barriers to appropriate age enrolment and barriers caused by distance or agricultural activity that characterize rural populations.

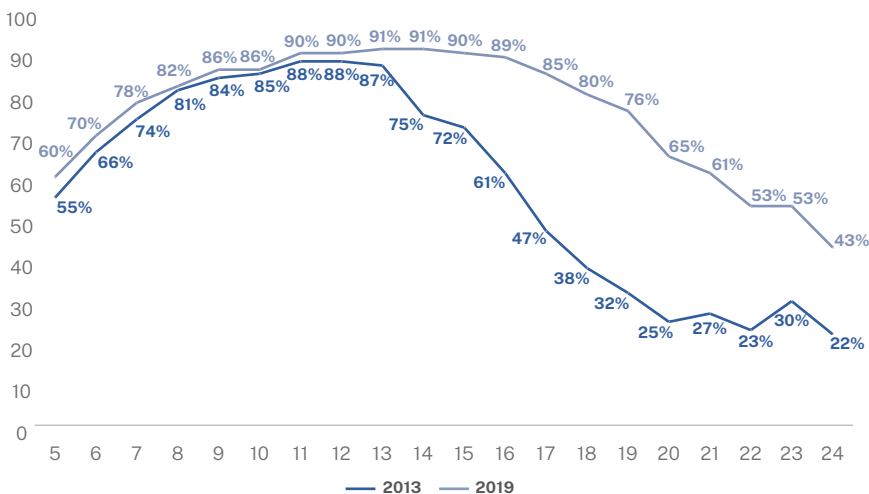
3.3.2 Generational access to education: By locality and gender

The likelihood of attending secondary school has significantly increased since 2013. *Figure 3.27* considers the proportion of individuals aged between 5 and 24 who have ever attended formal education including early childhood. ECE was included due to the high levels of enrolment observed at this level in Liberia. A comparison between 2013 and 2019/2020 LDHS data shows that access has improved, with improvement most prominent among individuals above the age of 13. This can be regarded as evidence of the post-war recovery Liberia has experienced over the past six years. The low rates of access in 2013 among individuals 13 or older are due to many of these individuals growing up during or just after the end of the Liberian civil wars when access to education was severely restricted. However, while improvement

is observed in older age groups, access among younger children has remained relatively stable. The proportion of children of primary school entry age has grown minimally from 66 per cent to 70 per cent. This indicates the continued prevalence of overaged enrolment. Peak levels of access are observed from ages 11 to 17, demonstrating a lack of progress on removing the barriers to age-appropriate enrolment.

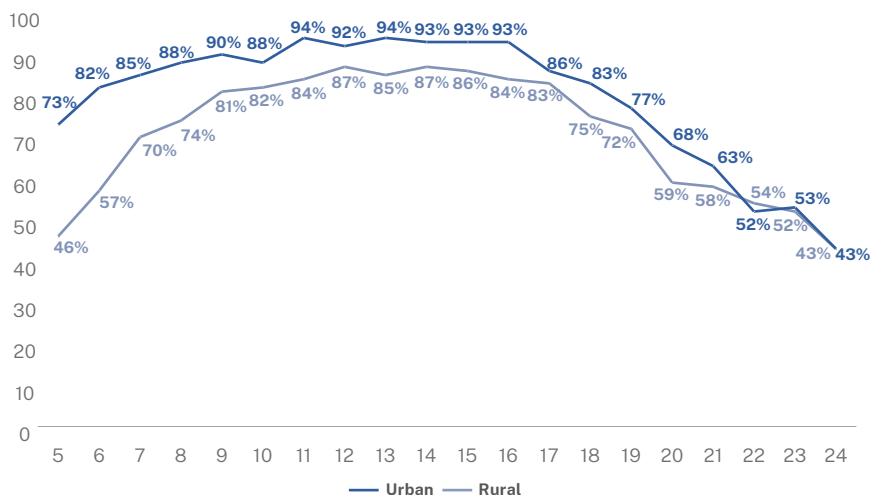
Gaps in generational access to formal education are widest among urban and rural populations at younger ages. Urban populations are 27 percentage points more likely to have accessed formal education at age 5 than their rural counterparts. This gap narrows with increasing age, with a difference of 5–10 percentage points remaining stable from age 10 to 16.

Figure 3.27 Generational access to education, 2013 and 2019



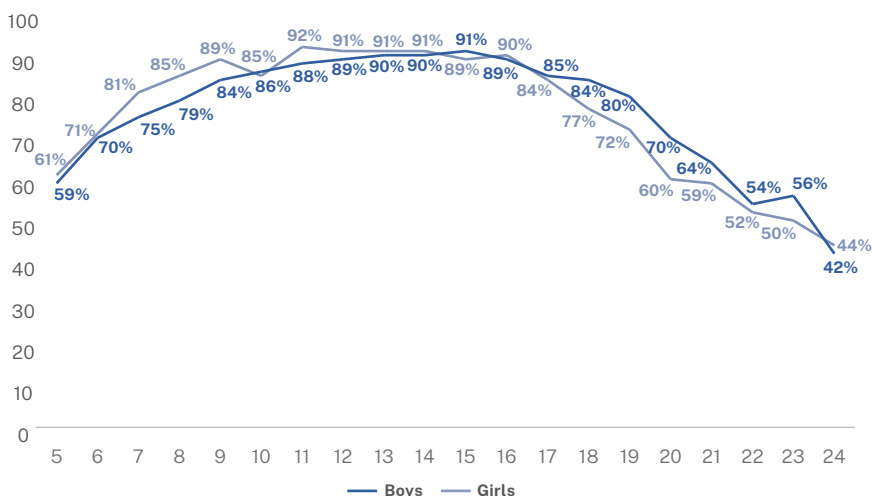
Source: Authors' calculations based on LDHS 2013 (LISGIS et al., 2014) and 2019/2020 (LISGIS et al., 2021).

Figure 3.28 Generational access to education by locality, 2019



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

Figure 3.29 Generational access to education by sex, 2019

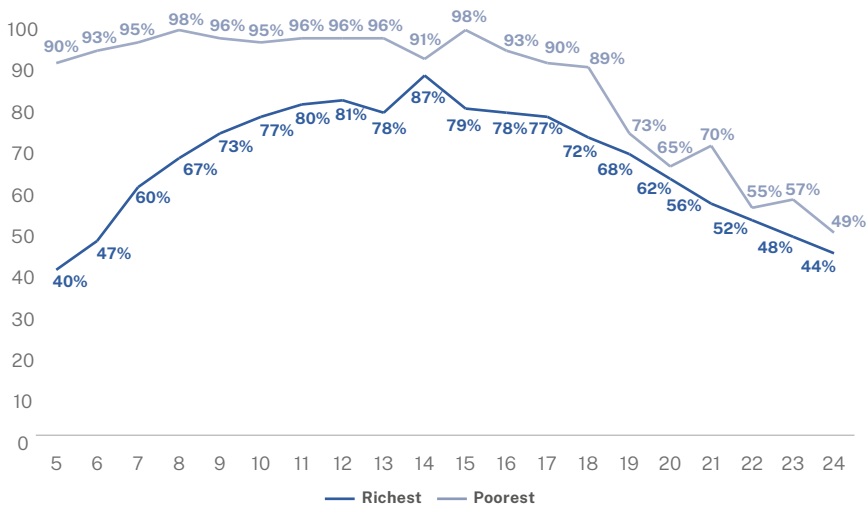


Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

Thereafter, it narrows further with almost parallel levels of access for older individuals (Figure 3.28). This trend tends to indicate greater barriers to age-appropriate

enrolment among rural populations, an element which was also reflected in the NER.

Figure 3.30 Generational access to education by wealth



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

Sex is not seen to have significant effects on generational access to education. Disaggregating generational access by sex reveals almost parallel levels of access across the 5- to 24-year-old age group. Slight gaps are seen among girls and boys in the 18- to 20-year-old age group in favour of male populations, with the greatest difference at 10 percentage points (Figure 3.29). This suggests that sex does not play a prominent role in predicting whether individuals will enrol in formal education.

Late enrolment in primary is more common among learners from poorer backgrounds. The poorest 6-year-olds are 46 percentage points less likely to attend formal school than those from the richest families. However, the diver-

gence between the two groups closes rapidly over time, with access among poorer populations exceeding those from the wealthiest backgrounds at age 22 to 24. However, glaring disparities are still prevalent. Richer populations reach peak levels of access at age 8, meaning that nearly all children from wealthier backgrounds have attended formal education by this age, compared with those from the poorest families, who have a six-year lag, with peak access reaching 87 per cent at age 14 (Figure 3.30). Not only does this indicate that richer populations are overall 11 percentage points more likely to access formal education, but also that they are more likely to enrol at later ages, again indicating the existence of wealth-related barriers to age-appropriate enrolment.

3.4 Out-of-school children

One in five children in Liberia is out of school. This subsection considers the prevalence of OOSC in Liberia, including identifying patterns among those who are out of school. As with generational access, learners enrolled in ECE are considered to be in school due to the high levels of enrolment observed in the country. It is important to note that none of the data considered here provided reasoning or background for why children were seen to be out of school – whether they dropped out or never attended. Rather, the data presented allow us to identify patterns related to sociodemographic characteristics, but it does not establish causality. It is recommended that future iterations of household surveys include questions regarding reasoning for being out of school, and that a study specifically focused on the causes of dropout and non-enrolment be conducted.

Eighty-one per cent of children of primary age are currently enrolled in formal education including ECE. This correlates with the high levels of GER which demonstrate strong enrolment, although not at the appropriate age. The highest proportion of OOSC is seen in the 15–17 age group at 20 per cent, followed by the 6–11 age group at 19 per cent. The lowest rate of learners who have never attended formal education is seen in the 12–14 age group, while it is highest among children 6–11 (*Table 3.11*). This is indicative of the issue of overaged enrolment, where children are most likely to enter formal education for the first time after the age of 6.

3.4.1 Determinants of OOSC status

Rural and poorer populations are the most likely to be out of school. Identifying the proportion of OOSC is only the first step in addressing this issue, which must be followed by a more indepth analysis of who these children are in order to develop associated targeted policies. As such, *Figure 3.31* and *Figure 3.32* examine out-of-school populations by gender, locality and wealth, as well as the intersections of these. This analysis helps to reveal which learners are most likely to be out of school and where the

greatest levels of disadvantage in access lie. In doing so, the greatest differences are seen according to wealth, with the poorest populations having 34 per cent of children aged 6–11 not enrolled in formal education. This is understandable given the continued existence of fees at pre-primary level in Liberia, as well as the dominance of non-public education providers in junior and senior secondary, which both create financial barriers to learners accessing education.

Table 3.11 Share of OOSC, 2019

Age group	Attending school	Out of school		
		Total	Left school	Never attended
6–11	81%	19%	1%	18%
12–14	86%	14%	5%	9%
15–17	80%	20%	9%	12%

Source: LDHS 2019/2020 (LISGIS et al., 2021).

Figure 3.31 Percentage of OOSC aged 6–11

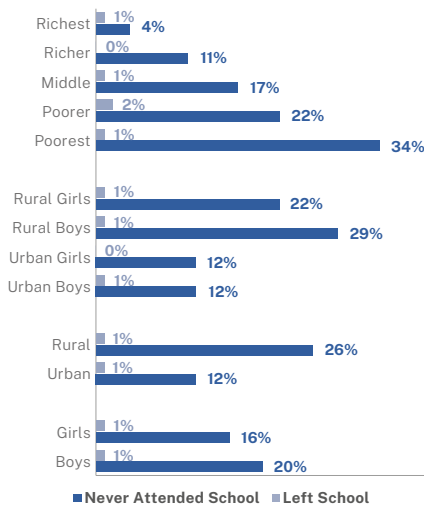
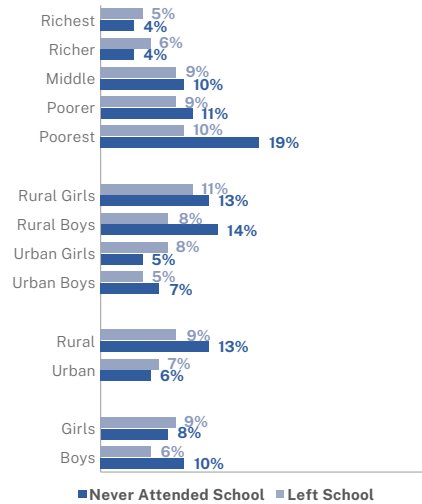


Figure 3.32 Percentage of OOSC aged 12–17



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

Regarding geographical location, rural populations in the 6–11 age group are more than two times more likely to be OOSC than their urban counterparts. Among secondary-school-aged children, the difference according to locality persists but narrows. While we do not have evidence regarding school distribution and the distance from communities to schools, other country contexts demonstrate that rurality often leads to being farther from educational institutions, limiting learner access. Furthermore, rurality is often correlated with lower levels of parental education and a greater need for children to do household or agricultural work, which act as reasons why these children are seen to never enrol or drop out.

Young boys are seen to be 1.25 times more likely to never attend school than girls, although this gap closes to 1.1 in the 12–17 age group. While boys are slightly more likely to never attend school than girls at

the secondary level, more girls drop out. This suggests that girls may enrol earlier than boys but then drop out, demonstrating disadvantages related to retention. Lower retention rates among girls may be related to school-based gender discrimination including SGBV, lack of safe spaces for girls, or a lack gender-separated latrines, as will be discussed further in Chapter 7.

The highest proportion of OOSC are seen in the North West and North Central regions in both the primary and secondary age groups. This parallels with what was seen regarding enrolment, with the northern areas tending to be the most disadvantaged in terms of access. These two regions also have lower proportions of OOSC who have dropped out of school in relation to those who have never attended, indicating that learners in these areas are more likely to never access education than to drop out (Figure 3.12).

Table 3.12 OOSC population by region, 2019

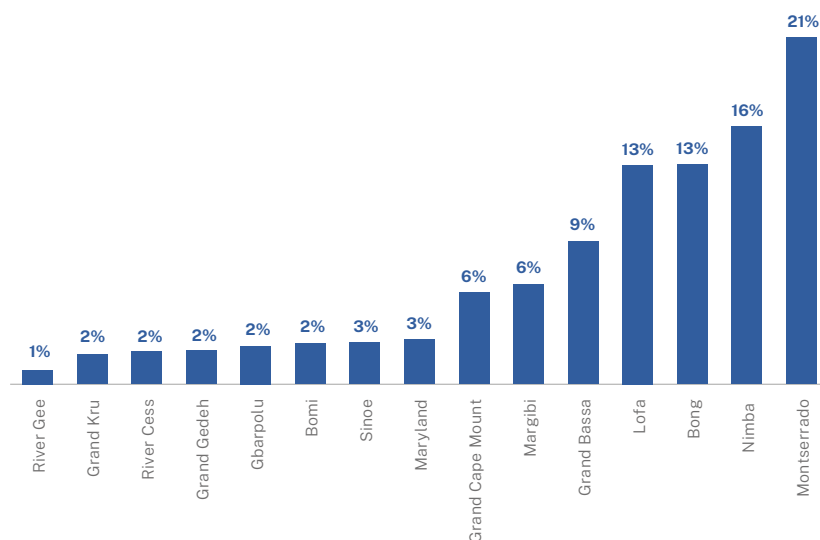
	Aged 6–11			Aged 12–17		
	Out of school	Never attended	Left school	Out of school	Never attended	Left school
North West	22%	21%	1%	21%	13%	7%
South Central	15%	14%	1%	14%	9%	5%
Southeastern A	20%	18%	2%	16%	9%	8%
Southeastern B	17%	16%	1%	14%	8%	6%
North Central	24%	23%	1%	19%	12%	7%

Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

One in five OOSC in Liberia lives in Montserrado county. The South Central region, where Montserrado lies, has one of the lowest proportions of OOSC as a percentage of their total population. However, it must be considered that it is the most populous county. As such, when

examining composition on a national level, the highest concentration of OOSC are seen to live there. Furthermore, given the urban nature of this county, it again highlights the universality of the issue of OOSC in Liberia, with this trend not just being seen in rural areas.

Figure 3.33 Distribution of OOSC aged 6–17 by county



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

3.4.2 Educational attainment for OOSC

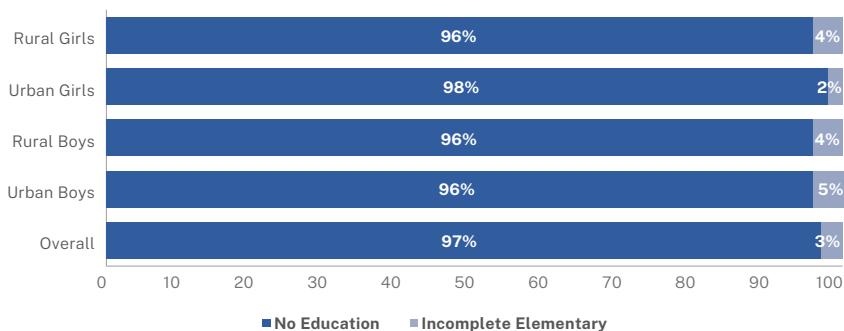
Almost all OOSC of primary age have never attended formal education. *Figure 3.34* examines educational attainment for OOSC according to the highest level of education they accessed, whether this be complete or incomplete, by the intersection of gender and locality. Across the 6–11 age group, there are a few differences between population groups, with 97 per cent of OOSC in this age group having never attended any form of education. This similarity suggests that while the overall proportion of OOSC are affected by locality and gender as discussed above, the characteristics of these groups themselves are quite similar to the 6–11 age group in terms of previous access to education.

In progressing to the 12–14 age group, urban girls are significantly more likely to have accessed some form of education than their rural and male counterparts. This reflects what *Figure 3.35* shows, namely that both urban and female populations have a higher proportion of OOSC who have dropped out as opposed to

never having received education. In rural localities, the gap between genders is seen to be narrow; however, rural out-of-school boys are still more likely to have never attended school at 79 per cent than their female counterparts at 73 per cent. Overall, the majority of OOSC in this age group have still not received any form of education, with a further 31 per cent having an incomplete primary education.

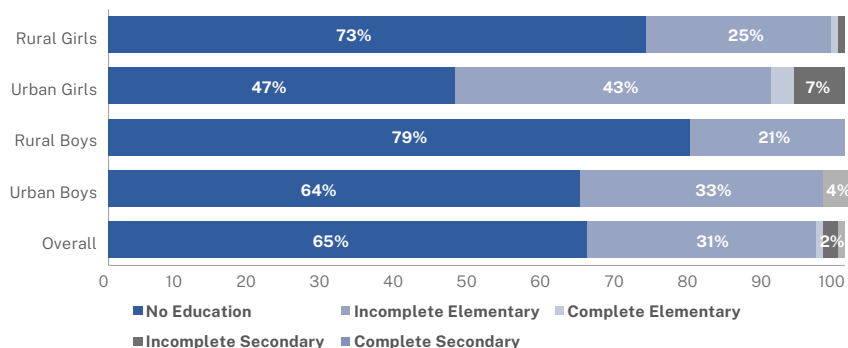
In the 15–17 age group, male OOSC populations continue to have greater proportions who have never attended school than their female counterparts, with the difference almost parallel between rural and urban localities. Female urban OOSC populations are more likely to have attended secondary education, at 22 per cent compared with urban males at 5 per cent. However, female urban OOSC are less likely to have completed secondary education at 4 per cent versus males at 11 per cent (*Figure 3.36*). As such, trends are consistent across age groups with male OOSC being less likely to have attended some form of education across

Figure 3.34 Education attainment for school dropouts aged 6–11, 2019



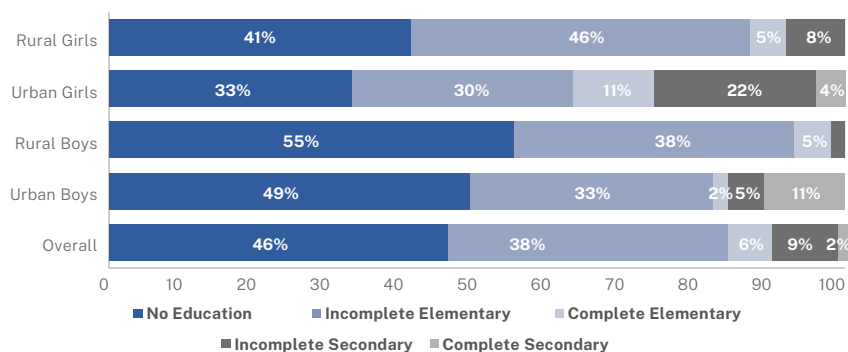
Source: LDHS 2019/2020 (LISGIS et al., 2021).

Figure 3.35 Education attainment for school dropouts aged 12–14, 2019



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021)

Figure 3.36 Education attainment for school dropouts aged 15–17, 2019



Source: Authors' calculations based on LDHS data, 2019/2020 (LISGIS et al., 2021).

all groupings than their female counterparts. This difference is more pronounced in urban localities.

OOSC are the most prevalent in the young and older age groups in Liberia, which is reflective of late school entry and dropout. Locality is seen to be a major driver of out-of-school status. This suggests that there are greater barriers to accessing education in rural areas. Barriers have previously been linked to both distance to schools and a greater demand for children to support work in the household. Girls are

more likely to be OOSC in the 12–17 age group, although they are also more likely to have attended some form of education than their male counterparts. This suggests that girls are more at risk of dropping out and thereby face issues of retention, which have previously been linked to girls becoming pregnant while enrolled, while males are more disadvantaged in terms of access. Wealth is seen to be a strong determinant of enrolment, suggesting the continued existence of financial barriers to enrolment despite fee-free access in primary and junior secondary.

3.5 Chapter summary

This chapter presented the mixed trends regarding educational access in Liberia, both in 2020 and over time. It demonstrated a decrease in enrolment and enrolment ratios over time, leaving us to question both data reliability and the potential causes for this contraction. Education is at risk of becoming more privatized, with private and faith-based schools expanding and a higher proportion of learners being enrolled in these institutions. This jeopardizes the progress that Liberia has made towards providing fee-free education under the ERA. It is arguably already present in the disparities observed between the wealthiest and poorest populations, which are starker than those according to gender or locality.

Overaged enrolment persists as a major challenge in Liberia, which is prevalent across all subsectors, especially in early childhood. Despite this prevalence, alternative learning options remain limited and the proportion of learners enrolled remains low. Overaged status is seen across all sociodemographic groups,

demonstrating the universality of this issue. However, it is more prominent in rural areas and among poorer populations, demonstrating barriers to age-appropriate enrolment relate both to locality and socioeconomic status. Almost all children with disabilities are seen to be out of school in Liberia, and barriers related to acceptance and stigma persist even once enrolment is achieved.

While repetition has dropped since 2015, it could still be reduced further at primary level. What emerges as the major issue in Liberia is intra-cycle dropout, with access between the first and final grades of primary decreasing significantly. Policy therefore needs to target the underlying causes of dropout in order to keep learners in school for longer. This is reflected in the high proportion of OOSC also being observed, with these being more prevalent in rural areas and among lower socioeconomic groups, which again suggests the existence of barriers such as finances, distance to school, and valuation of education.

Chapter 4

Education expenditure

This chapter presents findings of the analysis of expenditure on education in Liberia, focusing on two key streams of expenditure sources, including public and private spending, with the latter focusing on direct spending by households to education institutions. The results presented are collated from annual budget execution reports compiled and published by the Ministry of Finance and Development Planning (MFDP), payroll data from the MoE, and the 2016/2017 HIES, which although was conducted some years back, has been instrumental in providing insights to the level of resources households commit to education in support of the delivery of education.

4.1 Public expenditure on education

Public budgets in Liberia are executed by authorized ministries, departments, and agencies in line with the Public Finance Management Act, 2009 (amended in 2019). In the case of the education sector, the public budget is prepared and executed by the MoE and its associated agencies. Given the decentralized governance implemented in Liberia, some budgets associated with education are executed at regional, county or district level, even though overall accountability rests with the central ministry.

4.1.1 Priority of public expenditure on education: Public expenditure on education remains low despite sustained growth

The fiscal space in Liberia is small and has suffered multiple shocks in the recent past, limiting the amount of expenditure that the country can commit to the education sector. The overall expenditure of the Liberian Government is reported²⁶ to have reached US\$540.5 million in the 2018/2019 fiscal year²⁷ with unaudited expenditure and commitments in 2019/2020 and 2020/2021 showing that the total public expenditure increased to US\$570.4 million in 2020/2021 (Table 4.1). The public expenditure is characterized by growth in the initial years of the eight-year period selected for review, followed by a sharp decline between

2015/2016 and 2016/2017. Overall, government expenditure increased by 33 per cent between 2013 and 2020, including a 26 per cent growth observed between 2013 and 2018. In education, the public supported the sector with US\$74.4 million in 2018/2019 with projections indicating that by the end of the 2020/2021 fiscal year, the sector's expenditure would grow to US\$79.7 million. This translates to an increase of 8 per cent over the eight-year period selected for review, which is an annual average growth of 2 per cent. Notably, education expenditure grew four times slower than the expenditure by the entire government. As a share of the total

Table 4.1 Evolution of public expenditure on education in Liberia

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20*	2020/21**
Total govt spending	428,843	619,129	619,057	528,332	535,388	540,451	513,106	570,409
Education spending	68,833	68,251	68,246	76,340	81,848	74,404	70,969	79,717
Education as percentage of govt spending	15.9%	11.0%	11.0%	14.4%	14.8%	13.5%	13.8%	13.8%
Education as percentage of GDP	2.3%	2.2%	2.2%	2.3%	2.5%	2.3%	2.3%	2.6%

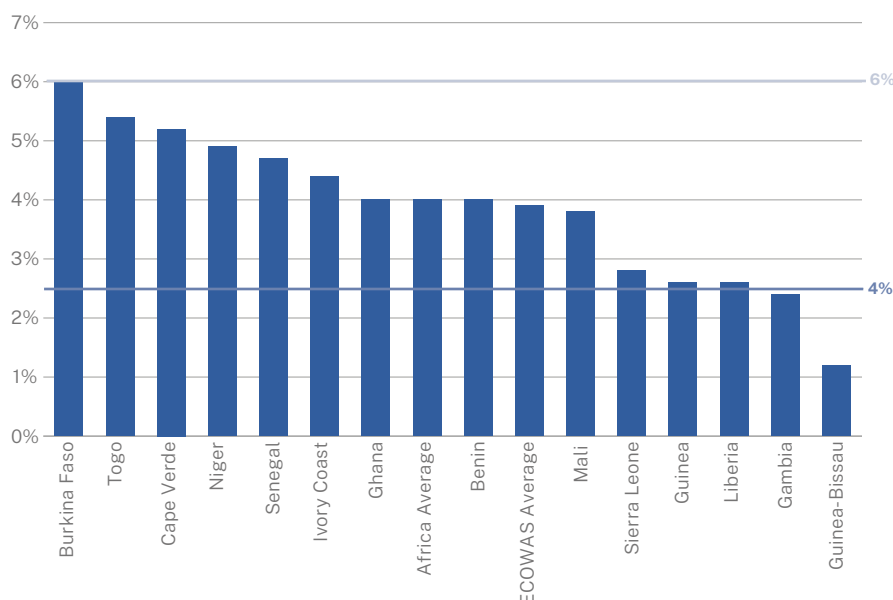
Source: National Budget (MFDP, 2013–2022).

Note: * = Estimated expenditure; ** = Budget. Expenditure reported in '000 US\$.

²⁶ Consolidated reports from the Accountant General.

²⁷ The focus on 2018/2019 is motivated by the fact that it is the latest audited actual expenditure available and thus gives greater understanding of government's commitment.

Figure 4.1 Expenditure on education as a percentage of GDP across ECOWAS countries



Source: IIEP-UNESCO (c2017) internal database on comparative indicators on education.

government spending, education sector spending has been stable around 14 per cent, going back to 2016/2017, while relative to the GDP, education spending has been oscillating around 2.2 per cent.

The low commitment and slow growth in education expenditure has implications regarding whether the country can deliver its education promises to its citizens as adopted in the 2030 Education Agenda, which calls on countries to commit at least 20 per cent of government expenditure or 4–6 per cent of GDP to education (UNESCO, 2015). To spend 2.3 per cent of its GDP (2018/2019 expenditure), the country would need to double its expen-

diture on education to get to the recommended expenditure range. Given the observed evolution, namely 8 per cent growth over an eight-year period, meeting this financial requirement may be a tall order for the government. Notably, this constraint is not limited to Liberia alone. In the region, commitment to education is mixed, with spending ranging from a low of 1.2 per cent in Guinea-Bissau to a high of 6 per cent in Burkina Faso (Figure 4.1). Notably, none of the regional peers exceeds the recommended expenditure range (4–6 per cent of the GDP); six countries spend within the recommended range;²⁸ while seven, including Liberia, are yet to reach this range.

²⁸ Spending on education by government is well within the recommended range in Burkina Faso, Togo, Cabo Verde, Niger, Senegal, and Côte d'Ivoire.

These spending patterns offer insight to the presence of past conflicts that affected countries have been embroiled in, which continue to hold back their socioeconomic potential and, in turn, limits their public commitment to education. For instance, the expenditure in Gambia,

Guinea, and Mali, all which have experienced notable disruption of civil life, is low and some of the causal effects may be traced back to their social issues. These socioeconomic issues dent the countries' economies and limit the level of resources available to commit to education.

4.1.2 Predictability of public budget: The execution rates of education budgets are nearly perfect

Education expenditure in Liberia is strongly predictable with only occasional fluctuations. The latest audited public spending on education is reported to have been US\$74.4 million, against an approved budget of US\$85.4 million, which translates to an execution rate of 87 per cent. Notably, this was one of the lowest execution rates for the sector in the eight-year period selected for review. Execution of education budgets has generally been high, averaging 95 per cent between 2013 and 2020, including 93 per cent between 2013 and 2018 (Table 4.2).

The lowest budget execution can be observed in 2015/2016, which may be

attributed to the major sanitary disruption experienced in Liberia around that time. Together with Guinea and Sierra Leone, Liberia experienced the infamous Ebola virus disease, which slowed down operations in and outside the government, including denting the respective economies (Qureshi, 2016; World Bank, 2014), hence the low execution rate during that period. Apart from this isolated case, budgets in education demonstrate a good environment for implementing sector policies and plans, and set a good precedent for achieving SDGs – granted that this predictability can be extended beyond salaries.

Table 4.2 Predictability of public budgets on education

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20*	2020/21**
Approved budgets	73,080	65,617	83,832	86,166	81,848	85,363	71,037	79,419
Actual expenditure	68,833	68,251	68,246	76,340	81,848	74,404	70,969	79,717
Budget credibility	94.2%	104.0%	81.4%	88.6%	100.0%	87.2%	99.9%	100.4%

Source: National Budget (MFDP, 2013–2022).

Note: * = Estimated expenditure; ** = Budget. Expenditure reported in '000 US\$.

Table 4.3 Public expenditure on education by type of spending

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20*	2020/21**
Recurrent	68,136	68,251	68,246	76,340	79,248	72,833	70,969	78,717
Development	697	–	–	–	2,600	1,571	–	1,000
Total	68,833	68,251	68,246	76,340	81,848	74,404	70,969	79,717
Percentage development	1.0%	0.0%	0.0%	0.0%	3.2%	2.1%	0.0%	1.3%

Source: National Budget (MFDP, 2013–2022).

Note: * = Estimated expenditure; ** = Budget. Expenditure reported in '000 US\$.

4.1.3 Public expenditure on education, by type: No spending on development despite the huge rebuilding work

Although the country remains in a reconstruction mode, capital spending does not align with this national identity. In general, there is no public expenditure on development, namely expanding facilities in existing institutions, an observation which certainly invites the question regarding the overall commitment of the government to its reconstruction agenda. In the eight-year series of public expenditure, spending on development is seen in 2013, 2017, 2018, and 2020 only. But even in these years, the share of capital spending relative to the entire expenditure on education remains low, with 3 per

cent (the share in 2017) being the highest reported during this period. Related to this is that even external support channelled through the integrated financial management information system is voted to recurrent spending. Available expenditure reports from development partners do not entirely confirm this, but since the reports do not provide details on what the support is or should be channelled to, the analysis is limited to the use of government systems for information. The expenditure reports from the MFDP show that no expenditure is geared towards development (Table 4.3).

4.1.4 Economic classification of public expenditure on education: Nearly two-thirds of recurrent spending goes to salaries

The structure of recurrent spending raises concerns on whether there is enough room to influence quality of education in the country. In 2018/2019, the government spent nearly US\$47 million on salaries of the US\$72.8 million reported to have been spent on recurrent items, with salaries translating to almost two-thirds of the recurrent spending. Moreover, of the US\$79 projected to have been spent on recurrent items in 2021, US\$50 million was spent on salaries, accounting for

64 per cent of the recurrent spending (Table 4.4). Although this shows a decline from the share observed in 2020, the spending on salaries clearly takes a large chunk of recurrent spending on education. Related to this is the growth of the wage bill in the education sector and we see that expenditure on the education wage bill as a percentage of overall government wage bill has consistently decreased over the years, an indication of faster growth in sectors complementary to education.

Table 4.4 Salary and non-salary recurrent expenditure on education

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20*	2020/21**
Salaries	38,730	47,268	47,268	46,457	51,032	46,825	51,727	50,007
Non-salary	29,407	20,983	20,978	29,883	28,216	26,008	19,242	28,711
Total	68,136	68,251	68,246	76,340	79,248	72,833	70,969	78,717
Percentage salaries	56.8%	69.3%	69.3%	60.9%	64.4%	64.3%	72.9%	63.5%
Education salaries as percentage of govt wage bill	23.2%	19.9%	19.8%	17.3%	16.6%	14.8%	17.4%	17.1%

Source: National Budget (MFDP, 2013–2022).

Note: * = Estimated expenditure; ** = Budget. Expenditure reported in '000 US\$.

Table 4.5 Details of non-salary expenditure on education

	2013/14	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20*	2020/21**
Compensation of employees	38,730	47,268	47,268	46,457	51,032	46,825	51,727	50,007
Use of goods and services	5,847	4,320	4,315	9,904	9,264	8,181	1,046	9,343
Grants and subsidies	23,406	16,191	16,173	19,021	18,856	17,827	18,197	19,367
Other recurrent	154	472	490	957	96	0	0	0
Total	68,136	68,251	68,246	76,340	79,248	72,833	70,969	78,717

Source: National Budget (MFDP, 2013–2022).

Note: * = Estimated; ** = Budget. Expenditure in '000 US\$.

Since salaries take a large chunk of the recurrent expenditure in education, there is less room for implementing other services, which are as important as human resources in the sector towards human capital development. For instance, in 2019, just over 25 per cent of the recurrent resources were available for spending in non-salary items (Table 4.5). This calls to question the size and structure of the expenditure in the sector. With this limitation, the education system can have only limited results insofar as quality education is concerned. Non-salary recurrent expenditure is focused on procuring goods

and services, and a large share on grants and subsidies. It is important to note that grants and subsidies are mostly transfers to autonomous institutions and tertiary institutions meeting this requirement and, as such, the associated budgets are decentralized for execution. Since the budget has no details about what institutions use the subsidies for, the analysis has not dwelt on the granular details of grants and subsidies. However, in most countries, grants and subsidies are used as payment for teaching and non-teaching staff, especially in tertiary education and school improvement in basic and secondary education.

Table 4.6 Composition of non-salary actual expenditure, 2018/19

	In volume	In percentage
Consultancies and training	545	2.1
Learning materials and supplies	1,077	4.1
Maintenance of equipment	1,074	4.1
Scholarships	1,673	6.4
Operational spending	3,811	14.7
Grants and transfers	17,827	68.5
Total non-salary recurrent expenditure	26,008	100.0

Source: National Budget (MFDP, 2019/2020).

Note: Expenditure reported in '000 US\$.

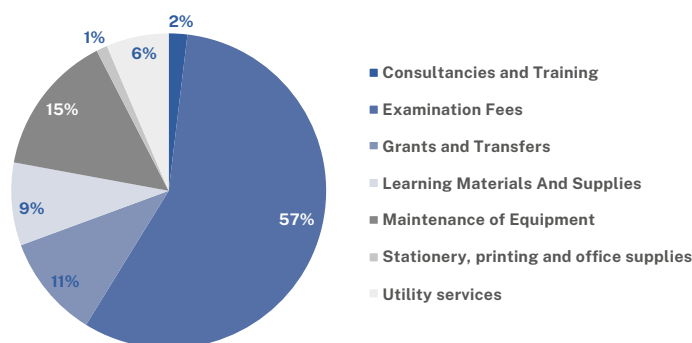
In the absence of clear guidance on how the resources are to be used, there is risk of misuse of resources, which as we have seen, are already too scarce for the country. According to Pritchett (2015), accountability is enhanced where the four key pillars of decentralization, namely delegation, funding, information and motivation, act coherently together. In order for institutions receiving funding from central government to be in line, the delegated function of education and training charged to tertiary institutions, and which is already followed by funding, needs clear information on expectation from the funding. The sector will need to consider developing a policy guideline on the subsidies, defining the use and accountability mechanisms, and most importantly defining how institutions qualify to receive public resources.

Besides grants and transfers, goods and services, which support the operations of the sector as well as the acquisition of materials for learning, are projected to spend more than US\$9 million in 2021, accounting for 12 per cent of recurrent spending, with an average of 9 per cent in the reviewed period. Of the US\$26 million spent in 2019, nearly US\$18 million

went to grants and transfers, of which US\$17 million went to TVET and universities. Altogether, grants and transfers accounted for close to 70 per cent of the recurrent non-salary expenditure in the sector. Learning materials, which ought to complement salaries in influencing instruction and learning outcomes – especially in basic education – accounted for only 4 per cent in 2018/2019. Scholarships, which are common in tertiary education alone, consumed US\$1.7 million – more than double the amount spent on learning materials and supplies, raising further questions regarding the structure of spending of scarce resources (Table 4.6).

Beyond salaries, spending on administration of examinations dominates the balance in basic and secondary education. The meagre resources left for other subsectors after transferring grants to universities are dominated by facilitating national and regional examinations. The audited expenditure shows that in 2018/2019, more than US\$2 million was spent on examinations for primary, junior secondary and senior secondary level, accounting for nearly 60 per cent of the recurrent non-salary expenditure in those levels. After paying examination

Figure 4.2 Non-salary spending in basic and secondary education, 2018/2019



Source: Authors' computations, National Budget (MFDP, 2019/2020).

fees, there are only little input from the government in support of schooling and learning. Subsidies in the three levels of basic education (primary, junior and senior secondary, paid as grants and transfers) accounted for only a tenth of non-salary expenditure. With almost no capital expenditure, subsidies to schools would be useful in undertaking rehabilitation works in schools or carrying out light expansion.

However, the expenditure levels show that this may not be happening. Moreover, learning materials and subsidies account for 20 per cent of non-salary recurrent expenditure, while maintenance of equipment takes up 15 per cent of non-salary recurrent expenditure. However, this must be read in the context of the small share of expenditure available for maintenance (Figure 4.2).

4.1.5 Public recurrent expenditure by level of education: Higher education leading the pack ahead of other subsectors

Although education has decentralized functions, execution of budgets remains highly centralized. Accordingly, the administration vote is responsible for executing a significant proportion of the budget. It is further important to note that although some expenditure votes are explicitly associated with various levels of education, some are cross-cutting in terms of the levels of education they affect. For instance, salaries, which take up two-thirds of the education recurrent expenditure (literally the entire sector's expenditure since there is no public spending on development), are executed under the administration vote. The actual

expenditure in 2018/2019 was reconstructed into the categories highlighted in Table 4.7, thanks to the payroll data, which has the level of education teachers are deployed to teach – at least for the teaching staff paid by the central level. Even non-teaching, non-administrative staff are attached to schools, whose levels are clearly indicated. Reconstructing salaries into levels was therefore straightforward. Notably, expenditure on higher education is high, and possibly higher than all other subsectors if the salaries were to be decomposed out of general administration. The government's high focus on higher education is aptly reflected

Table 4.7 Public recurrent expenditure on education by function/level

Level of education	Salaries	Goods and services	Grants and subsidies	Grand total
General administration	30,796	979	9	31,784
Basic and secondary education	3,906	665	293	4,864
Primary education	0	321	0	321
Secondary education	800	2,236	88	3,125
Teacher education	1,488	337	0	1,824
TVET	5,094	1,246	661	7,002
Higher education	4,741	2,396	16,775	23,913
Grand total	46,825	8,181	17,827	72,833

Source: National Budget (MFDP, 2019/2020).

Note: * = Estimated expenditure; ** = Budget. Expenditure in '000 US\$.

Table 4.8 Public recurrent expenditure on education by function/level

Level of education	Goods and services	Grants and subsidies	Grand total	Percentage goods and services
General administration	979	9	988	99.1%
Basic and secondary education	665	293	958	69.4%
Primary education	321	–	321	100.0%
Secondary education	2,236	88	2,325	96.2%
Teacher education	337	–	337	100.0%
TVET	1,246	661	1,908	65.3%
Higher education	2,396	16,775	19,171	12.5%
Grand total	8,181	17,827	26,008	31.5%

Source: National Budget (MFDP, 2019/2020).

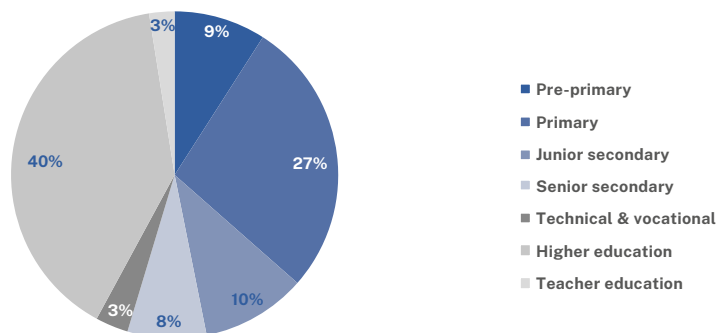
Note: * = Estimated expenditure; ** = Budget; Expenditure reported in '000 US\$.

in the spending by households in later sections – it is counter-intuitive to see lower spending on higher education by households. Although public spending in higher education leads other subsectors – a strong commitment from the public – this commitment has stopped households from spending too much on higher education. The loss of revenue from households is causing strain in public universities, if revelations by the University of Liberia are anything to go by.

The focus of non-salary recurrent expenditure on higher education leaves little space for other subsectors. Significant

expenditure is executed through the Department of Administration to cater for salaries of teachers and non-teaching staff in schools, decentralized offices, and the central office in Monrovia. A large part of the balance after discounting salaries is spent on higher education grants. These grants cover salaries and personal emoluments for teaching and non-teaching staff in tertiary institutions. Seventy-three per cent of non-salary expenses are committed to higher education, leaving only 26 per cent (of 36 per cent considering that 64 per cent already went to known salaries) for other subsectors (Table 4.8).

Figure 4.3 Public recurrent expenditure by level of education



Source: Authors' computations, National Budget (MFDP, 2019/2020).

Although higher education leads overall spending in the sector, there are some positives in other subsectors based on a regional comparison. *Figure 4.3* illustrates the share of recurrent spending by subsector during the 2018/2019 fiscal year. Like access in ECE, which is seen to be relatively higher than in peer countries, the expenditure on ECE is equally higher (relatively). The high access and participation of children in ECE are seen in the modest spending (in share). In 2018/2019, recurrent spending on ECE accounted for 8 per cent of the total sector spending. This is in sharp contrast with the share of spending in most low-income countries on ECE – some of which commit under a percentage of recurrent education expenditure on pre-primary education. Primary education accounted for 28 per cent, while secondary (junior and senior

secondary schools combined) accounted for nearly 20 per cent.

Teacher education registered the smallest share of spending in the sector, accounting for 2.5 per cent. This is concern regarding the capacity to train teachers needed due to the expanding basic and secondary education and, at the same time, to build capacity of unqualified teachers in service. Spending on TVET was almost similar to that of junior secondary school, accounting for a tenth of the recurrent spending in the sector. Higher education, which took up almost all the grants and transfers in the sector, accounted for one-third of the total expenditure. Altogether, spending on post-secondary education accounted for 45 per cent of the country's expenditure, while basic and secondary education accounted for the complementary 55 per cent of recurrent spending.

4.1.6 Average public expenditure on education per learner

The US\$73 million spent on recurrent education items in 2018/2019 was shared among 610,700 learners and trainees in public ECE, primary, junior secondary,

senior secondary, technical and vocational institutes, universities, and teacher training institutions (*Table 4.9*).

Table 4.9 Salary and non-salary expenditure by level of education, 2018/2019

Level of education	Enrolment in public institutions	Teachers/lecturers' salaries	Administrators' salaries	Goods and services	Grants and subsidies	Total recurrent expenditure ('000 US\$)	Avg. expenditure	Multiple of primary unit cost	Multiple PCGDP
Pre-primary	246,544	4,904	1,619	95	17	6,636	27	0.4	4.1%
Primary	278,093	16,574	1,826	1,400	198	19,999	72	1.0	11.0%
Junior secondary	28,817	4,267	1,648	1,540	99	7,553	262	3.6	40.2%
Senior secondary	26,066	3,195	1,264	1,155	74	5,687	218	3.0	33.5%
Technical and vocational	5,883	5,094	39	1,249	662	7,043	1,197	16.6	183.6%
Higher education	24,301	4,741	160	2,406	16,777	24,083	991	13.8	152.0%
Teacher education	1,000	1,488	7	337	0	1,831	1,831	25.5	280.8%

Source: National Budget (MFDP, 2019/2020).

Note: * = Estimated expenditure; ** = Budget; Expenditure reported in '000 US\$.

Table 4.10 Decomposition of the average spending per learner, 2018/19

	Teacher salaries	Admin salaries	Goods and services	Grants and subsidies	Average
In US\$					
Pre-primary	19.9	6.6	0.4	0.1	26.9
Primary	59.6	6.6	5.0	0.7	71.9
Junior secondary	148.1	57.2	53.4	3.4	262.1
Senior secondary	122.6	48.5	44.3	2.8	218.2
Technical and vocational	866.0	6.6	212.2	112.5	1,197.2
Higher education	195.1	6.6	99.0	690.4	991.0
Teacher education	1,487.6	6.6	337.2	0.1	1,831.5
As percentage					
Pre-primary	73.9	24.4	1.4	0.3	100.0
Primary	82.9	9.1	7.0	1.0	100.0
Junior secondary	56.5	21.8	20.4	1.3	100.0
Senior secondary	56.2	22.2	20.3	1.3	100.0
Technical and vocational	72.3	0.5	17.7	9.4	100.0
Higher education	19.7	0.7	10.0	69.7	100.0
Teacher education	81.2	0.4	18.4	0.0	100.0

Source: Authors' computations, National Budget (MFDP, 2019/2020) and Annual Schools Census (MoE, 2020a).

As seen in *Table 4.10*, the public spent about US\$30 on every learner in public ECE; US\$70 on each learner in primary; US\$260 on each learner in junior secondary; US\$220 on each learner in senior secondary; US\$1,200 on each TVET trainee; US\$1,000 on each university student; and more than US\$1,800 on each teacher trainee. Even though the overall spending on TVET and teacher education is lower than the spending on universities, the average spending is lower for the latter. The higher unit spending in teacher education and TVET relative to university is justified by high enrolment in universities. Meanwhile, the spending on junior secondary learners was almost fourfold

the average spending on primary learners; while the spending on senior secondary learners was triple the average spending on primary; with the highest seen in teacher education where each trainee is estimated to have consumed more than 25 times the amount spent on learners in primary.

Salaries constitute the largest part of the average expenditure on learners regardless of the level of education. The composition of the spending per learner varies across the seven levels of education, but salaries to teachers and administration appear dominant. In ECE, three-quarters of the average spending on learners is due to teacher salaries, and almost the

Table 4.11 Regional comparison on the spending on in primary and secondary

Country	Unit cost as percentage of PCGDP		Relative to Liberia		Relative to average*	
	Primary	Secondary	Primary	Secondary	Primary	Secondary
Benin (2015)	11.0	15.0	1.3	0.7	0.9	0.7
Burkina Faso (2015)	16.0	19.0	1.9	0.9	1.3	0.9
Cabo Verde (2017)	17.1	17.2	2.1	0.8	1.4	0.8
Côte d'Ivoire (2015)	13.4	36.4	1.6	1.8	1.1	1.7
Gambia (2013)	9.5	12.2	1.1	0.6	0.8	0.6
Ghana (2013)	8.7	39.8	1.1	1.9	0.7	1.8
Guinea (2016)	7.0	13.0	0.8	0.6	0.6	0.6
Guinea-Bissau (2013)	4.2	9.2	0.5	0.4	0.3	0.4
Liberia (2021)	8.3	20.7	1.0	1.0	0.7	0.9
Mali (2015)	14.6	27.1	1.8	1.3	1.2	1.2
Niger (2015)	22.1	46.7	2.7	2.3	1.8	2.1
Senegal (2016)	15.7	24.5	1.9	1.2	1.3	1.1
Sierra Leone (2018)	5.6	12.6	0.7	0.6	0.5	0.6
Togo (2017)	15.7	15.3	1.9	0.7	1.3	0.7
ECOWAS average	12.1	22.0	1.5	1.1	1.0	1.0
Africa average	11.9	28.8	1.4	1.4	1.0	1.3

Source: Authors' computations, National Budget (MFDP, 2019/2020), Annual School Census (MoE, 2020a) and IIEPUNESCO (c2017) internal database on comparative indicators on education, which is a living database.

entire cost is salaries when administrator salaries are added. At primary level, more than 80 per cent of the average cost is due to teacher salaries, and more than 90 per cent of the cost is salaries. In ECE, there is almost no spending on goods and services, while they account for 7 per cent of the average spending in primary. This implies limitation to implement activities beyond those directly done by teachers and administrators without movement. For instance, this structure cannot accommodate monitoring and supervision of schools by quality assurance teams who need facilitation to move to schools. Administration is weak in post-secondary education, possibly due to the perceived autonomy of the institutions charged with delivering education at those levels.

Within the ECOWAS, only Guinea-Bissau and Sierra Leone spend comparatively lower than Liberia at the primary education level. *Table 4.11* presents the comparative spending in primary and secondary

levels of education fixed to the per capita gross domestic product (PCGDP).

The US\$54 spend on every learner in primary translates to 8.3 per cent of the PCGDP of Liberia. In secondary, the US\$105 and US\$165 average spend translate to about 21 per cent of the PCGDP. Compared with known spending in the region, the average is 12.1 per cent for the 14 countries and 12.9 per cent for the continent. The average spending in Liberia for primary learners is, therefore, significantly lower than the regional average, with Liberia only being ahead of Guinea-Bissau and Sierra Leone. In secondary, the story is different with Liberia spending more than other countries compared with primary. Although the spending by Liberia is lower than the regional and continental spending relative to PCGDP (22 per cent and 29 per cent, respectively), the country is further up in the ranks (sixth of 14) compared with its position among peers in primary expenditure.

4.1.7 Staff salary in education sector

This subsection analyses salaries by assessing the distribution and equity in its application. This is due to the large share of spending on salaries: 64% of recurrent spending on education goes to salaries, and the average spending per learner shows that salaries contribute the most to average spending at all levels. The results presented here are based on the 2021 staff salaries, which are reconstructed from the August 2021 payroll.²⁹

4.1.7.1 Composition of publicly paid staff in the education sector

Human resources managed from the central office in Monrovia are dominated by males. The central payroll system supports 14,740 staff (12,680 teaching and 2,960 non-teaching staff) with females accounting for a fifth of the teaching staff and close to one-third of the non-teaching staff. Teaching staff cover ECE, primary, junior secondary, senior secondary

²⁹ The payroll was only available for August 2021. The reconstruction assumed that the staff numbers were stable throughout the year and that any attrition was cancelled by replacements. The fact that there have been limited recruitments in the recent past supported this assumption. Annual salaries were estimated by assuming that staff would generally receive the same salary for 12 months.

Table 4.12 Analysis of education sector salaries, 2021

Staff category	Sex of staff	Number	Mean annual salary	Annual wage bill
Teaching staff	Female	2,476	2,064	5,111,617
	Male	10,199	2,229	22,736,984
	Total	12,675	2,197	27,848,601
	Percentage female	19.5%	94.0%	18.4%
Non-teaching staff	Female	595	2,727	1,622,267
	Male	1,473	3,190	4,698,177
	Total	2,068	3,056	6,320,444
	Percentage female	28.8%	89.2%	25.7%
Grand total		14,743	2,318	34,169,045

Source: Estimated from August 2021 payroll of the MoE (2021b).

Table 4.13 Composition of the teaching staff supported by the public payroll, 2021

Staff category	Staff sex	ECE	Primary	Junior secondary	Senior secondary
Principals	Female	88	83	6	5
	Male	402	704	144	58
	Total	490	787	150	63
	Percentage female	18.0	10.5	4.0	7.9
Vice principals	Female	50	76	10	5
	Male	206	590	146	48
	Total	256	666	156	53
	Percentage female	19.5	11.4	6.4	9.4
Teachers	Female	635	1,189	211	100
	Male	1,091	4,641	1,178	697
	Total	1,726	5,830	1,389	797
	Percentage female	36.8	20.4	15.2	12.5
Grand total	Female	773	1,348	227	110
	Male	1,699	5,935	1,468	803
	Total	2,472	7,283	1,695	913
	Percentage female	31.3	18.5	13.4	12.0

Source: Estimated from August 2021 payroll of the MoE (2021b).

and TVET. Altogether, teachers and non-teaching staff in the education sector are projected to have consumed US\$34.2 million in 2021: teaching staff US\$28 million (82 per cent) and the balance by non-teaching staff (in school and outside schools, *Table 4.12*).

4.1.7.2 Composition of the teaching staff paid by the public

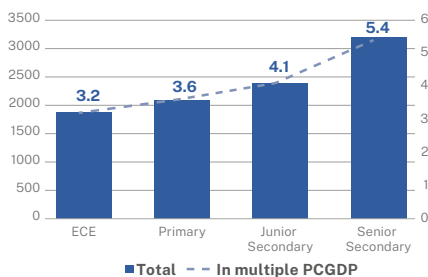
Males dominate public teaching staff, with the share increasing with levels of education. Of the 12,680 members of the teaching staff supported by the central payroll system, 12,360 are associated with ECE, primary, junior secondary, and senior secondary. The payroll supports 2,470 teachers in ECE; 7,280 in primary; 1,700 in junior secondary; and 910 in senior secondary. Of these, 1,490 are principals, 1,130 are vice principals, while 9,740 are teachers-in-chalk. In general, males dominate the teaching staff, with females accounting for more than two-thirds of staff in ECE; nearly one-fifth in primary; and 13 per cent and 12 per cent in junior and senior secondary; respectively. The representation is lower in school leadership. Although female teachers account for 31 per cent of the teaching staff in ECE,

female principals account for only 18 per cent at this level. Similar patterns are observed at primary and secondary levels. In junior secondary, although females account for 13 per cent of the teaching force, female principals account for only 4 per cent of the principals at this level.

4.1.7.3 Teacher wage bill in basic and secondary education: Male dominance and gender pay gap

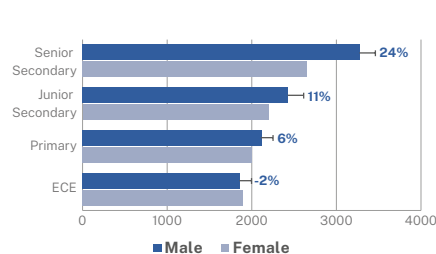
As expected from their dominance in staff composition, male members of the teaching staff take up large shares of the overall wage bill. Male members are projected to have consumed around 81 per cent of the teacher wage bill in 2021, ranging from 80 per cent towards teachers to 87 per cent towards principals and vice principals. In ECE, the marginal better average teacher salary for females means that their wage bill is slightly higher than their composition in the teaching staff at that level. Nonetheless, two-thirds of the wage bill at this level is attributed to male members of the teaching staff. The wage bill attributed to female members is intuitively lower than that attributed to males because of the share of females in the teaching staff. However, it is important

Figure 4.4 Average salary for teacher-in-chalk, in PCGDP



Source: National Budget (MFDP, 2019/2020) and Annual School Census (MoE, 2020a).

Figure 4.5 Average salary for teacher-in-chalk, by sex



Source: National Budget (MFDP, 2019/2020) and Annual School Census (MoE, 2020a).

Table 4.14 Wage bill of the teaching staff supported by the public payroll, 2021

	Female	Male	Total	Percentage to female
ECE				
Principals	183,304	810,561	993,865	18.4%
Vice principals	100,314	398,360	498,674	20.1%
Teachers	1,203,798	2,027,550	3,231,348	37.3%
Primary				
Principals	208,204	1,535,459	1,743,663	11.9%
Vice principals	170,169	1,264,785	1,434,954	11.9%
Teachers	2,376,851	9,818,265	12,195,115	19.5%
Junior sec				
Principals	21,060	370,349	391,409	5.4%
Vice principals	29,160	363,537	392,697	7.4%
Teachers	463,797	2,861,691	3,325,489	13.9%
Senior sec				
Principals	22,500	232,860	255,360	8.8%
Vice principals	16,320	172,260	188,580	8.7%
Teachers	265,221	2,286,785	2,552,006	10.4%
Total				
Principals	435,068	2,949,229	3,384,297	12.9%
Vice principals	315,963	2,198,943	2,514,906	12.6%
Teachers	4,309,667	16,994,291	21,303,958	20.2%
Grand total	5,060,698	22,142,463	27,203,161	18.6%

Source: Estimated from August 2021 payroll of the MoE (2021b).

to note that this is also a function of the pay gap, where female teachers for instance earn 6 per cent less on average than male teachers.

As the average teacher salary increases with rising levels of education, the gender gap also increases. The average annual teacher salary in ECE in 2021 was estimated to be US\$1,870; rising to about US\$2,100 in primary; US\$2,400 in junior secondary; and US\$3,200 in senior secondary. On average, teachers in primary schools earn 12 per cent more than their peers in ECE, and those in junior secondary and senior secondary earn

14 per cent and 53 per cent higher, respectively, than their peers in primary schools. Relative to the PCGDP, the average teacher salary ranges from 3.2 times in ECE to 5.4 times in senior secondary (Figure 4.4). Apart from males dominating payroll, gender-related salary gaps are observed, which increase with rising levels of education. For instance, male teachers in ECE are generally paid 2 per cent less than their female counterparts. In primary, the gap changes direction and male teachers are paid better than their female counterparts by 6 per cent. The gap rises to 11 per cent in junior secondary and 24 per cent in senior secondary.

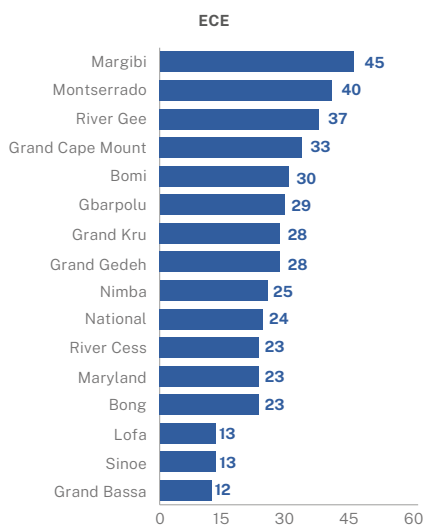
Based on the deployment of teachers and the salaries associated with them, we computed the average input per learner in ECE, primary and secondary, knowing that teachers are posted in those counties to attend to learners. Results show large differences between counties. In ECE, the average public input is US\$24, but it ranges from a low of US\$12 in Grand Bassa to US\$45 in Margibi, which is nearly four times the input in Grand Bassa (see *Figure 4.6*). In primary, similar patterns are observed. Learners in Lofa receive an average input of US\$84, which is almost twice the average for the country and nearly four times the US\$23 associated with learners in Montserrado (see *Figure 4.7*).

The variations are much larger in secondary. For instance, in junior secondary (see *Figure 4.8*), the average

input due to teacher salaries is US\$55, but it ranges from a mere US\$7 in Grand Cape Mount, which is an eighth of the national average, to about US\$380, which is seven times the national average. In senior secondary, learners from River Cess county receive up to US\$1,480 annually as teacher input, which is 17 and 39 times the national and the average input to learners in Montserrado, respectively (*Figure 4.9*). Although Montserrado county has the highest enrolment in the country, they have fewer allocated teaching resources than other counties. This is not to say that counties such as Margibi are resourced any better, but it should be understood that resources do not necessarily follow learners.

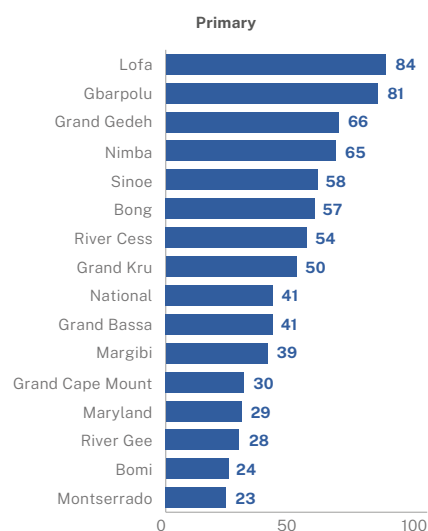
The overall implication is that learners from these different counties do not get the same quality of learning. If a learner

Figure 4.6 Variation in the average spending per learner in ECE, by county



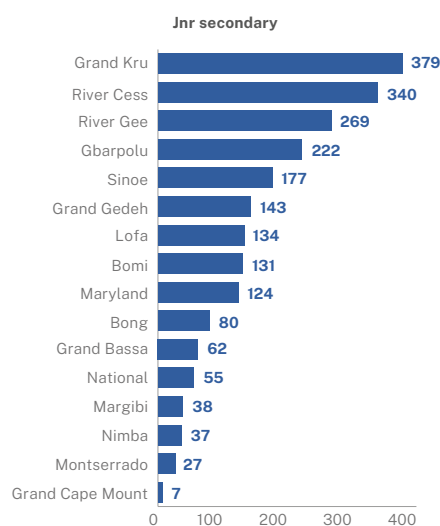
Source: National Budget (MFDP, 2019/2020) and Annual School Census (MoE, 2020a).

Figure 4.7 Variation in the average spending per learner in primary, by county



Source: National Budget (MFDP, 2019/2020) and Annual School Census (MoE, 2020a).

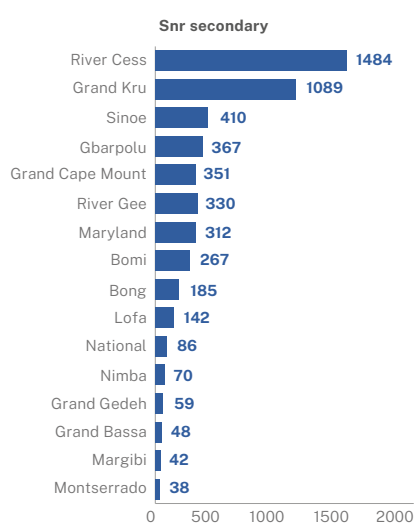
Figure 4.8 Variation in the average spending per learner in junior secondary, by county



Source: National Budget (MFDP, 2019/2020) and Annual School Census (MoE, 2020a).

in River Cess or Grand Kru receives an input more than 30 times that of a learner in Montserrado on the same type of input, they cannot possibly have comparable outputs unless there is a balancing act

Figure 4.9 Variation in the average spending per learner in senior secondary, by county



Source: National Budget (MFDP, 2019/2020) and Annual School Census (MoE, 2020a).

outside the regular system. This is possibly why parents have to put more into education even though there is the promise of fee-free education in some levels.

4.2 Private spending on education

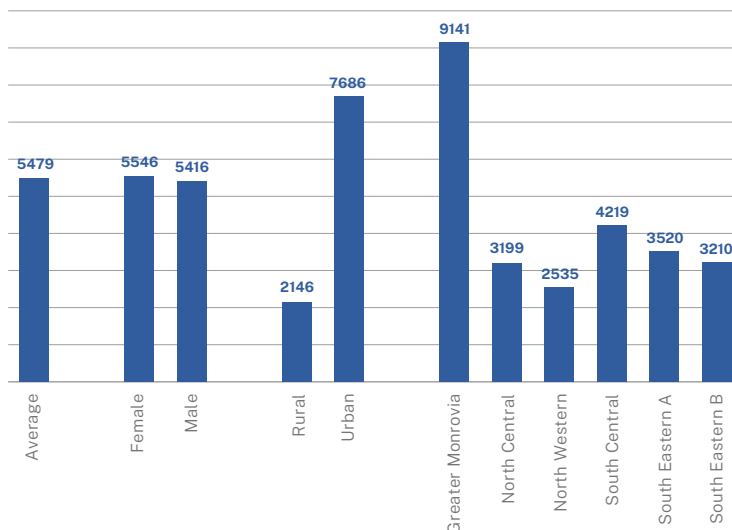
Although the government sets the education policy and, as discussed in the previous section, maintains education as a top priority, households too have a role to play towards achieving the education vision. The government commits itself to subsidize education at most levels, but the operational reality has always kept parents at the forefront to forge partnerships with schools to keep their children learning. In assessing the extent to which the cost-sharing arrangement affects families in Liberia, this section presents findings of the contribution to education by households as estimated from the 2016 HIES. The low public expenditure on education and the large variations observed across counties mean that learning has to be supported from complementary sources if learning is to remain effective. In several countries that have pronounced fee-free education, households have had to chip in to cover the following: tuition and related school fees or levies, uniforms and learning materials, transportation, housing and food, private tuition and additional materials, and extracurricular activities.

4.2.1 Household spending on education: Urban families spend up to three times more on education than rural families

Households generally spend similar amounts on boys as they do on girls' education, but the biggest concern is the gap between urban and rural families. According to the 2016 HIES, households

are estimated to have spent an average of L\$5,500³⁰ on each learner attending school during the 2016/2017 school year (LISGIS, 2017). The results further show that there is no gender differential on

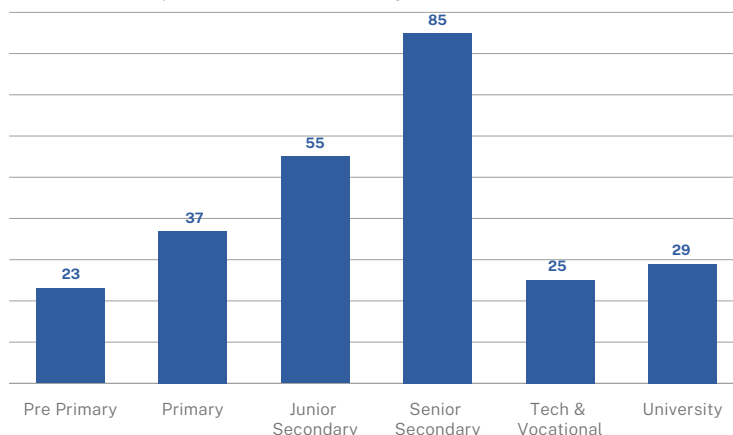
Figure 4.10 Household expenditure on education, by selected groups



Source: HIES 2016 (LISGIS, 2017).

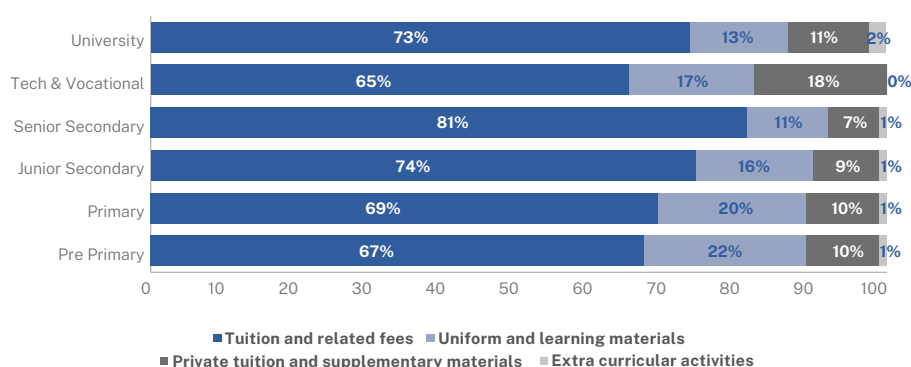
³⁰ This is equivalent to US\$40 at the exchange rate at the time of writing (US\$1 = L\$141.77).

Figure 4.11 Household expenditure on education, by level of education



Source: HIES 2016 (LISGIS, 2017).

Figure 4.12 Details regarding what household expenditure on education is used for



Source: HIES 2016 (LISGIS, 2017).

household spending – spending on girls is only marginally higher (L\$5,500) than the spending on their male counterparts (L\$5,400). In contrast with gender differentials, there is a wider disparity between learners from rural and urban areas, and families from urban areas spend nearly four times (L\$7,700) of the spend by rural fami-

lies (L\$2,150) to support their children's learning. This disparity is extended to the regions where families from the Greater Monrovia region spend nearly four times the amount spent on North Western children, and more than double the amount spent by families in the closest region, which is South Central (see Figure 4.10).

Besides the rural versus urban and regional variations, the results reveal stark disparities in spending by levels of education, with the average expenditure on learners increasing with advancing levels of education. This pattern is, however, broken after senior secondary, with the promise of free tuition in higher education possibly affecting the contribution from families. It is observed that household expenditure on education dramatically falls after senior secondary, explicable by the significant input to universities from the public.

Household spending on education is mostly focused on tuition and management of institutions (*Figure 4.12*). This is understandable considering that public expenditure as seen in *Section 3.1* is more focused on salaries of teachers and administration of basic education examinations. Uniforms and textbooks come a distant second, while only limited spending is seen on extracurricular activities. As is the case with public expenditure, households do not spend on capital or development.

4.3 Sharing the cost of education: Households spend substantial amounts on basic and secondary education

Although the no-fee policy implemented in most low- and middle-income economies enabled children who hitherto had no access to school (Oketch and Rolleston, 2007; Sukutha, 2021), no country on the continent has been able to remove households fully from the cost-sharing arrangement (NBS, 2020; Stats SL, 2019). The level of cost input by households, especially in basic education, remains substantial. The public extend about US\$30 to learners in public ECE; US\$70 to learners in public primary; US\$260 to learners in junior secondary; US\$220 to learners in senior secondary; US\$1,830 to teacher trainees; US\$1,200 to TVET trainees; and US\$1,000 to students in universities.

In comparison, households spend about US\$20 on learners in public ECE; US\$40 on learners in public primary; US\$60 on learners in junior secondary; and US\$90 on learners in senior secondary. This translates to more than 40 per cent of the total input between households and public in ECE and primary, and one-third in secondary.

In tertiary education, the spending by households cannot match the amounts put in by the government. This possibly explains the dilemma of public universities that face lowering average spending due to the rising number of students but not in the context of marginal gains in funding.

Table 4.15 Cost-sharing between public and households

	Public	Households	Total	% paid by households	As % of PCGDP
ECE	27	23	50	45.9	7.6
Primary	72	37	109	33.8	16.7
Junior secondary	262	55	317	17.2	48.6
Senior secondary	218	85	304	28.1	46.5
Technical and vocational	1,197	25	1,223	2.1	187.4
Tertiary education	991	29	1,020	2.8	156.3
Teacher education	1,831	–	1,831	0.0	280.8

Source: Authors' computations based on expenditure reports and HIES 2016 (LISGIS, 2017).

4.4 Chapter summary

Expenditure on education remains low in Liberia, calling to question the feasibility of achieving the Education 2030 Agenda if the trend is sustained in the future. The low spending on education is tied to the overall economic performance and the limited resource base, of which the solution is outside the education sector. Increasing fiscal space for the entire government will be conditional for increasing commitment to education.

One of the progressive aspects established from the analysis of expenditure on education is the high execution rate of approved budgets over the years. Implementation of education policies and plans is enhanced in environments with predictable financial commitments. Notwithstanding this progress, the analysis revealed that large parts of budgets are still executed from the central level – a contrast of the expectation for strong accountability. As the country continues to reconstruct, building capacity for decentralized systems and giving them responsibilities will go a long way to strengthening accountability in the sector while also improving the execution of budgets and policies in the same stride.

Apart from the low spending on education, other concerns include that large parts of the available resources are committed to salaries, leaving only a limited room for expansion, especially for a system that is in a reconstruction phase. Moreover, other sources for financing education, notably households, do not support construction. This means that expansion may be stalled; a situation that would be detrimental to children whose access to school is predicated on expansion. Also, although higher education leads the pack in terms of share of expenditure attributed to it, this

does not count when put in the context of low overall expenditure. More than half of recurrent expenditure attributed to basic and secondary education is proven to be nothing beyond teacher salaries and examinations.

In terms of beneficiaries, the analysis revealed an unbalanced structure in the workforce, with males dominating teaching and non-teaching staff and inherently the wage bill. The dominance is also partly due to the pay gap that exists between males and females; the latter having a 6 per cent and 11 per cent disadvantage in the case of teaching and non-teaching staff, respectively. Attracting and retaining motivated staff will include addressing the pay gap while also paying attention to the claims of late payment of salaries.

There is limited dissemination of financial information outside the publicly executed expenditure, which makes it difficult to comprehend the input to education fully. Off-budget spending by development partners is missing. It is conceivable that partners are supporting expansion, which is missing from public and household expenditure. However, without information sharing, it would be difficult to know what is not reported or shared.

According to Avelar, Terway and Dreux Frotte (2021), Liberia can consider a raft of mechanisms for innovative financing that may increase commitment to education, including impact bonds, income-contingent loans, income-sharing agreements, debt swap, debt buy-down, new funds or organizations, education bonds, remittance and community mobilization, impact investment, and taxation (see *Table 4.16*).

Table 4.16 Innovative mechanisms for financing education

Mechanism	Description
Impact bonds	<p>An impact bond is a results-based financing model in which one or more private investors provide working capital to a service provider to implement an intervention. The repayment of this investment is contingent on achieving previously agreed results.</p> <p>In a development impact bond, a donor agency or a foundation makes the repayments; in a social impact bond, the government is the outcome payer (although some combination of a government with a third party is also possible). Each impact bond has its contractual specificities in terms of incentives offered to implementers and investors and the means and roles in managing the project and assessing its outcomes.</p>
Income-contingent loans	A loan offered by government, who then does the debt collection as a taxation after graduation. The charging ceases once the student has repaid the loan in full. Government is the investor, and government and the student share the risk.
Income-sharing agreements	A private investor pays for post-secondary tuition fees as an equity investment and receives a percentage of the student's future income for some period of time as a repayment for the investment. The private investor and the student share the risk.
Debt swap	A creditor forgives the debt of a borrowing country on the condition that the country invests an agreed amount of local currency, which has been freed up, in the development and education sector.
Debt buy-down	A third party buys down all, or a part of, the interest and/or the principal of a loan between a country and a lending institution, thereby releasing the borrowing country from all or some of its future repayment obligation. This generates fiscal room for manoeuvre, which the country can use to fund development or education.
New fund or organization	<p>In the context of innovative financing, the creation of new funds or organizations aims to raise the profile of a particular issue and to raise additional funds from various public and private sector stakeholders for development/education financing.</p> <p>While numerous formats are possible, they may also play the role of distributing grants, assisting in negotiations, developing innovative financing capacity and serving as a platform to connect different actors and sectors. Examples of such instruments are the GPE Multiplier Fund and the Education Outcomes Fund for Africa and the Middle East.</p>
Education bond	An investment where an investor receives a fixed return on the principal and interest of the underlying security. Any future revenue streams can be the basis for securing future revenue streams. National governments can issue them as domestic bonds or multilateral financial institutions as thematic bonds.
Remittance	A transfer from a migrant, often a foreign worker, to an individual in their home country. The government can amplify remittances for education or create donor incentives to expand the funds families have available for education. Governments can introduce taxes on or fees for remittance transfers to generate revenues for public education.
Impact investment	May take the form of numerous asset classes and may result in many specific outcomes. The point of impact investing is to use money and investment capital from private sources for positive social results.
Taxation	Governments can apply a tax to a specific industry sector or an economic activity, directing the revenue to provide additional funds for education.

Source: Avelar, Terway and Dreux Frotte (2021), *Innovative Finance for Education*.

Chapter 5

Quality of education and management of teaching resources

This chapter interrogates learning outputs and outcomes in basic and senior secondary, using examinations and assessments, and focusing on trends and patterns of the outcomes. As a key element of learning, the chapter reviews the existing curriculum, its response to the needs of Liberians, and its implementation. This especially includes the availability of quality assurance staff to support and monitor schools and the state of their equipment and facilitation to carry out the same. The chapter reviews teachers, highlighting the capacity of teacher training institutions to prepare teachers needed in the context of the expanding education system; existing mechanisms for delivering continuous professional development (CPD); the practice of teacher utilization; and existing incentives to keep teachers' feet on the ground. The chapter further focuses on key facilities available to support learning, including availability of textbooks, classrooms, water, sanitation, and hygiene (WASH) facilities, and other amenities that support learning such as connectivity to electricity and availability of water in schools. This chapter is organized in two key sections. The first section focuses on the curriculum in basic education, its implementation and assessments, which focus on examination and assessment results. The second section focuses on teacher preparation and management.

5.1 Curriculum and assessments

5.1.1 Implementation of the curriculum

The curricula for primary, junior secondary and senior secondary schools cover English, French, general science, mathematics, physical education, religious and moral education, and social studies. The curriculum for senior secondary covers biology, chemistry, physics, economics, English (grammar and literature), French, geography, history, mathematics, and physical education. In all curricula, the sector emphasizes the need to place learners at the centre of curriculum implementation.

A learner-centered approach is emphasized in this curriculum. This is based on the firm belief that learning becomes more permanent, meaningful and exciting when learners themselves take ownership of the learning process. Instructors are therefore urged to contrive those classroom strategies that engage learners actively in the teaching and learning process. (MoE, n.d.)

Placing learners at the centre is paramount to support them to acquire the desired knowledge and skills if they are to realize the desired results. Implementation has to commence with the dissemination of the curricula to schools (IIEP-UNESCO, 2021a). While all the curricula for the respective grades of basic and senior secondary envision a learner-centred approach to learning, the principal element in the curriculum implementation process is lacking. Anecdotes from the MoE indicate that schools mostly do not have curricula, which sets the implementation thereof on a path of failure and ineffective instruction. Without enough curricula, it is difficult for teachers to prepare adequately for teaching. The lack of curricula in schools may be extrapolated to the lack of its

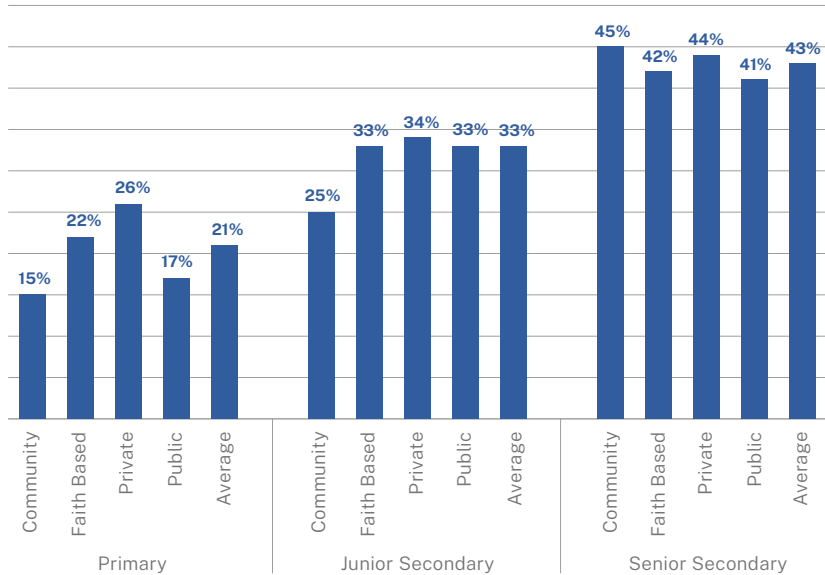
dissemination among teachers, which leaves teachers in an awkward situation when they are expected to cover content they have no access to (Mutegi, 2014). Moreover, there is no recognized ECE curriculum, which means that the impressive access rates discussed in *Chapter 2* regarding ECE may count for naught.

5.1.1.1 Availability of teaching resources

Only a minority of schools have designated spaces where teachers can prepare for lessons. Teacher preparation in terms of scheming and lesson planning is an integral part of effective teaching and instruction (Shen et al., 2007). However in Liberia, the majority of schools have no designated rooms where teachers can prepare. Only one in five primary schools, one in three junior secondary schools, and four in ten senior secondary schools have staffrooms or designated rooms where teachers can plan for lessons and collaborate with other teachers to improve instruction. As illustrated in *Figure 5.1*, the share of schools with designated rooms for teacher preparation ranges from 15 per cent of community primary schools to just more than one-quarter of private schools.

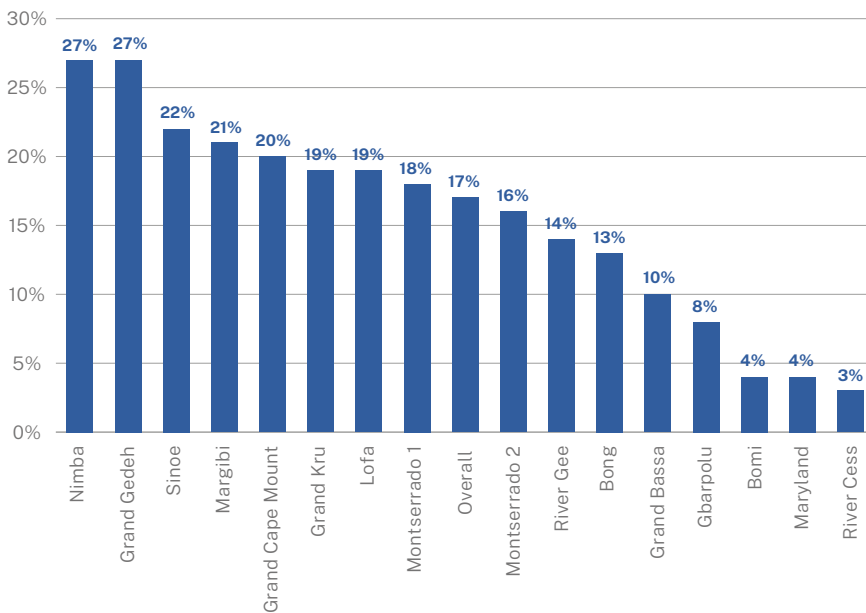
There is a large variation between counties in schools that have designated rooms for teacher preparation, ranging from 3 per cent in River Cess to 27 per cent in Nimba (nine times higher than River Cess). This obviously affects the quality of teacher preparation between counties. Learners in counties with a higher proportion of designated rooms are in better positions than their peers, but with the caveat that even the highest share is only 27 per cent (*Figure 5.2*).

Figure 5.1 Share of schools with staffrooms, 2019/2020



Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

Figure 5.2 Share of primary schools with teacher preparation rooms, 2019/2020



Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

5.1.1.2 Availability of curriculum support materials

Apart from the limited availability of the curriculum, there is a general concern regarding the lack of curriculum support materials in schools. Providing teaching materials to teachers and learners ensures that teachers can spend their time effectively to prepare and plan for classes rather than spending time looking for materials (Anderson, 2019). This multiplies the time that teachers would otherwise spend searching for teaching materials. On the side of learners, availing materials would give them the opportunity to follow instructions effectively during scheduled periods and focus on private learning outside lessons. These facts notwithstanding, administrative data reveal that there are inadequate teaching and learning materials, notably textbooks, with sharing of books among many learners a widespread phenomenon in the country. The 2019/2020 Annual Schools Census reveals that regardless of the school type, the pupil/textbook ratio in primary schools remains high, with the best case observed in public schools where up to six learners share a single language textbook. The largest ratio is observed in community schools, where more than 10 learners share a science book.

The shortage of textbooks is not any better in secondary school, where the junior secondary pupil/textbook ratios average 1:7 for language and mathematics and 1:8 in science, respectively. On the extreme, up to nine learners in faith-based and private schools share one science textbook. In senior secondary school, pupil/textbook ratios average 1:5 for language and science and 1:6 in mathematics, respectively, while on the extreme, more than 10 learners share a science textbook in community and faith-based schools.

Beyond the overall shortage of textbooks at primary and secondary level, the ratios vary significantly across counties. For instance, the pupil/textbook ratios for language range from a low of three learners per language textbook in Lofa to a high of 13 learners per textbook in Montserrado 1. Similar patterns are seen for mathematics (see *Figure 5.3*). Although not illustrated here, similar patterns are observed in public secondary schools, where the textbook shortage is more pronounced in Montserrado than other counties.

Availability of textbooks to learners is at the core of the Education 2030 Agenda, which seeks to ensure access to quality and equitable education for all.

Table 5.1 Pupil/textbook ratios in primary schools, 2019/2020

	Enrolment	Core textbooks			Pupil/textbook ratio		
		Language	Maths	Science	Language	Maths	Science
Community	27,937	3,775	3,084	2,916	1:7	1:9	1:10
Faith-based	107,916	15,076	12,322	11,823	1:7	1:9	1:9
Private	193,612	28,074	22,286	21,573	1:7	1:9	1:9
Public	278,093	49,488	41,783	37,426	1:6	1:7	1:7
Overall	607,558	96,413	79,475	73,738	1:6	1:8	1:8

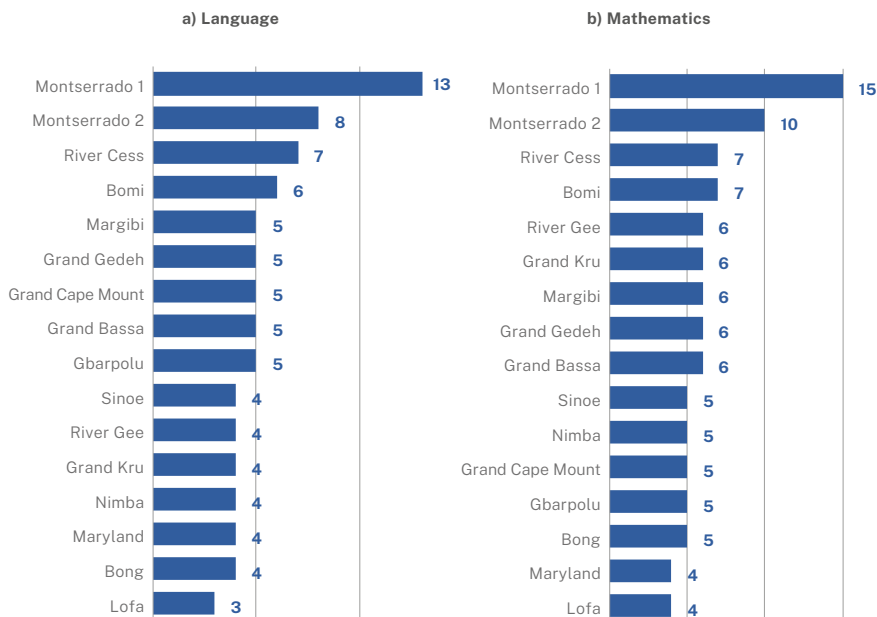
Source: Annual Schools Census 2019/2020 (MoE, 2020a).

Table 5.2 Pupil/textbook ratios in secondary, 2019/2020

	Enrolment	Core textbooks			Pupil/textbook ratio		
		Language	Maths	Science	Language	Maths	Science
Jnr secondary	168,379	25,483	23,066	21,853	1:7	1:7	1:8
Community	5,669	1,052	995	963	1:5	1:6	1:6
Faith-based	40,802	5,274	4,804	4,593	1:8	1:8	1:9
Private	68,743	9,159	8,001	7,893	1:8	1:9	1:9
Public	53,165	9,998	9,266	8,404	1:5	1:6	1:6
Snr secondary	106,194	13,771	12,215	12,758	1:8	1:9	1:8
Community	1,734	179	161	157	1:10	1:11	1:11
Faith-based	30,714	3,367	3,076	2,872	1:9	1:10	1:11
Private	47,680	5,412	4,927	4,810	1:9	1:10	1:10
Public	26,066	4,813	4,051	4,919	1:5	1:6	1:5

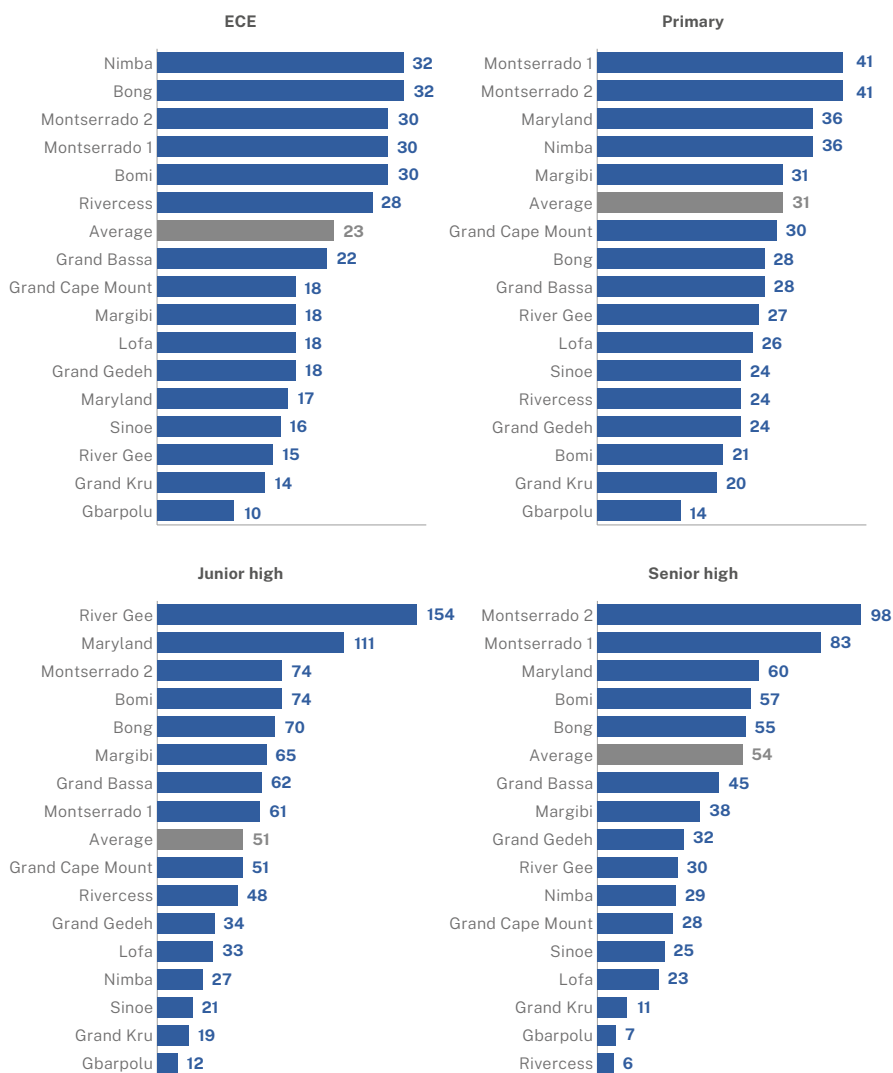
Source: Annual Schools Census 2019/2020 (MoE, 2020a).

Figure 5.3 Pupil/textbook ratio in primary for selected subjects, by county



Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

Figure 5.4 Average class size in basic and senior secondary by county, 2019/2020

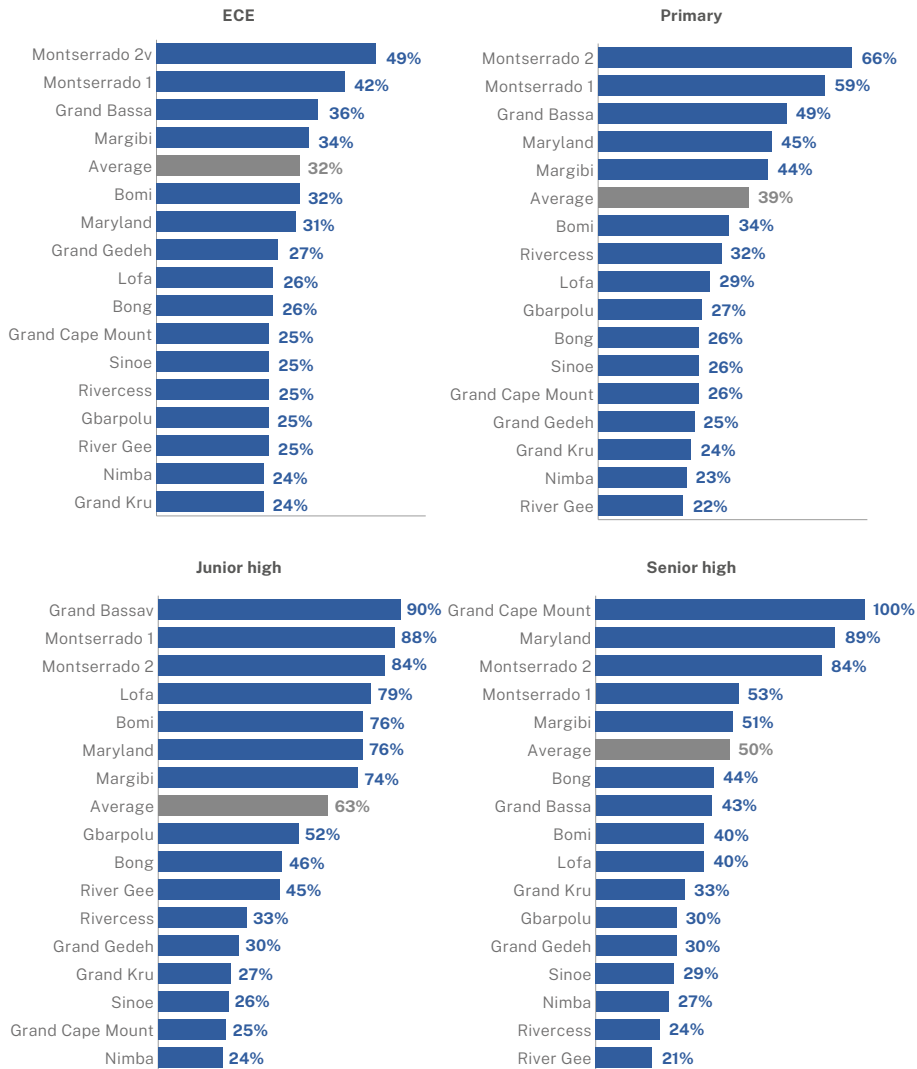


Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

In fulfilling this promise, countries are called to 'ensure that every institution is secure and has water, electricity, sex-segregated toilets that work and are accessible, adequate and safe classrooms, and appropriate learning materials and tech-

nology' (GEMR, 2016a, 2016b). The limitation in the availability of learning materials to support curriculum implementation is a clear indication of the impact of low expenditure on education, especially the implication towards meeting associ-

Figure 5.5 Share of solid classrooms in basic and senior secondary by county, 2019/2020



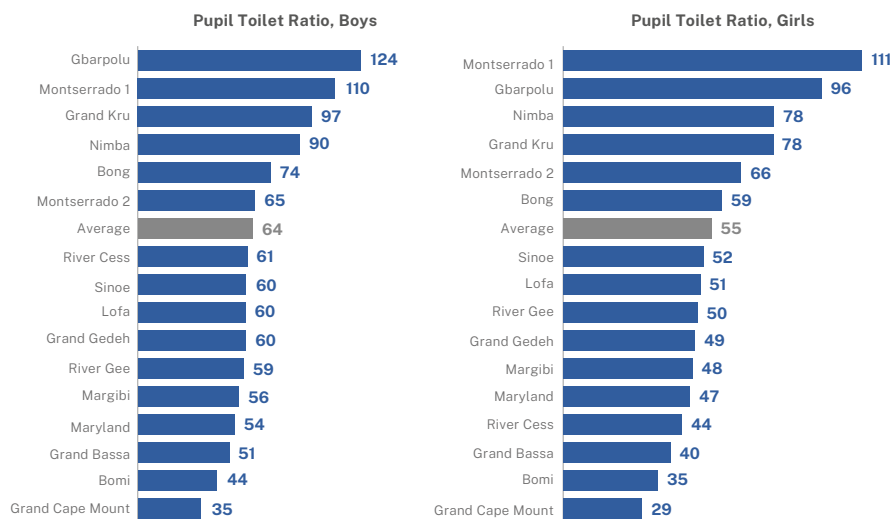
Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

ated SDG 4 targets. Without the critical input of learning materials, the anticipated targets for learning is at risk of not being met, which may spread into a vicious cycle of unsatisfied learners leaving the system earlier than programmed (GEMR, 2014).

5.1.1.3 Availability of other facilities supporting learning

Other critical resources that support the implementation of curricula are fairly adequate in some levels of education and

Figure 5.6 Pupil/toilet ratio in primary schools, 2019/2020



prominently inadequate in some, especially when the focus is shifted to counties. For instance, there seems to be enough classrooms in ECE and primary school, where the average class sizes are 23 and 31, respectively. Even with variation across counties, the class sizes remain modest for these two levels (see *Figure 5.4*). In secondary school, however, the average class sizes are large – a situation that certainly influences the instruction process. The class sizes are complicated for some counties where there are more than 100 learners in a classroom (Maryland and River Gee counties in junior secondary). In Montserrat, the average class size in senior secondary approaches 100.

Apart from the availability of classrooms, the quality thereof affects the quality of instruction. Solid classrooms are expected to provide a better instruction environment than semi-solid and make-shift classrooms. Given that there are no further details regarding the quality of classrooms, solid classrooms were used

as the benchmark to define what constitute quality classrooms, acknowledging that some solid classrooms may need to be upgraded. That said, the 2019/2020 Annual Schools Census (MoE, 2020a) results show that a significant proportion of classrooms are not solid: only one in three classrooms in ECE are solid, four in 10 in primary, two-thirds in junior secondary, and a half in senior secondary (see *Figure 5.5*). Assuming that the availability of classrooms was to be limited to this benchmark, the class sizes presented in *Figure 5.4* would dramatically go up. This demonstrates the huge task the country is facing to address their infrastructure needs and improve the quality of the instruction environment.

Similar to the shortage observed for critical resources that support learning, sanitation facilities, notably toilets, have high ratios, at least in primary schools. Due to data limitations, primary schools were used to highlight this shortage. According to the 2019/2020 Annual Schools Census

(MoE, 2020a), up to 64 boys share a toilet in primary schools, with large variations observed across counties. The pupil/toilet ratio for boys in Gbarpolu is more than 1:120; three times higher than the 1:35 ratio observed in Grand Cape Mount. While the ratios are slightly lower for girls, they remain high (see *Figure 5.6*). These high pupil/toilet ratio certainly carry sanitation risks. The GPE (2018) warns that lack of access to proper sanitation facilities – such as the situation observed in primary schools – poses a huge barrier to education as children frequently miss school due to hygiene-related diseases.

In addition, the science, technology, engineering, and mathematics (STEM) sector experiences specific challenges that impede its development in the country. For instance, the 2019/2020 Annual Schools Census indicates that only 117

junior and/or senior secondary schools had functional science laboratories, which translates to only 5 per cent of the schools having this essential facility (MoE, 2020a). Moreover, only half of these laboratories reported to have consumables, further demonstrating the challenges that STEM faces. Anecdotal accounts indicate that besides the lack of laboratories and consumables, schools lack qualified staff who can help learners with practical lessons. Some studies show that science teachers are equally ill-equipped to deliver science subjects (Hackman, Zhang, and He, 2019). Compounded with this is the acute challenge of the lack of inclusivity in STEM as girls continue to lag behind their male counterparts. This is not a challenge limited to Liberia, but one that runs across the continent, with boys dominating access to and performance in science subjects (Sichangi, 2017).

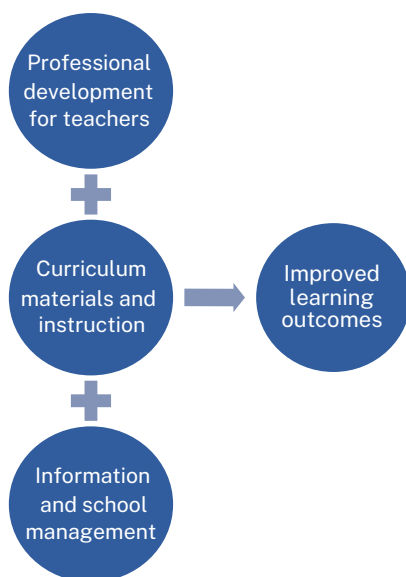
5.1.2 Complementary implementation of the curriculum through partnerships

Recognizing the magnanimous challenge in implementing the curriculum in basic and senior secondary education, the government is encouraging partnerships with non-state actors to enhance learning. The government has entered partnerships and sanctioned trials including the Liberia Education Advancement Program (LEAP) and the Second Chance programme. This subsection highlights the implementation modalities of these partnerships as well as the results that have been reported from the operations since their inception.

5.1.2.1 Liberia Education Advancement Programme

LEAP is public–private partnership that supports the delivery of 100 per cent tuition-free primary education from ECE through Grade 9. Launched in 2016, LEAP aims to improve educational outcomes in selected public schools through a multi-partnership model (New Globe, n.d.; Rising Academies. n.d.; Street Child, 2019). The programme is predicated on the unique context of Liberia where fewer

Figure 5.7 LEAP model



than 20 per cent of primary schools have appropriate infrastructure, fewer than 40 per cent of children attend primary school, and only 20 per cent of girls in Grade 5 can read a single sentence. LEAP was initiated to (i) improve school management and accountability; (ii) enable provision of quality learning outcomes; and (iii) optimize education service delivery models that the MoE can apply to other public schools. The operational model of

LEAP is illustrated in *Figure 5.7*. Under this model, the government maintains, monitors, and staffs every school. The government retains 100 per cent ownership of the programme while providers support educational services in schools through CPD of teachers, including frequent monitoring and coaching; provision of curriculum materials to learners and teachers; and infusion of innovative data management approaches to ensure a culture of data production and use is built.

Table 5.3 highlights the key elements to explain the difference between LEAP and the traditional service delivery approach. In some way, LEAP is investing in areas where the mainstream system has not been able to venture due to the limited public expenditure on education. For instance, *Chapter 4* highlighted that the structure of spending deprives critical services, such as quality assurance, of much-needed resources. Moreover, spending on learning materials remains low. Investment on data and information remains limited to the extent that there is a reliance on external partners to conduct periodic censuses. It is due to gaps such as these that LEAP has been able to build strong partnership with the government.

Table 5.3 Comparison between LEAP and the traditional learning approach

LEAP model	Traditional model
<ul style="list-style-type: none"> • Focuses strongly on school monitoring and curriculum support • Assures the provision of learning and teaching resources at school level • Has a strong component of measuring results to facilitate dialogue and improvement • Has no conditional payment of fees for the benefit of learners 	<ul style="list-style-type: none"> • Limited supervision (some schools have not been supervised for years) • Limited provision in public expenditure for learning materials • Available data systems do not support regular data collection • Parents and households support the educational inputs that are not covered

Source: LEAP and policies on education.

Table 5.4 LEAP beneficiaries and costs

	2016/17	2017/18	2018/19	2019/20	2020/21	2021/22*
Number of providers	8	7	7	4	4	4
Number of schools supported	93	194	194	297	323	525
Benefiting learners		50,164	50,451	65,713	71,840	110,000
Total expenditure (million US\$)		6.801	6.003	4.931	4.671	8.2
Average expenditure (US\$)		136	119	75	65	75

Source: Authors' computations based on review of LEAP and policies on education.

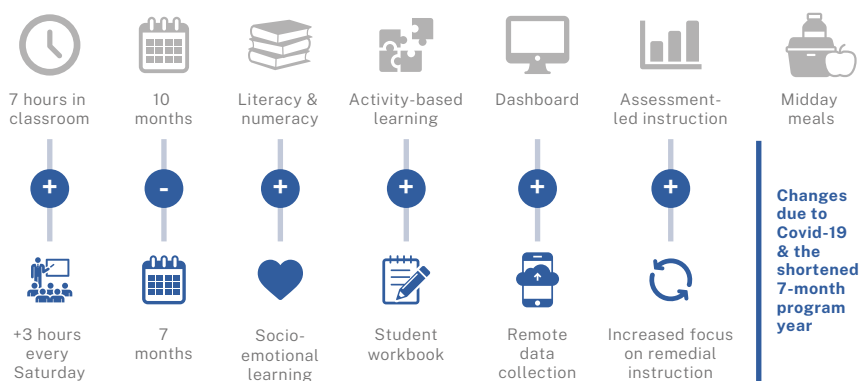
Note: * shows projected values.

Five years after implementation, up to the year ending 2021, LEAP's implementing partners supported nearly 72,000 learners in 320 tuition-free schools, and had projects to reach about 110,000 learners in the sixth year as shown in Table 5.4. Although the average cost of the programme varies by implementing partner, the global average has been declining since the inception of the project, with the unit cost in 2020/2021 being half of the starting cost in 2017/2018. The number of learners benefiting from the programme increased by 43 per cent in the first five years. The number of benefiting schools more than tripled by the fifth year and is expected to grow fivefold by the sixth year, and beneficiaries are continuing to rise. Thus, the unit cost is inevitably coming down. This is particularly good news for the sustainability of the programme, which seems to be here to stay. One area of concern is the declining funding, especially with the reduction of more than US\$2 million between 2018 and 2021. The indicative resources for the 2021/2022 implementation period, however, offers a glimpse of hope. LEAP has received an indicative commitment of US\$8.2 million for its 525 schools (or estimated 110,000 learners). Given that the cost had already dropped to US\$65 per learner by 2020/2021, it is conceivable that there will be additional

beneficiaries, which could see the unit cost go down further as anticipated by the programme management.

Implementation of LEAP and periodic evaluation show that there are returns on investment, which support the case made for implementation at scale. There is a strong desire for the programme to be mainstreamed in the next sector plan and be implemented as an integral part of the basic education curriculum. The 2020/2021 assessment established that LEAP increased learning by 0.26 standard deviations in English and 0.35 in mathematics (New Globe, n.d.). Both are substantial results compared with the results from the traditional curriculum implementation approach, with these results being equated to more than a year of additional learning. In some schools, particularly those under the oversight of New Globe, learning increased by 0.62 standard deviations, which equates to 2.5 years of additional learning. Other notable positives from the programme include innovations that have the potential to support system-wide impact in Liberia, especially on data collection and use; demonstrated accountability for delivering learning outcomes; and the flexible and dynamic partnership, which was tested at the height of COVID-19

Figure 5.8 Second Chance programme model



Source: Luminos (2021).

during which the programme integrated radio instruction. One of the main concerns of the programme is to scale up throughout the country to ensure all children have an opportunity to enhance their learning experience and, hence, learning outcomes. The implementing partners hold that there are opportunities for improving LEAP, which could benefit from:

A clearer long-term vision defined and driven by the Ministry of Education; a clearer governance and regulatory structure, with clear accountability for performance and principles of equity and transparency at its heart; enhanced transparency where all resources invested into the program is reported by respective implementing partner; enhanced communication and engagement with local and international stakeholders, who are not yet bought to the private sector participation in curriculum delivery. (New Globe, n.d.)

5.1.2.2 Second Chance Liberia programme

The Luminos Second Chance programme is a 10-month accelerated learning

programme that was launched in 2016 in collaboration with community-based organizations. It aims to support OOSC aged 8–14 to develop key literacy and numeracy skills and transition back to formal education. The programme offers a child-centred, activity-based pedagogy, assessment-informed instruction, and a phonics-based approach to reading instruction (Luminos, 2021).

The programme is founded on the appreciation that Liberia has one of the world's highest rates of OOSC. Without intervention, society may not break away from the vicious cycle of illiteracy and poverty. The implementation model is pragmatic and adapts to changes as they happen in the implementation context, with the 2020/2021 session having followed the model illustrated in Figure 5.8. During this period, learners attended class for seven hours per day from Monday to Friday, with five of those hours devoted to reading and two hours to numeracy. Teachers in the programme are young people with a secondary school education who are drawn from the local community. They receive intensive training on the Second

Chance pedagogy, estimated at 25 days annually. During the teaching sessions they are supported with scripted teacher guides and ongoing classroom-based coaching (Luminos, 2021).

In the six years since the programme's inception, Luminos has supported nearly 12,700 children to reintegrate into formal schools. In 2020/2021 alone, Luminos supported 2,400 OOSC across Bomi, Grand Cape Mount, and Montserrado counties. The Endline evaluation highlights positive results from the programme:

On reading, students showed improvement across every EGRA³¹ subtask, including improvement of 48 percentage points on both letter identification and oral reading fluency of Grade 2 level text, 41 percentage points on familiar words,

and 28 percentage points on reading comprehension. In oral reading fluency, students read 31.5 correct words per minute (CWPM) at end line, compared with 2.8 CWPM at baseline. These improvements are statistically significant. (Luminos, 2021: 5)

On numeracy, students again showed improvement across every single EGMA³² subtask, including improvement of 35 percentage points in number identification, 32 percentage points in number discrimination, 27 percentage points on addition and 17 percentage points on subtraction. When compared with similar programmes in Liberia and globally, results show that Second Chance is a highly efficient and effective way to help vulnerable children catch up on learning. (Luminos, 2021: 6)

5.1.3 Learning outcomes, assessments and examination

The challenges in implementing the curriculum give a pessimistic impression regarding the chances of the education system to achieve the desired learning outcomes. This subsection interrogates the existing assessment and examination infrastructure as well as some of the learning outcome results from the recent past under the current resource context.

5.1.3.1 Learning outcomes: Assessments highlight weak foundational competencies, sustained throughout the system

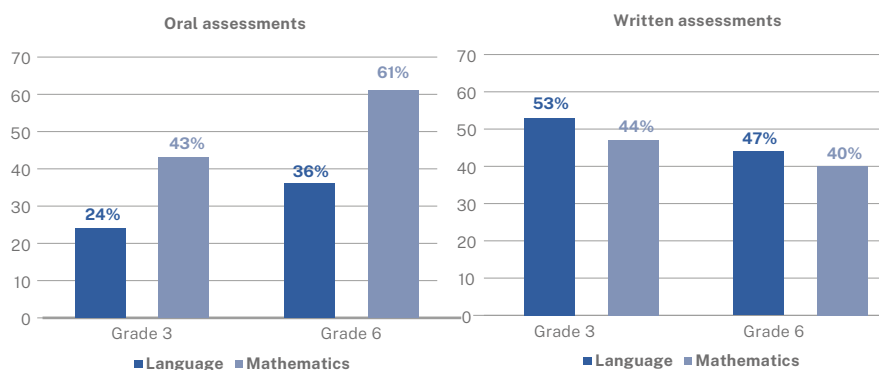
Learning assessments highlight weak foundational competencies that are sustained throughout primary education. A reading and numeracy assessment³³ was

³¹ Early Grade Reading Assessment.

³² Early Grade Maths Assessment.

³³ The assessment focused reading (pre-reading and comprehension) as well as mathematics. Pre-reading skills: vocabulary and oral language vocabulary. Reading comprehension skills: sentence completion, maze task, focus on and retrieve explicitly stated information; inferences, interpretations and integration of ideas and information. Numeracy: assesses knowledge of whole numbers and knowledge of simple operations, expressions, simple equations, and relationships; measurement and geometry; and reading, interpreting, and representing data.

Figure 5.9 Proportion of correct scores in language and mathematics

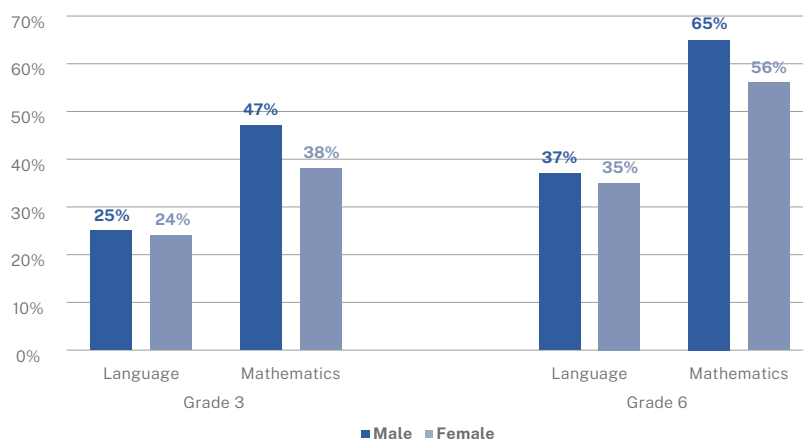


Source: National Learning Assessment Policy Pilot Results (Dayal et al., 2021).

conducted in 2021 as part of the assessment policy reform and targeted learners in Grade 3 and 6 from the Bomi, Bong, Grand Bassa, Margibi, Montserrado, and River Cess counties. The results for language revealed that only one in four questions in oral assessment were answered correctly by third graders (see Figure 5.9); with sixth graders recording better performance at 36 per cent. However, this certainly shows

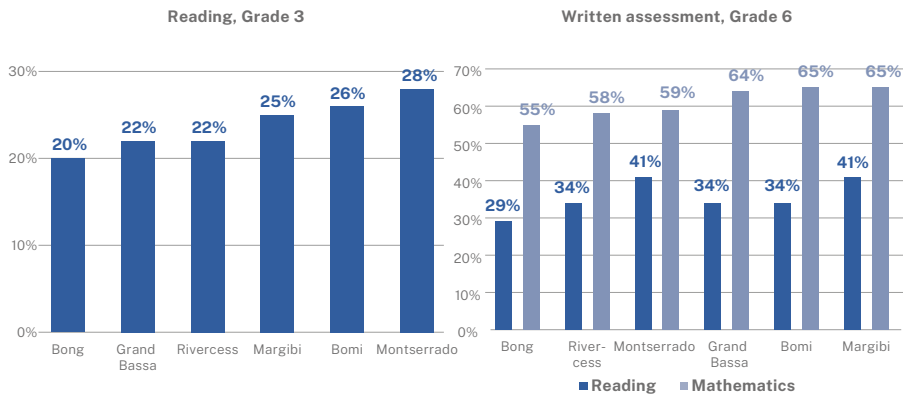
the sustained weaknesses in learners. There was better performance in written language assessment with a surprise better performance from children in Grade 3 (53 per cent) compared with their peers in Grade 6 (47 per cent). The low correct score rates in Grade 3 highlight the benefits of knowing and identifying problems when learning is just taking off and having an opportunity to intervene at the right level.

Figure 5.10 Proportion of correct scores in oral assessments, by sex, 2021



Source: National Learning Assessment Policy Pilot Results (Dayal et al., 2021).

Figure 5.11 Proportion of correct scores in oral assessments, by county, 2021



Source: National Learning Assessment Policy Pilot Results (Dayal et al., 2021).

In mathematics, learners got 4 in 10 items correct, with the performance improving in sixth grade where assessed learners had 6 in 10 correct scores. In written assessment there are similar patterns to those observed in language, with third graders recording better performance than their sixth grade peers. These results show that over the grades, the advantage that learners had in oral mathematics is lost to language when it comes to written assessment. The assessment further revealed that boys perform better than girls in mathematics, but the difference shrinks with advancing grades. Boys performed 24 per cent than girls in Grade 3 compared with 16 per cent in Grade 6. In language, there were only marginal differences between boys and girls (see Figure 5.10).

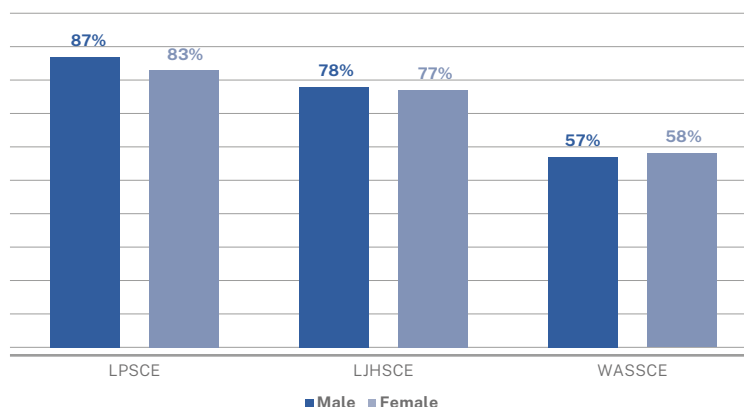
In addition to the demonstrated, concerning foundational competencies, the results revealed disparities across the country. They indicated considerable variation in the correct score across counties, with only 28 per cent oral reading by Grade

3 learners from Montserrado compared with 20 per cent by learners from in Bong; and a 10-percentage point gap between Bong and Margibi in written mathematics assessment for sixth graders (Figure 5.11).

5.1.3.2 Learning outcomes: End-of-cycle examinations present better learning outlook

The national examinations paint a better picture of performance at the terminal grades of primary and secondary school even though there is consensus that high-stake examinations may not be the best indicators of learning outcomes. However, in the case of Liberia, the formative element in the examinations makes them more appealing to the discussion of learning outcomes. The WAEC in Liberia oversees the national examinations, namely the Liberia Primary School Certificate Examination (LPSCE), Liberia Junior High School Certificate Examination (LJHSCE), and the regional West Africa Senior School Certificate Examination (WASSCE).

Figure 5.12 Share of candidates passing national and regional examinations, 2020



Source: National Learning Assessment Policy Pilot Results (Dayal et al., 2021).

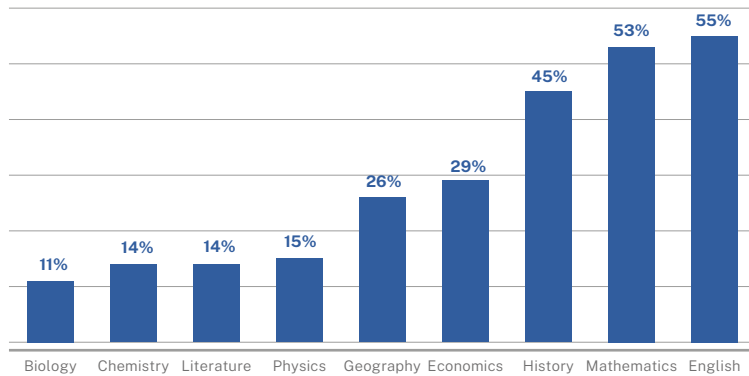
The LPSCE and LJHSCE continuous assessment components are carried out regularly by schools, which means school-level results account for a significant portion (30 per cent) of the national score, which substantially reduces the high-stake pressure of national examinations. The final grade of a candidate has two components, namely the Continuous Assessment Score (CASS) or School's Grade and the Terminal Assessment Score (TASS) or WAEC's Grade. CASS contributes 30 per cent while TASS contributes the balance, namely 70 per cent of the candidate's final grade.

The 2020 results from the national and regional examinations show that most candidates passed their respective examinations, with the share of those who passed dropping with advancing level of examination. The LPSCE attracted 24,879 candidates in 2020; LJHSCE attracted 29,040; while WASSCE attracted 22,660 candidates. Of these candidates, 9 in 10 males and 8 in 10 females passed the LPSCE. At the junior secondary level,

about 8 in 10 candidates passed their examinations regardless of gender. At senior secondary level, the proportion of candidates who passed their examinations dropped to 6 in 10 candidates. Except for primary school where there was only a marginal gap, there were no observable gender differentials at national level.

Although 6 in 10 candidates who sat for the WASSCE in 2020 had at least a pass, the results reveal large variations across subjects, with sciences registering the lowest success rates. As shown in Figure 5.13, only mathematics and English registered more than half of the candidates with at least a pass. In sciences, including biology, chemistry and physics, the highest proportion of candidates with at least a pass are seen in physics, at 15 per cent. In biology, only one-tenth of the candidates had at least a pass. This may reflect the challenges discussed earlier regarding the ill preparation of science teachers, lack of complementary staff, and limited investment in science equipment and laboratories, including a lack of consumables.

Figure 5.13 Share of candidates with passes and credits in WASSCE, 2020



Source: National Learning Assessment Policy Pilot Results (Dayal et al., 2021).

Although the administration of examinations in the country is stabilizing, especially for national examinations, the WAEC decries operational challenges that may continue to undermine the progress made and, in some way, influence the integrity of examinations negatively. The council operates on inadequate resources, both human and financial, which means that some of the operations that ought to be automated are not.

The last audited expenditure in the sector shows that of the US\$2.7 million attributed to WAEC, three-quarters went directly to the administration of examinations. Almost all expenditure was spent on WASSCE, 23 per cent on salaries, and less than 1 per cent on operations and maintenance. This structure highlights the impression of the infrastructure at the council. The insufficient logistics and human capacity means that the council has to involve external parties to administer examinations, which is a huge risk to their integrity. In the past, this approach has been a weak link in the examination administration, even to the extent of abet-

ting examination malpractice. The limited human resources in the council further implies limited monitoring of school testing, which accounts for a substantial share of the final examination scores.

5.1.3.3 Assessment systems: Changing the landscape of assessment in Liberian education to address the learning crisis

The basic and senior secondary education curricula contemplate a learner-centred approach to learning—a mission that needs urgent attention through the availability of resources highlighted before (both human and material). Moreover, results from the learning assessments, even though not representative of the entire country, suggest that there is room for improvement. To address the learning challenges in schools, the 2018 World Development Report highlights three policy approaches that countries can pursue to realize the education promise made to the children eligible for school (World Bank, 2018b). It notes that the learning crisis cannot be reversed unless education systems change the way they look at learning and

Table 5.5 Previous learning assessment lessons

Study name	Grades	Counties covered
Early Grade Reading Assessment (EGRA) Plus: Liberia Program Evaluation Report (Piper and Korda Poole, 2010).	Grade 2 and 3	Bomi, Bong, Gbarpolu, Lofa, Margibi, Montserrado, and Nimba
Early Grade Literacy Assessment (EGLA) completed in 2014: Expanding EGRA: The Early Grade Literacy Assessment and its contribution to language instruction in Liberia. Presentation at UKFIET (2015) by Hobb and Davidson (2015).	Grade 2 and 3	Grand Bassa
Read Liberia Baseline completed in May 2017 (NORC, 2017).	Grade 1 and 2	Bong, Grand Bassa, Margibi, Montserrado, and Nimba
Liberian Education Advancement Program (LEAP). The programme was originally known as Partnership Schools for Liberia (PSL).	Grade K1–5	Bong, Bomi, Gbarpolu, Grand Bassa, Grand Cape Mount, Grand Kru, Lofa, Margibi, Maryland, Montserrado, Nimba, River Cess, and Sinoe
Read Liberia Activity: District Education Monitoring Approach (DEMA) with Group Administered Literacy Assessment (GALA) issued by USAID (2021).	Grade 2	Bong, Grand Bassa, Lofa, Margibi, Montserrado, and Nimba

Source: National Learning Assessment Policy (IIEP-UNESCO, 2021b).

use learning including: (i) Assessing learning and making it a serious goal. Countries are called to use better systems for measuring learning outcomes and encourage the dissemination of results to facilitate action among different stakeholders; (ii) Acting on evidence to make schools work for all learners, using that evidence to guide innovative practices that will improve learning, and considering the different contexts of countries; and (iii) Aligning the input and functions of education actors to ensure synergies are working well in the system to enhance learning for all learners (World Bank, 2018b).

Arising from such recommendations and from lessons learned from past experiences (Table 5.5), the government is reforming assessment in the country. This may be a game changer for learning if it can build onto some of the success stories from public-private partnerships

on learning, especially from the technological side.

The government developed a national assessment policy that is anchored on: (i) The need to address challenges related to the quality of education, where all levels of the education system are defined by low learning outcomes and assessment capacity challenges. The sector acknowledges that learners in Grade 2 and Grade 3 perform far below the oral reading fluency benchmarks, with a significant proportion of learners not able to read a single word; (ii) The need for assessing foundational areas of language and mathematics, with research showing foundational literacy and numeracy are critical for learning later; (iii) The need for timely detection of gaps in foundational skills at two time points: assessment in Grade 3 and Grade 6 can provide early warning for immediate feedback to the

Table 5.6 Elements before and in the new policy on learning assessments

Status of assessment hitherto the policy	Assessment policy orientation
Studies conducted on non-representative samples of primary grade learners.	The National Learning Assessment Policy sampling procedure aims to ensure the population of sampled schools represents all regions of Liberia.
No systematic approach to assessment, Grade 2 and Grade 3, K1–Grade 5, etc.	Focus is on Grades 3 and 6 from primary school to: (i) regularly assess foundational skills at the primary level and (ii) help identify and remedy gaps at the earliest.
Limited to formal learning streams; therefore, not providing comprehensive account of learning even in covered counties.	The National Learning Assessment Policy recommends the inclusion of a subsample of OOSC due to the large number thereof.

Source: National Learning Assessment Policy (IIEP-UNESCO, 2021b).

MoE to take action based on the results; and (iv) The transition from a content-based to a competency-based curriculum as contained in the National Curriculum Policy of 2019 and National Curriculum Framework of 2019. These place learning

as the central priority of the Liberian education system and trigger the need for an assessment policy and framework. The differences between the incoming policy and the elements from the old practice are highlighted in *Table 5.6*.

5.2 Management of teachers

Teacher management in Liberia can be conceptualized through two distinctive phases, namely teacher preparation and teaching practice. The second phase can be reviewed in a general practice sense as well as by separating teachers from the employer as illustrated in *Figure 5.14*. In the first phase, this report reviews the capacity of RTTIs – and any other institution engaged in training teachers – to carry out pre-service and in-service training; the required qualification for prospective teachers to enter into teacher training programmes; the efficiency of the output of teacher training; and the registration, licensing and recruitment process. The second phase reviews the stock of teachers teaching in basic and senior secondary schools in Liberia, highlighting teacher characteristics, teacher deployment, teacher salaries, and other welfare considerations.

5.2.1 Teacher preparation and registration

Teacher training in Liberia is mostly carried out by three RTTIs together with a host of private institutes authorized to conduct such training. Teachers are either trained through in pre-service C and B certificates in RTTIs or through a Bachelor of Education at university. The C certificate aims to equip teachers with the knowledge, skills, and attitude necessary to teach learners at primary education levels. Candidates wanting to train as teachers are required to demonstrate that they have completed secondary school by presenting a WAEC certificate, passing an entry examination in language and mathematics, and meeting the intake criteria set by the ministry. The

curriculum of the C certificate balances the subject content and pedagogy to ensure that teachers are effective in their delivery. This is achieved through a five-component package including foundations of teaching, teaching content, pedagogy, child development, and teaching practice. The teacher training curriculum is standard-based and guided by the rationale that teaching cannot simply be reduced to a series of observable behaviours. The curriculum is further based on the local context in the country. It requires the teaching of concrete concepts that reflect the relevance and reality of the work of a teacher in Liberia, rather than abstracts.

Figure 5.14 The cycle of teacher management in Liberian basic and senior secondary schools

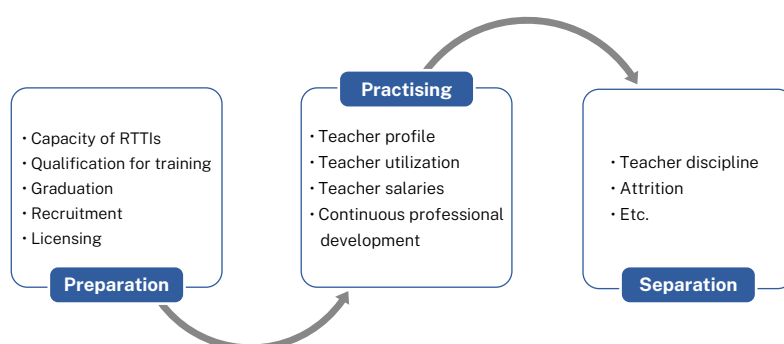


Table 5.7 RTTIs and training programmes offered

Name	Type of training offered
Zorzor RTTI	Pre-service C certificate
Webbo RTTI	Pre-service C certificate
Kakata RTTI	Pre-service C and in-service B certificate

Source: Anderson (2015).

The C certificate training programme is delivered in two modes, namely a field-based mode and a residential-based mode. The field-based mode is spread over one academic year starting with an initial four-week residential period, which is followed by monthly cluster meetings, and finishing with a two-week residential period. Teachers are observed in the classroom and receive individual feedback on their strengths and weaknesses. The residential-based mode is delivered over an entire year. The design of the residential-based mode divides the specified courses into the weeks in a quarter. Priorities have been established for the courses that have more teaching time allocated.

There are three RTTIs that offer pre-service teacher training (Table 5.7). Besides the three RTTIs, there are 18 local private teacher training institutes of which 17 offer the C certificate, while one offers C, B and A certificates. The fact that there are six times more private teacher training institutes than public RTTIs demonstrates the demand for teacher training in the country – a demand that is not fully satisfied by the three RTTIs. Yet one concern remains for the private teacher training institutes, namely the quality of their training programmes. At the time of this analysis, permits for 11 of the 18 private

teacher training institutes had expired. Furthermore, one was offering an A certificate programme while its accreditation authorizes it to only offer a C certificate programme. There have also been concerns in the variation in the implementation of the C certificate programme – not just in private teacher training institutes but also among the three RTTIs.

Apart from preparing teachers who can enter primary school classrooms straight away, the C certificate programme offers opportunities for teachers to acquire a Bachelor of Science in Education degree through a seamless study programme.³⁴ The principles of the seamless study programme include: (i) a modular approach to curriculum design for the in-service C certificate curriculum framework should be used for the pre-service C certificate framework; (ii) the pre-service C certificate curriculum unit design should connect to the in-service C certificate curriculum unit design and should correlate directly with the first-year programme at the Bachelor of Science degree level; (iii) general studies courses at university level should be reviewed as applicable for content adaptation and inclusion in the C certificate coursework; (iv) provisions should be made for students to have the option to test out of

³⁴ Recommended in 2008 by administrators from the MoE as well as those from RTTIs, trainers, and education professionals.

Table 5.8 Trends in the number of graduating teacher trainees

	Webbo RTTI		Kakata RTTI		Zorzor RTTI		Total for the three RTTIs			
	Male	Female	Male	Female	Male	Female	Male	Female	Total	% Female
2008/09	69	3	149	18	144	20	362	41	403	10.2
2009/10	78	9	145	26	216	42	439	77	516	14.9
2010/11	92	21	144	28	182	40	418	89	507	17.6
2011/12	85	12	184	40	75	30	344	82	426	19.2
2012/13	109	21	211	60	124	43	444	124	568	21.8
2013/14	98	19	222	35	126	30	446	84	530	15.8
2014/15	87	18	164	51	165	28	416	97	513	18.9
2015/16	78	8	130	36	149	18	357	62	419	14.8
2016/17	56	9	134	6	125	15	315	30	345	8.7
2018/19	62	9	88	16	82	19	232	44	276	15.9
Avg.	81	13	157	32	139	29	377	73	450	16.2
Total	814	129	1,571	316	1,388	285	3,773	730	4,503	16.2

Source: As provided by MoE, Bureau of Teacher Education.

some basic first-year courses at university level, pending enrolment, upon successful completion of the pre-service C certificate; and (v) provisions and/or requirements should be made for students who are tested and deemed skill-deficient to take remedial or basic preparatory college in English, mathematics, and reading courses prior to entering the degree programme.

Access to pre-primary is strong, but the quality may be compromised by the lack of a training programme for preparing teachers expected to teach at this level. Notwithstanding the elaborate training programme for C certificate teachers, including a pathway to acquire a degree certification that qualifies teachers to be deployed in secondary schools, there is no standard curriculum or programme for training teachers who will eventually teach at ECE. Even with the high levels of participation observed in *Chapter 2*,

which is an incentive for investing in a strong and standard teacher training programme for ECE teachers, there is no dedicated teacher training programme for the high number of teachers demanded. The sector will benefit from the development of a standard programme for ECE. The opportunity should also be taken to review the C certificate programme, which has been in place since 2008. While the curriculum has been revised recently and calls for a more learner-centred approach in teaching, the training programmes may not be aligned to these demands. This could mean that trained teachers are not necessarily qualified to teach the curriculum in its current format.

The number of teacher trainees graduating from the three RTTIs has been on a general decline since 2012, with male dominance recorded throughout the last decade. *Table 5.8* presents an evolution of teacher trainees graduating from the

three RTTIs between 2008/2009 and 2018/2019. There is scant information on the capacity of teacher training institutions, both public and private, and as such, this analysis focuses on graduation limited to public institutions. Certificate teacher trainees are declared successful after (i) successfully completing the courses specified in the curriculum; (ii) meeting continuous assessment criteria, which include regular attendance, participation and overall performance; and (iii) successfully completing teaching practice experience (Anderson, 2015).

In the last decade, the three institutions have graduated more than 4,500 teacher trainees, averaging 450 trainees every year. However, the declining number of graduates is concerning. Fewer trainees have graduated since 2013, with the number of graduating trainees dropping from nearly 570 to the 280 recorded in 2019; thus, the output of trainees has decreased by more than half. This declining number is of serious concern given the high share of unqualified teachers in schools as demonstrated in later sections

of this chapter. Another notable feature is the low share of female teacher graduates, who averaged only 16 per cent in the reviewed period, including the lowest share of 9 per cent observed during the 2016/2017 training session. In *Chapter 3*, the dominance of male teachers in the payroll signalled the need to recruit more female teachers to address the imbalance. However, given the disparity in graduation numbers, addressing the imbalance may need to start by RTTIs admitting more female teacher trainees. In addition to the declining output of teacher trainees across the years, RTTIs are concerned about the acute shortage of teacher trainers, especially in specialized programmes. This is complicated by the lack of teacher training programmes geared towards disabilities. As seen in *Chapter 3*, the limited spending on education is focused on salaries, but it clearly excludes critical areas such as quality assurance. The spending structure affects the ability of the sector to conduct monitoring, even for the few RTTIs according to concerns from teacher education stakeholders.

5.2.2 Management of practising teachers

More than 60,000 teachers serve basic and senior secondary education, with more than 80 per cent deployed in basic education. The 2019/2020 Annual Schools Census (MoE, 2020a) reports that there were more than 60,500 teachers at ECE, primary, junior secondary, and senior secondary levels across all types of school (community, faith-based, private and public). Of these, nearly 1 in 4 teachers is deployed in ECE, about 4 in 10 in primary, and 3 in 10 in secondary schools (see *Table 5.9*). There is a notable drop in the size of the teaching force, with

the Annual Schools Census (MoE, 2015a) reporting that there were nearly 64,300 teachers in 2015/2016 compared with the 60,500 teachers in 2019/2020 (MoE, 2020a), with the drop limited to primary schools. In the same period, the number of teachers in senior secondary increased by nearly half. Although these are highly significant changes in the number of staff in the sector, there is no clear explanation. Signals show that the changes could be due to operational mixing whereby primary teachers may be teaching in junior and senior secondary schools, and

Table 5.9 Evolution of the teaching staff in basic and secondary education

Level	2015/16	2019/20	Percentage change
ECE	14,311	14,724	2.9
Primary	30,438	22,488	-26.1
Junior secondary	12,983	13,345	2.8
Senior secondary	6,549	9,646	47.3
TVET	-	339	-
Total	64,281	60,542	-5.8

Source: Annual Schools Census 2015/2016 (MoE, 2015a) 2019/2020 (MoE, 2020a).

the other way around as well, and possibly the 2019/2020 census made efforts to clean this up. The results on teachers provide a window of opportunity for the continued improvement of EMIS to deliver more valid data that can support planning and management of the sector.

The high contribution of non-public streams to the delivery of education in the country is complemented by further input in public schools. As seen in *Chapter 2*, public schools account for 45 per cent, 46 per cent, 32 per cent and 25 per cent of enrolment in ECE, primary, junior secondary and senior secondary, respectively. It implies that more than half of the education opportunities in basic and senior secondary schools are offered by non-public streams. Regarding teachers, it is notable that the number of teachers in public schools follows enrolment.

Of the 60,200 teachers in basic and senior secondary, 27,600 are in public schools, accounting for about 46 per cent of all teachers, with the complement being in non-public schools of which 32 per cent are in private schools alone. Of the 25,700 teachers in public schools, 12,400 are paid directly by the government, which translates to 45 per cent of the teachers teaching in public schools. Thus, more

than half of the teachers in public schools are paid by other entities (communities, and local and international non-governmental organizations, etc.). The share of teachers paid by the government further varies according to the level of education, with primary education topping the list at 69 per cent, followed at a distant second by ECE at 41 per cent. The stark majority of teachers in public secondary schools are not paid by the government: nearly three-quarters in junior secondary and 80 per cent in senior secondary schools (*Table 5.10*). As seen in *Chapter 4*, public expenditure mostly covers teacher salaries. It is evident here that the weight of this provision is even lower when the share of teachers on government payroll is considered.

5.2.2.1 Pupil/teacher ratios

The pupil/teacher ratios across basic and senior secondary schools are modest, ranging from 11 in senior secondary to 37 in ECE schools. However, when considering governmental efforts only, the impression is that significant work remains in the pursuit of quality education. The 60,200 teachers in basic and senior secondary schools support more than 1.4 million learners (nearly 542,700 in ECE; 607,600 in primary; 168,400 in junior secondary;

Table 5.10 Teaching staff in basic and secondary education, 2019/2020

	ECE	Primary	Junior secondary	Senior secondary
Community	484	983	465	431
Faith-based	2,806	4,109	2,356	1,940
Private	5,447	6,802	3,883	2,907
Public	5,987	10,594	6,641	4,368
All teachers	14,724	22,488	13,345	9,646
On government payroll	2,472	7,283	1,695	913
Not on government payroll	3,515	3,311	4,946	3,455
Percentage of government-paid teachers	41.3%	68.7%	25.5%	20.9%
Percentage of teachers in public schools	40.7%	47.1%	49.8%	45.3%

Source: Annual Schools Census 2015/2016 (MoE, 2015a) 2019/2020 (MoE, 2020a).

and 106,200 in senior secondary). This equates to a classical pupil/teacher ratio of 37, 27, 13 and 11 in ECE, primary, junior secondary, and senior secondary, respectively, in all schools. According to regional comparisons, these pupil/teacher ratios remain modest (Table 5.11).

In public schools, the pupil/teacher ratios rise considerably but still remain modest across primary and secondary. However,

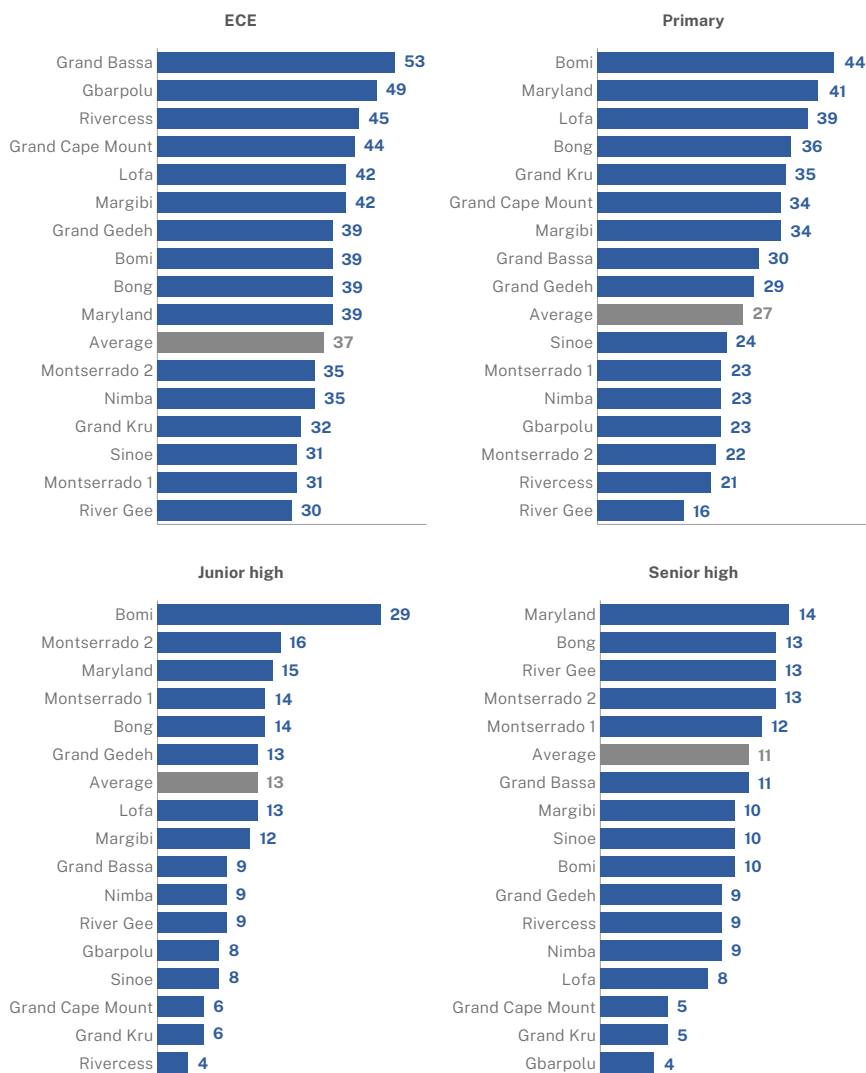
the ratios are outside the recommended norm for ECE. This changes dramatically when only considering government effort in public schools, with the highest pupil/teacher ratio seen in ECE, where there are up to 100 learners per teacher. Notably, in the other levels, the pupil/teacher ratios remain reasonably modest, with the pupil/teacher ratio in public primary schools being 38 when only considering government-paid teachers. On face value,

Table 5.11 Teachers and pupil/teacher ratios, 2019/2020

	Enrolment		Teachers			Pupil/teacher ratios		
	In all schools	In public schools	All teachers (all schools)	In public schools	Govt-paid in public schools	All teachers (all schools)	All teachers in public schools	Govt-paid teachers only in public schools
ECE	542,696	246,544	14,724	5,987	2,472	37	41	100
Primary	607,558	278,093	22,488	10,594	7,283	27	26	38
Jnr secondary	168,379	53,165	13,345	6,641	1,695	13	8	31
Snr secondary	106,194	26,066	9,646	4,368	913	11	6	29
Total	1,424,827	603,868	60,203	27,590	12,363			

Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

Figure 5.15 Pupil/teacher ratios in basic and senior secondary by county, 2019/2020



Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

the system can do without non-government-paid teachers given the low and modest pupil/teacher ratios.

In the context of the difficult past of the country, during which education has been

used as an avenue for reconstruction and reintegration, and even as a platform for securing employment for unemployed youth, operating with low pupil/teacher ratios may be necessary. On the flip side, it affects the households and learners who

are then subjected to unnecessary costs. *Chapter 3* demonstrated that payment from households is mostly for tuition, which schools use to employ teachers, yet we see here that the teachers in this case may not be necessary at least from the data coming from the Annual Schools Census. Although the average pupil/teacher ratios remain modest across basic and senior secondary education, there are large variations across counties (see *Figure 5.15*).

5.2.2.2 Trained teachers and training opportunities

There is an acute shortage of trained teachers at basic and senior secondary level – a reflection of the low output from RTTIs. While pupil/teacher ratios remain modest in basic and senior secondary schools, trained teachers are in low supply, with the share of trained teachers ranging from 35 per cent in ECE, 45 per cent in primary, 31 per cent in junior secondary, and 26 per cent in senior secondary. Moreover, this share exhibits large variations between counties. For instance, in ECE, three-quarters of teachers in Bomi are trained compared with only 15 per cent in Grand Gedeh. Similar patterns are observed in primary and secondary levels of education as shown in *Figure 5.16*. Compared with the sub-Saharan Africa average, the share of qualified teachers in Liberia is much lower. In primary where the regional average is 68 per cent, the country reports only 45 per cent of trained teachers, which not only demonstrates how far off the SDG 4 target³⁵ the country is but also how far it lags in comparison to its continental peers.

The shortage of trained teachers at basic and senior secondary level puts the pursuit of quality education in serious jeopardy, with pupil/qualified teacher ratios (PqTRs) soaring across the four levels of education. Despite the pupil/teacher ratios being modest in the country, when only trained teachers are considered, the ratios rise dramatically, ranging from 41 in junior secondary to 104 in ECE, with large variations across the counties. For instance, in ECE, the PqTR in Grand Cape Mount is 275, which is more than five times the PqTR in Bomi. There are similar patterns in other levels of education. Some of these PqTR levels are clearly a threat to the quality of education (*Figure 5.17*).

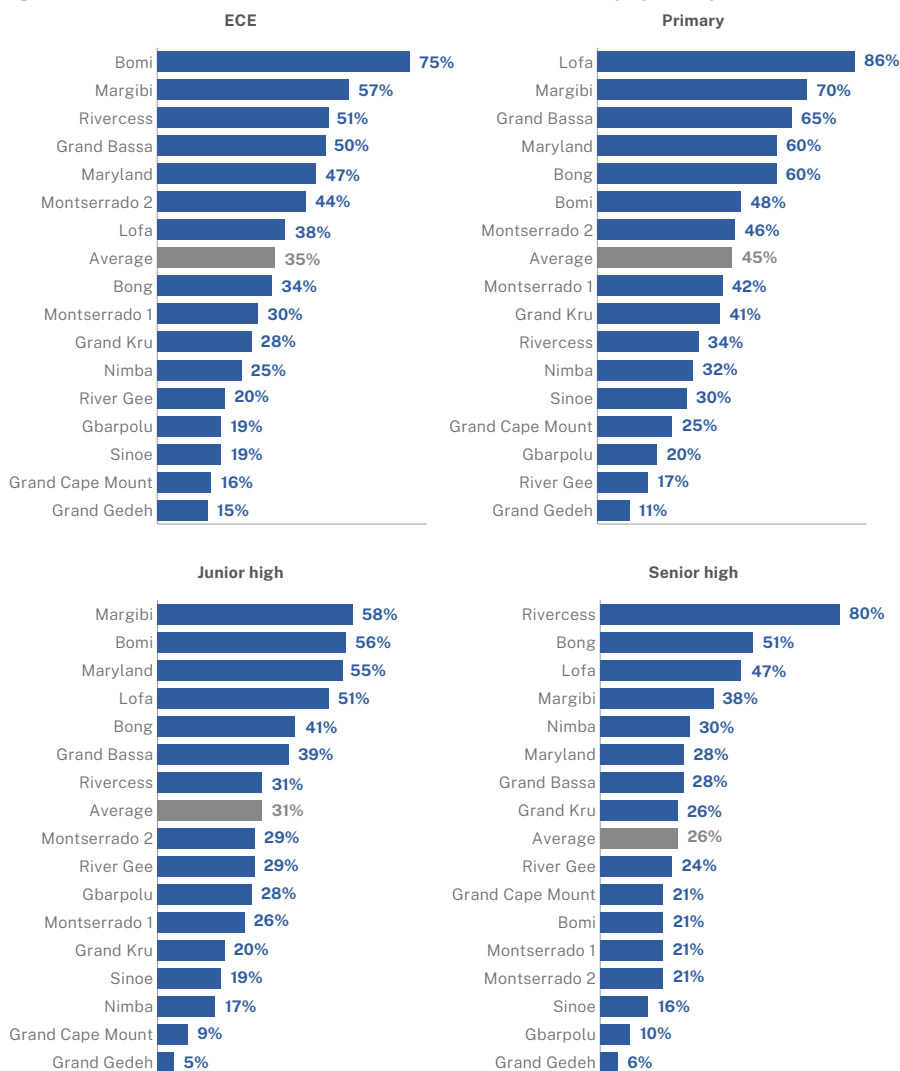
5.2.2.3 Teacher deployment

Teacher deployment improves with advancing levels of basic education, with the randomness showing existing room for improvement. Efficient use of resources in a resource-constrained context can enhance results from the said context, which can be true for the use of teaching resources. Given that teachers are employed more or less centrally in the country, the decision to have a teacher deployed to District A and not District B, or School A and not School B, is mostly at the discretion of the Bureau of Teacher Education and management.

Here we look at the allocation of teachers in districts according to the enrolment in each district and each level of basic education. Ordinarily, teachers are allocated to stations based on the number of learners they are to teach, yet in the case of Liberia,

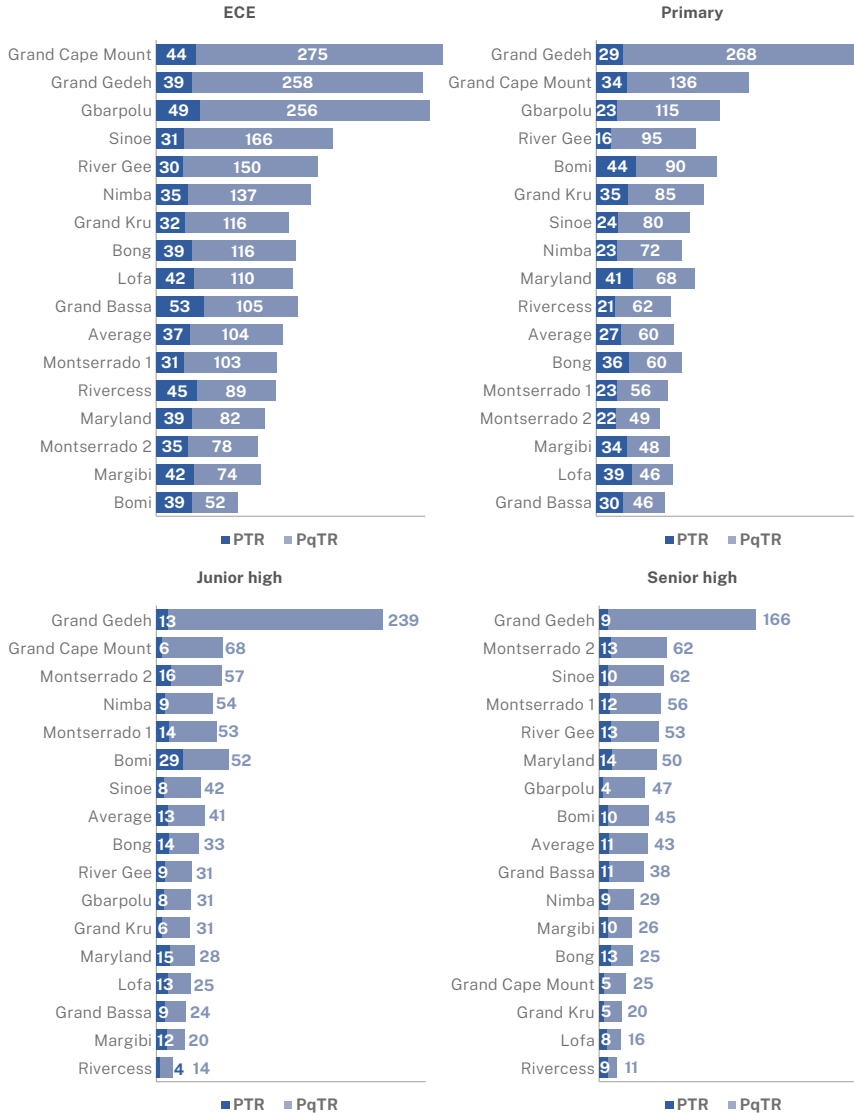
³⁵ SDG 4 targets 100% of trained teachers by 2030.

Figure 5.16 Share of trained teachers in basic and senior secondary by county, 2019/2020



Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

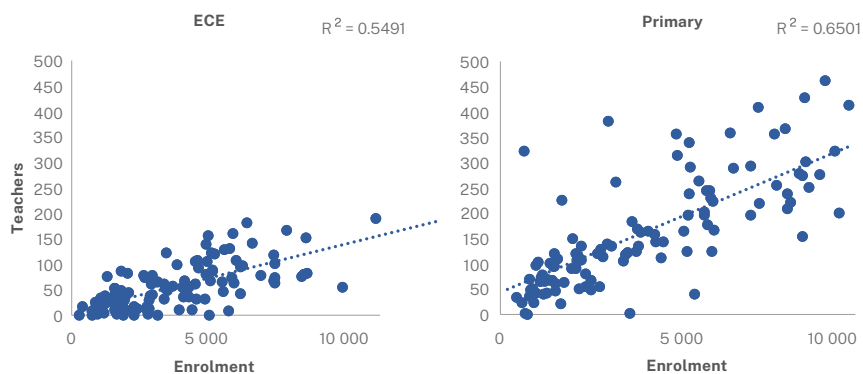
Figure 5.17 PTRs and PqTRs in basic and senior secondary by county, 2019/2020



Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

Note: PTR: pupil/teacher ratio; PqTR: pupil/qualified teacher ratio.

Figure 5.18 Degree of randomness in the deployment of teachers in ECE and primary, 2020



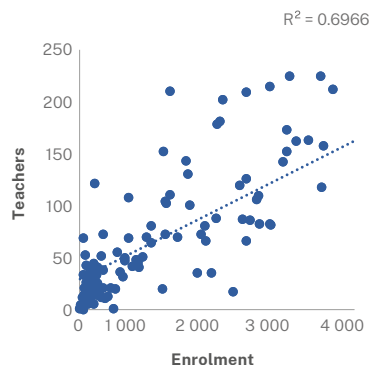
Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

this relationship is weak,³⁶ especially in ECE where 45 per cent (i.e., 1–55 per cent) of teacher deployment is based on factors other than enrolment (Figure 5.18). The relationship is higher in primary, with an Rsquared of 0.65, which means that in 35 per cent of cases, the deployment of teachers is not based on enrolment.

In junior secondary, the deployment of teachers is substantially higher than ECE and notably higher than primary. However, like primary, there is room for improvement as 30 per cent of the distribution of teachers does not follow enrolment (Figure 5.19). It is important to note that deployment in secondary is more complex deployment in ECE and primary, which have grade teaching as opposed to secondary where there is subject teaching. Therefore, the R-squared in secondary should be interpreted cautiously.

The deployment of teachers exhibits variabilities across counties, with some counties showing near perfect deployment compared with others where all deployment is random and does not follow enrolment. For instance, in ECE, the deployment of teachers in the Lofa district

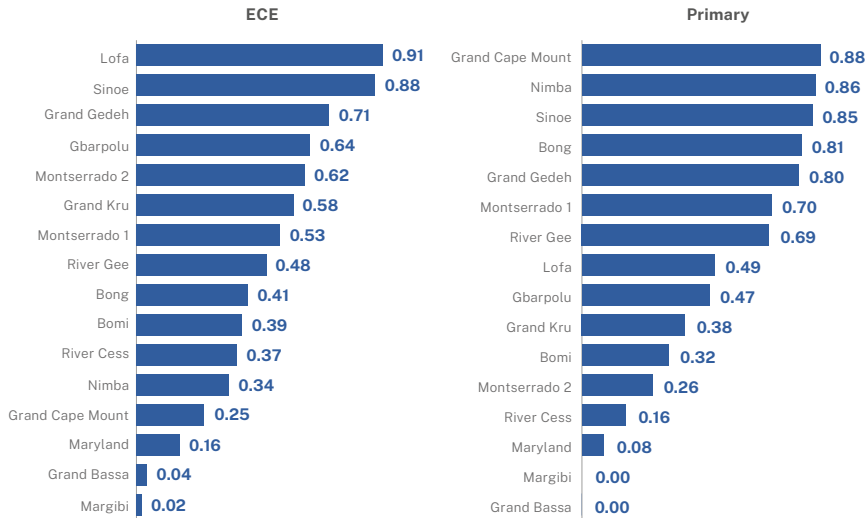
Figure 5.19 Degree of randomness in the deployment of teachers in junior secondary, 2020



Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

³⁶ A strong R-squared is ordinarily calibrated at 0.7, or 70 per cent on a scale of 0 to 1.

Figure 5.20 Degree of randomness in teacher deployment by county, 2020



Source: Authors' computations based on Annual Schools Census 2019/2020 (MoE, 2020a).

follows enrolment compared with the case of Margibi, where deployment does not follow enrolment (*Figure 5.20*). Similar patterns are observed in primary. The discretion that the central bureau has in deploying teachers can be explored to ensure the redistribution of teachers, especially in areas that do not require any financial consideration. Redistribution can be explored in counties to raise the degree of randomness in teacher distribution to reasonable levels.

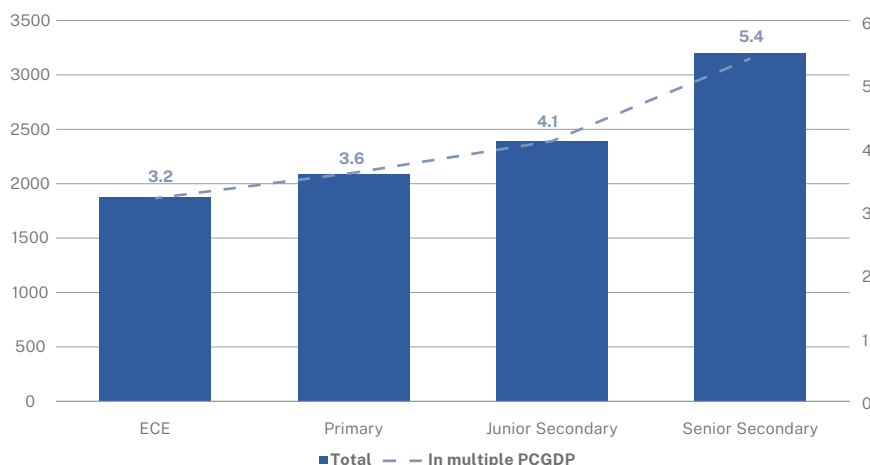
5.2.2.4 Teacher compensation and fidelity

Having seen the number of qualified teachers serving basic and senior secondary, it behoves the government to review the attraction and retention of teachers in the system. IIEP-UNESCO (2021b) recommends that governments need to create environments that motivate teachers to continue teaching, a precursor

to the maintenance of a critical pool of trained teachers. One of the main causes of teacher attrition is a poor compensation package, often in comparison to the level available to other sectors of the economy.

In Liberia, as discussed in *Chapter 3*, teachers are remunerated fairly well relative to the economic context. In 2021, a teacher in ECE earned an average annual salary of US\$1,870, rising to about US\$2,100 in primary, US\$2,400 in junior secondary, and US\$3,200 in senior secondary. These figures imply that teachers in primary schools earn 12 per cent more than their peers in ECE, and those in junior secondary and senior secondary earn 14 per cent and 53 per cent higher, respectively, than their peers in primary schools. There are no comparisons with other sectors to establish how good these salaries are and how the market compensates workers with similar qualifications. However, when compared

Figure 5.21 Average salary for teachers-in-chalk, in PCGDP, 2021



Source: Authors' computations based on MoE (2021b) payroll.

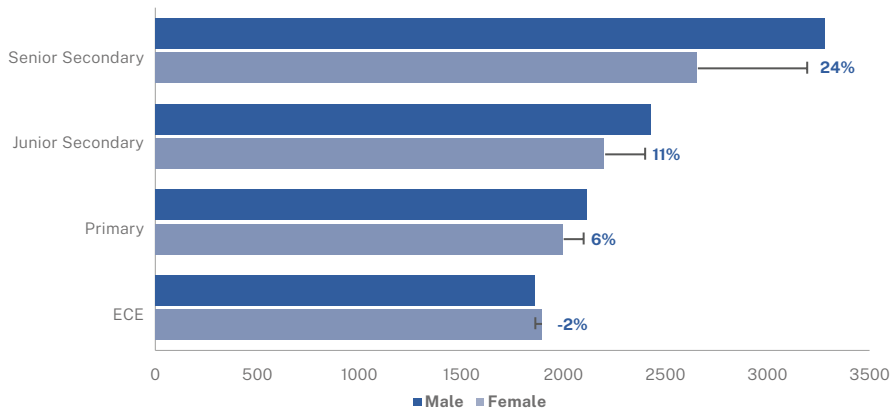
with the average wealth in the country, the average teacher salary ranges from 3.2 in ECE to 5.4 times in senior secondary (Figure 5.21).

Although there is no unanimous call to improve teacher salaries or premises on which such calls may be predicated on, there are structural differences in teacher compensation that may be remedied. For instance, there are salary differences between male and female teachers, especially at senior secondary level. Apart from males dominating payroll (see Chapter 3 for MoE payroll analysis), there are gender-related salary gaps, which rise with the rising levels of education. Male teachers in ECE are generally paid 2 per cent less than their female counterparts. In primary, the gap changes direction and male teachers are paid better than their female counterparts by 6 per cent. The gap rises to 11 per cent in junior secondary and 24 per cent in senior

secondary (Figure 5.22). These differences are calibrated for teachers with similar qualifications.

Other issues regarding teacher compensation worth highlighting in this analysis include teachers' perception of their salaries and the challenges they face in receiving pay, noting that dissatisfaction on the level of pay and delays can lead to unmotivated teachers – an ingredient for undesired participation in teaching. Generally, teachers in primary schools are dissatisfied with their remuneration, with the results of the *Time to Teach: Understanding Teacher Attendance and Time on Task in Primary Schools* study conducted in October 2021 revealing that eight in ten teachers are not satisfied with their remuneration (Figure 5.23). Those teaching in rural schools are nearly twice as dissatisfied with their salaries than their urban counterparts, while teachers in private schools are nearly four times as

Figure 5.22 Average salary for teachers-in-chalk, by sex, 2021



Source: Authors' computations based on MoE (2021b) payroll.

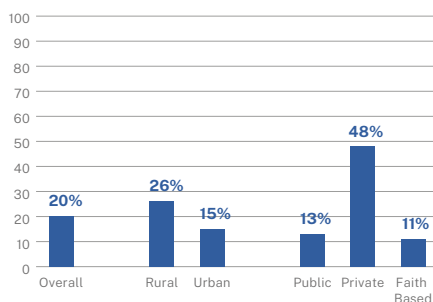
satisfied by their salaries than their peers teaching in public schools.

The dissatisfaction is compounded by late payment of salaries, with only 40 per cent of teachers reporting that they receive their salaries on time, which is slightly more than the average (46 per cent) in urban schools. In rural schools, only one in three teachers received their salaries on time. In public primary schools, only one in ten teachers receives salary on time

compared with all the teachers in private schools, and nine in ten of those in faith-based schools (Figure 5.24).

Lack of teacher motivation, as alluded to earlier, can lead to attrition in instances. In some cases, lack of motivation can breed other ills such as absenteeism, which has the potential of decreasing the quality of education. That said, one in five teachers surveyed were found to have repeat cases of school absenteeism, and nearly all teachers have missed coming

Figure 5.23 Percentage of teachers satisfied with their salaries



Source: Peirola and Ximena (2021).

Figure 5.24 Percentage of teachers receiving their salaries on time

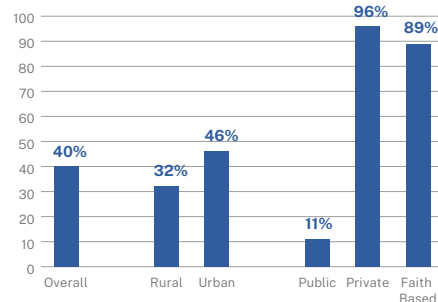
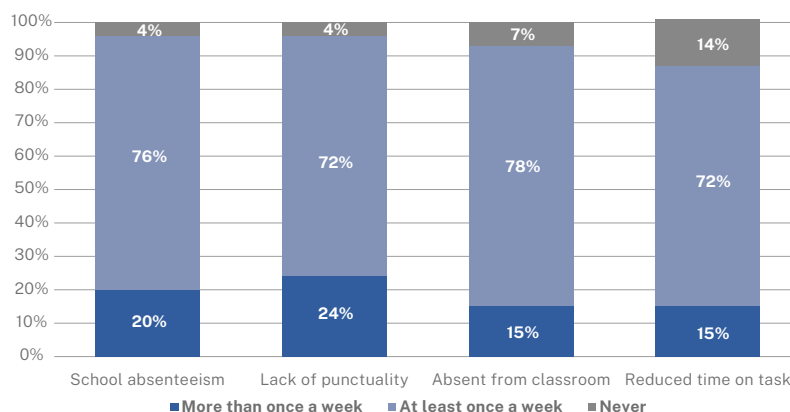


Figure 5.25 Teacher absenteeism in primary schools, 2021



Source: Peirolo and Ximena (2021).

to school at least once in a week, with only a minority of 4 per cent of teachers having never missed being at school (Figure 5.25). Other forms of teacher fidelity to instruction include reporting late to duty, being present at school but failing to attend classes, and failing to use periods scheduled for lessons effectively. On average, one in four teachers has had repeat cases of coming to school after the expected times. Similar to the case of school absenteeism, only a small

fraction of teachers have never been late to school. One of the resource management challenges that school heads have to deal with are human resources, who while present in school, do not turn up for their assignments. The study further reveals that 15 per cent of teachers had repeat cases of being at school but never attending their periods. A further 15 per cent do not fully use all the time allocated to their lessons.

5.3 Chapter summary

The country has some ground to cover in the pursuit of quality education, which is reflected in *Chapter 4* on expenditure. With the limited expenditure on education comes an acute shortage of learning support materials and facilities. The curriculum, which is the principal material for instruction, is in limited supply across basic and secondary schools. Multiple learners share books – a phenomenon that limits learning. Moreover, only a few schools have designated spaces where teachers can prepare for lessons. In addition, there is a shortage of other critical resources that support the implementation of the curriculum, which are fairly adequate in some levels of education and prominently inadequate in others, with huge disparities across counties.

LEAP in partnership with the government is supporting selected schools to address some of these operational challenges, especially on improving school management and accountability; enabling the provision of quality learning outcomes; and optimizing education service delivery. The programme provides learning materials to students, supports teachers through CPD, including coaching, and increases investment in data and information to support decision-making. The Second Chance programme is another initiative outside the mainstream curriculum implementation that seeks to improve learning across the entire system. Since their inception, these models have had substantial results among learners in supported schools and centres. However, the interventions reach only a limited fraction of learners in basic education, and certainly calls for more efforts to ensure more learners – if not all – can enjoy similar learning experiences.

Learning assessments from across the education system highlight weak foundational competencies – a phenomenon that is sustained throughout primary education in both literacy and numeracy. However, on a more positive front, results from the national and regional examinations show that most candidates passed their respective examinations. However, this should be interpreted cautiously as high-stake examinations can hardly be used to deduce competence. These positives can be strengthened by investing in the learner-centred approach to learning contemplated by the curricula at the different levels of basic and secondary education. The key principles include the availability of teaching and learning resources, including teachers who are well prepared pedagogically to carry out effective instruction.

Regarding teacher preparation, the three RTTIs in the country train teachers together with a host of private institutes authorized to conduct teacher training in on-site and distance approaches. These few institutes may not be adequate to serve the needs of the sector, which is seen in the high teacher ratios across the different levels of education. In addition, the number of teacher trainees graduating from these institutes has been declining over the past decade – a fact that will continue to hurt the supply of teachers to schools. Administrative reports further show that there is an acute shortage of trained teachers in basic and secondary schools, which is a clear reflection of the relatively low output from RTTIs. Moreover, although access to pre-primary is strong, quality may be compromised by the lack of a training programme

for teachers expected to teach at this level, which literally cuts off this level of education from quality teaching. In terms of efficiency and equity, deployment of teachers shows that the extent to which teachers are deployed based on enrolment is weak. Also, although there is no unanimous call to improve teacher

salaries or premises on which such calls may be predicated, there are structural differences in teacher compensation that may be remedied. Male teachers earn notably more than their female counterparts – a situation that might be detrimental to the motivation and functioning of staff.

Chapter 6

TVET and higher education



The youth employment challenge in low-income economies such as Liberia stems from a myriad of demand- and supply-side constraints. On the demand side, constraints include economic underdevelopment, poor job growth, non-conducive business environment, weak competitiveness, low labour productivity, lack of wage employment and decent work opportunities, and a pervasive informal economy. On the supply side, the problem mostly relates to poor human capital development. Young people are either not qualified enough or the skills and competencies they acquire do not live up to labour market needs and employers' expectations. Against this background, terminal levels of education, namely TVET and higher education, are called to play a critical role in enhancing, beyond human capital, youth employability and employment prospects, thereby contributing to accelerated development.

This chapter first provides an overview of TVET and higher education in Liberia in an attempt to uncover their strengths and weaknesses, focusing on the organization and delivery, and the performance in terms of access and equity. The scant information available prevents us from extending the analysis properly to other important aspects related to internal efficiency and quality. Thereafter, the chapter turns to the external efficiency of the terminal levels of education, using the most recent survey available, namely the HIES conducted in 2016. New light is cast on youth labour market outcomes in Liberia with the aim to assess the extent to which TVET and higher education increase the youth's chances to access employment, complete the labour market transition, and occupy decent jobs.

Before proceeding, two remarks are worth mentioning. First, the landscape of higher education and, above all, TVET, is rapidly evolving. This chapter captures the most recent developments that came to our knowledge up to the time of writing in November 2021. While reviewing the chapter, readers should bear in mind that major changes are expected to unfold in the coming months and years. Second, survey results discussed here were collected while Liberia was still struggling to recover from the Ebola crisis; therefore, they are still affected by the protracted shocks the Liberian economy and labour market experienced. Needless to say, all findings in this chapter must be put in perspective with the COVID-19 pandemic and its potential damages as well, including those on the education system.

6.1 Overview of TVET and higher education

The first part of the chapter starts with a discussion on the organization and delivery of TVET and higher education, whereafter it moves to the analysis of subsector performance in terms of access and equity.

6.1.1 Organization and delivery

In this section, we deal with organizational and delivery features of the TVET and higher education systems in Liberia. It is based on a desk review of existing policy and project documents, as well as on the information gathered during a fact-finding mission conducted in Monrovia in early October 2021. The section discusses recent developments and highlights policy, regulatory and institutional gaps. The following analyses have been constrained by poor data accessibility and information sharing, which are recurrent problems that the country should consider.

6.1.1.1 TVET

Liberia adopted the National Policy for TVET covering the period from 2015 to 2020. This policy is aimed at:

[m]itigating the misalliances between the skills supply and the needs of the industry, reskilling to aid the current workforce meet the changing strains of the industry, leaving the traditional formal educational tract and engender a paradigm shift towards the acquisition of skills that add value to the human person, developing and adopting standardized curricula for different disciplines and integrating the informal sector into the country's TVET platform. (Liberia, 2015)

However, the policy suffered from weak implementation – a widespread problem in Liberia which most often stems from a

lack of resources. UNESCO is currently finalizing a report that will provide an overview of the implementation of the policy and the operational plan for the past five years, focusing on their status, challenges, and way forward. According to the draft report (Liberia, 2020), the lack of political will, regulatory framework, national curriculum, and qualification framework for TVET, the poor coordination and coherence of TVET activities, the lack of funding, and the low attractiveness of TVET among young people – among other challenges – explain why implementation has been so ineffective.

Regarding TVET financing, *Chapter 4* documented the low budgetary allocation directed towards the TVET subsector. The draft report concludes that TVET provision remains limited in terms of enrolment and the quality of TVET programmes. Delivery thereof is insufficient to affect employment prospects, and linkages between training providers and employers are weak, thus hindering youth labour market transition and fuelling skills mismatch. Subsequently, the policy has been revised at the request of Liberia with technical assistance from UNESCO. The new National TVET Policy, which will cover the period 2022–2027, is currently being finalized (Liberia, 2021a). An operational plan, capturing the work plan of all partners with their budgets, is under way.

Other recent reforms aimed at improving the Liberian education sector concern the

TVET system directly or indirectly. Those specifically targeting TVET are mainly the establishment of the Inter-Ministerial Task Force on TVET and a draft TVET legislation to establish the Liberia TVET Commission (LiTCOM), which is still under legislative review for approval (Liberia, 2021b). Adoption of the draft TVET legislation is a prerequisite for the legal recognition and operationalization of LiTCOM as a national structure mandated to oversee and guarantee the internal efficiency and quality of the TVET system.

According to Liberia (2020), a strong national authority is required to coordinate and provide oversight responsibility for TVET, minimize the fragmentation of TVET provision, ensure coherence and accountability within the system, avoid costly duplication of training programmes, and implement an effective framework for resource mobilization. Roughly speaking, the MoE cannot be a ‘player’ (run schools) and a ‘referee’ (evaluate them) at the same time. However, establishing LiTCOM as an autonomous TVET body is not exempt from certain risks, including: (i) excessive lengthy process (it will probably take two to three additional years); (ii) difficulties in obtaining initial funding; (iii) reluctance of some staff to be transferred to the new body; (iv) difficulties in recruiting additional qualified staff; and (v) lack of political commitment to move the process forward. It is worth noting that Liberia does not have an allocated budget to operationalize LiTCOM, which requires a significant amount of funding, raising concern even at cabinet level. The issue will be addressed once the TVET law has been passed. Ensuring sustainable financing of LiTCOM is key for the successful implementation of the new National TVET Policy.

Broader policies and reforms include ERA 2011 (Liberia, 2011b), the G2B-ESP 2017–2021 (MoE, 2016a), PAPD 2018–2023 (Liberia, 2018), and the Liberia National Vision 2030 (Liberia, 2012).

The regulation of the formal TVET system is currently under the responsibility of MoE and is governed by the National TVET Policy. In turn, the Ministry of Youth and Sports (MoYS) is in charge of informal TVET (see Box 6.1). The MoE Bureau of Science, Technology, Vocational and Special Education oversees the accreditation of all TVET institutions operating in the country. Certification of trainees is not presently done exclusively by MoE since many government agencies are involved in skills development. As a result of the lack of uniform curricula for the various trades, certification is currently being carried out by different training providers working in silos.

Special and inclusive education and STEM are of utmost importance to MoE. However, despite being in the same bureau as TVET, the three areas do not work in tandem as exemplified by the lack of concrete data on special and inclusive education and STEM in TVET. MoE should consider splitting these areas given that TVET is a subsector of the education system, whereas special and inclusive education and STEM are transversal issues of more concern to other subsectors.

At present, there is no regulatory body or policy document to ensure quality assurance of the TVET system. The European Union contributes to filling this gap through its Youth Rising Project 2018–2024, worth US\$25.5 million, implemented by the United Nations Industrial Development Organization (UNIDO). In

Box 6.1: The MoYS and Informal TVET

MoYS oversees the informal TVET institutions under the responsibility of the ministry and takes an oversight role for the TVET institutions accredited by MoE that offer informal TVET. Although MoYS operate seven informal schools, only two are currently operational, namely: (i) the Monrovia Vocational Training Centre with over 3,000 enrolled students; and (ii) the Business and Domestic Occupation Training Centre for underprivileged youth with 324 students.

Other informal schools include: (i) the Klay Agricultural Vocational Training Centre, which is a boarding school with an enrolment target of 250 students; and (ii) the Tumutu Agricultural Vocational Training Centre, which is a boarding school with an enrolment target of 500 students; furthermore, there is (iii) a vocational training centre that specializes in tailoring. These three schools were closed because of the COVID-19 pandemic. Overall, informal schools are overcrowded with nearly 40 students per class.

Students in informal schools are evaluated after a three-month common course, which comprises classes in mathematics, English, physics, and material sciences. If students do well, they follow specialized studies during 12 months at school, which are divided into 30 per cent theory and 70 per cent practical courses. Afterwards, students do a three-month internship before graduation. Students can further undertake an externship in key sectors such as automotive, electricity, welding, and fabrication. Students who fail the common course or who are illiterate are sent directly to a master craftsperson to do an apprenticeship, and they do not follow theory classes.

With its objective of shifting towards a more demand-driven TVET supply, MoYS is stepping up efforts to engage the industry more in curriculum development, training, and work-based learning. Some companies provide students with sponsorships and educational materials.

In contrast with formal TVET where students follow the normal academic process before stepping into the vocational pathway, informal TVET targets illiterate and semi-illiterate youth, in particular, who are offered on-the-job training. MoYS further deals with the recognition of prior learning, essentially gained through traditional apprenticeships, for informal workers who receive a certificate upon assessment.

MoYS has an entrepreneurship programme that teaches students soft skills and delivers entrepreneurship courses, for instance, how to develop a business plan. Seed funding is generally required to start a business. Since access to finance is a big challenge, MoYS provides graduates with start-up kits containing all the materials needed to start on their own, including money for transportation. However, these kits are provided as part of specific projects of limited scale funded by donors.

Source: Interview between P. Suárez Robles and M. Sheriff, Assistant Minister for Vocational and Technical Training, MoYS (07 October 2021).

particular, this project aims to improve the quality, relevance, and modernization of TVET by strengthening links with the private sector and by improving the governance, planning, management, and delivery capacity at governmental and TVET provider level (UNIDO, 2018).

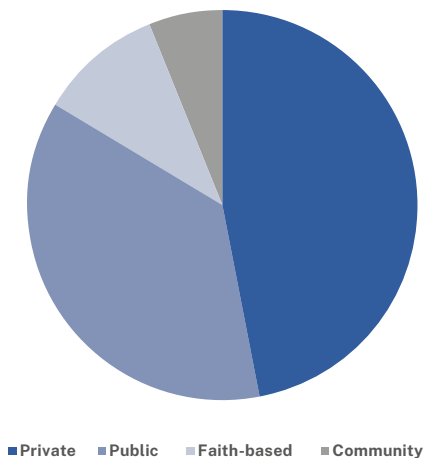
According to the draft National TVET Policy 2022–2027, its first objective will be to improve coordination and governance of the TVET system (Liberia, 2021a). To this end, the draft policy has identified several strategic priorities, including establishing: (i) a coordinating body to harmonize and regulate TVET delivery; and (ii) a framework for supervising, monitoring, and doing quality assurance of TVET. Moreover, as part of its policy objective to improve the quality of TVET programmes, the draft policy foresees to develop, *inter alia*: (i) a national framework for accreditation of training providers and programmes; (ii) a national assessment system; and (iii) a National TVET Qualifications Framework (NTVETQF) (Liberia, 2021a). UNESCO, UNIDO, IECD³⁷ and other partners will provide technical assistance to achieve these goals. Owing to the lack of harmonization of the TVET system, each TVET institution has its own evaluation system. To address this issue, MoE is currently working on NTVETQF which shall consist of seven levels: Proficiency I, Proficiency II, Certificate I, Certificate II, Diploma, associate's degree, and bachelor's degree. The Inter-Ministerial Task Force on TVET has been repeatedly insisting on the importance of assessing with a national qualification framework.

Under the European Union's Youth Rising Project, the development of competency-based curricula is one of the key areas earmarked for TVET reform. Currently, key staffers in MoE, MoYS, as well as in multi-lateral and some other public schools are being trained as curriculum developers using the Developing a Curriculum (DACUM) methodology to orient learning contents to labour market requirements. In addition, as part of the ongoing reform process, employers are systematically becoming involved in the curriculum development process as subject matter experts by providing key information for selected trade areas. The relationship between practical and theoretical contents in the curricula are keenly being considered and will be spelled out when the curriculum development process is completed. For now, practical skills are examinable on a limited scale due to the acute lack of needed equipment and tools in existing workshops around the country. Once developed, the national curricula in the various trade areas will be distributed to all training providers. At this stage, no further adjustments are envisaged and training providers are expected to follow the contents of the new national standardized curricula strictly. For the sake of external efficiency, training providers should be allowed to modify and adjust curricula to some extent in line with local labour market needs.

The European Union's Youth Rising Project focuses substantially on training teachers and upgrading infrastructure. About 80 teachers from South Africa, Lesotho, Gambia, and Kenya have been recruited to

37 Institut Européen de Coopération et de Développement.

Figure 6.1 Distribution of TVET schools by type of ownership, 2019–20



Source: Liberia Education Statistics Report 2019–20 (MoE, 2020c).

undergo advanced skills training abroad in selected key trades, including aquaculture, ICT, carpentry, and agriculture. The next step is to train administrators at the central level to become TVET experts with the ability to assess programmes, which should take place in the coming year. Ten schools are being refurbished and workshops are being equipped fully with state-of-the-art equipment and tools. These include various multilateral schools around the country. The Swedish International Development Cooperation Agency (Sida) provides financial support to a similar project, entitled Promoting Youth Employment Through Support to TVET, which aims to improve teacher capacity and upgrade the TVET provider infrastructure and delivery system in the Lofa and Margibi counties. The European Union's Youth Rising Project further promotes entrepreneurship, which is an area of critical importance given the fact that, on one hand, wage employment opportunities are scarce and, on

the other hand, there is limited entrepreneurship content in the curricula of most training institutions.

According to the Liberia Education Statistics Report 2019–20 (MoE, 2020c), there is a total of 49 TVET schools in the country. The distribution of TVET schools by type of ownership (*Figure 6.1*) shows that nearly half of them are private (46.9 per cent) and over a third are public (36.7 per cent). Liberia only has five faith-based (10.2 per cent) and three community TVET schools (6.1 per cent).

6.1.1.2 Higher education

The higher education system in Liberia comprises three main degree levels: (i) associate's degrees after two-year courses in junior colleges as part of non-university, post-secondary education; (ii) bachelor's degrees generally after two years of general courses followed by two years of specialization in a particular field of study at the university; and (iii) master's degrees generally after two years of university studies beyond a bachelor's degree. Students must pass an entrance examination to access higher education. In Liberia, national languages are not used as a teaching medium.

The higher education system in Liberia does not currently offer doctoral degrees. Notwithstanding, the country has a few students who were given scholarships to do their doctoral studies abroad. According to the National Commission on Higher Education (NCHE), the country should have its first Doctor of Philosophy (PhD) students in a year's time, starting with social sciences and humanities. Other fields such as sciences, which are more demanding in terms of mate-

rial and equipment requirements, are expected to follow. For instance, the University of Liberia is collaborating with universities abroad to develop its own PhD programmes in the coming years. The university plans to create a PhD programme in the field of education first.

Before the second Liberian civil war (1999–2003), there were only two full-fledged universities, namely the University of Liberia and the Cuttington University College (now the Cuttington University). Furthermore, William V.S. Tubman Technical College in Maryland county offers associate's degrees. A couple of post-secondary institutions, namely Leigh Sherman, Lincoln College of Professional Studies, and the Tubman National Institute of Medical Arts, provide certificate and diploma education in various professional and technical disciplines.

Since the end of the civil crisis, the NCHE has established six regional community colleges in the Bomi, Grand Bassa, Nimba, Lofa, Grand Gedeh and Sinoe counties to expand higher education opportunities in rural areas. Additionally, two baccalaureate degree-granting colleges have been established in Gbarnga in Bong county and Harbel in Margibi county to boost higher education access. Lastly, the Liberia Maritime Training Institute, based in Margibi county, reopened in 2017 with their first batch of 24 engineering cadets. As with other national institutions, they faced repeated closures at different periods due to the civil war, the Ebola crisis, and a lack of financial resources.

The NCHE serves as the regulatory body of the higher education system. It was established in 1989 to formulate broad

policy guidelines for establishing higher education institutions (HEIs). The NCHE's mission is to set standards and regulations to ensure that all public, private, and faith-based tertiary education institutions in Liberia create, sustain, and provide relevant and quality higher education. Concretely, the NCHE is responsible for: (i) monitoring, evaluating and accrediting all HEIs; (ii) facilitating the establishment of an autonomous national accreditation centre; (iii) approving new and existing higher education programmes for funding; and (iv) reviewing existing programmes at HEIs with the aim of establishing priority programmes of study based on national needs. However, the oversight role of the NCHE is facing some limitations as government grants and transfers are given to the HEIs directly.

As of 2021, Liberia has a registered total of 53 HEIs duly licensed and accredited by the NCHE, of which 11 are public, 17 private, and 25 faith based. The latter are private institutions sponsored by religious organizations. Teacher training is provided by three RTTIs, which are located in Kakata, Zorzor and Webbo, and by 18 private local teacher training institutes located for the most part in the Montserrado county.

The distribution of HEIs by region and county sheds light on the spatial disparities in the provision of higher education (*Table 6.1*). HEIs are available in only 10 of the 15 counties. The Southeastern and North Western regions are underserved with only two HEIs each compared with 11 HEIs in the North Central region and 37 HEIs in the South Central region. Montserrado county alone has half of all the HEIs in the country, which are all

Table 6.1 Number of HEIs by region and county, 2021

Region	County	Number of HEIs
North Central	Bong	5
	Nimba	4
	Lofa	2
North Western	Bomi	2
	Grand Cape Mount	0
	Gbarpolu	0
South Central	Montserrado	32
	Margibi	4
	Grand Bassa	1
Southeastern A	River Cess	0
	Sinoe	1
	Grand Gedeh	1
Southeastern B	River Gee	0
	Grand Kru	0
	Maryland	1
Total		53

Source: NCHE (2021).

found in Monrovia and surroundings. The latter should be contrasted with the fact that, according to the statistical abstract of the HIES 2016, the Montserrado county accounts for no more than 32 per cent of the total population in Liberia (LISGIS, 2017).

As shown in Table 6.2, few HEIs offer postgraduate education. There are only nine institutions that grant master's degrees, which is equivalent to 17 per cent of all HEIs. The vast majority operate at undergraduate level: 43 per cent offer associate's degrees (23 HEIs) and 40 per

cent offer bachelor's degrees (21 HEIs). Postgraduate education is essential to allow young people to compete for high-skill occupations.

The distribution of HEIs by type of institution and degrees offered points to the need for Liberia to invest more in higher education, especially in postgraduate studies (Table 6.3). Only 11 HEIs are public (21 per cent), whereas 17 are private (32 per cent), and 25 are faith based (47 per cent). Postgraduate degrees are mainly offered by faith-based institutions (six of nine). The majority of public HEIs only deliver asso-

Table 6.2 Number of HEIs by degrees offered, 2021

Degree offered	Number of HEIs
Bachelor's degrees and above (master's)	9
Bachelor's degrees only	21
Associate's degrees	23
Total	53

Source: NCHE (2021).

Table 6.3 Number of HEIs by ownership and degrees offered, 2021

	Associate's degrees	Bachelor's degrees only	Bachelor's degrees and above (master's)	Total
Public	6	3	2	11
Private	9	7	1	17
Faith-based	8	11	6	25
Total	23	21	9	53

Source: NCHE (2021).

ciate's degrees (six of 11). Private HEIs do better with seven of them offering bachelor's degrees (41 per cent) compared with only three public HEIs (27 per cent). In terms of spatial distribution, two-thirds of master's-degree-granting institutions are based in Monrovia. The other three are in the Bong, Margibi and Maryland counties. The Montserrado county has almost all the private HEIs (15 in 17) and the majority of faith-based HEIs (16 in 25).

Overall, the higher education system in Liberia is confronted with major challenges. Despite the relatively high public recurrent expenditure on higher education (see *Chapter 3*), the subsector lacks sufficient resources, including scholarships, to address the increasing number of tertiary students. The University of Liberia is by far the largest HEI in the country. It has close to 20,000 enrolled students, of which 2,000 to 3,000 students graduate every year. With the new tuition policy, all public universities will be tuition-free for undergraduate students. Although they will be not exempted from registration fees, these are relatively low.

Eight-thousand new students are expected to enrol in the University of Liberia the next academic year. Increased resources and investment are needed to

hire more staff, build additional facilities, and purchase the necessary equipment to accommodate the new students. Technology also comes into play. Although blended learning emerged during the COVID-19 pandemic, access to ICT, and even to basic infrastructure services such as electricity, is costly. Students can hardly follow if they are not provided with internet access, computers, or phones. According to the Vice President of the University of Liberia, many of them subsequently drop out (Interview between Suárez Robles and Tweah, 2021).

Scientific research in Liberia is limited. Local scholars and researchers are lacking and the country has to resort to foreign instructors and experts. The University of Liberia is probably an exception. Currently, around 100 faculty members are doing a PhD abroad, for which the university is paying. Once graduated, they will be reincorporated into the faculty. However, since the programme is expensive, the university is trying to reduce costs by not sending staff too far away. The University of Liberia has a research institute that focuses on areas such as economics, peace and stability, democracy, rural law, education, health, and comparative analysis.

Box 6.2: The University of Liberia

The University of Liberia has seven colleges, five graduate programmes, and three professional schools. The colleges specialize in: (i) social sciences and humanities (Liberia College); (ii) business and public administration (A. Romeo Horton College); (iii) general studies; (iv) science and technology (Thomas J.R. Faulkner College); (v) education (William V.S. Tubman College); (vi) agriculture and forestry (William R. Tolbert, Jr. College); and (vii) technical and vocational studies (David Straz-Sinje College).

The graduate programmes focus on: (i) international relations (Ibrahim Badamasi Babangida Graduate Programme); (ii) regional planning; (iii) educational studies; (iv) business and public administration; and (v) environmental studies and climate change.

The professional schools are: (i) the School of Law (Louis Arthur Grimes); (ii) the College of Health and Life Sciences (A.M. Doglioti); and (iii) the School of Pharmacy. There are three institutes, namely the Kofi Annan Institute of Peace and Conflict Transformation, the Institute of Population Studies, and the Confucius Institute.

With one-third of the students enrolled, the Business College is the largest institution. They used to have more enrolled students, but because the labour demand in the business field is declining, more students opt for other fields of study, in particular science and technology. The Liberian economy is investing more in the industry sector (e.g., construction and infrastructure, public utilities such as electricity and water), and increasingly needs a skilled workforce in this domain.

A major problem is the absence of internships, which are not required in the higher education system. Their access is not facilitated by universities, which means that although students can do an internship, they have to find it on their own through informal channels (such as family and friends). In fact, a significant proportion of students already work. For the new generation, the labour market transition is particularly tricky because employment opportunities are scarce. The public sector remains the most attractive as it usually offers better pay and employment stability, but students have better chances of finding jobs in the private sector. However, their employability is undermined by the lack of practical skills and world-of-work knowledge.

The University of Liberia has an office in charge of career guidance, which occasionally invites companies to meet with students. However, the office has not been effective over the past years in strengthening the links between students and employers. Overall, the lack of career guidance is another major weakness of the higher education system.

Self-employment typically accounts for the main entry point in the labour market for low-income economies such as Liberia. The College of Social Sciences started an entrepreneurship programme a couple of years ago that teaches students how to become entrepreneurs, run a business, and follow leadership courses. They also take classes in other colleges, mainly the Business College. The programme includes a business incubator. It was a challenge at the beginning to attract students, especially within the context of the COVID-19 pandemic, but the programme is now raising interest.

Source: Interview between P. Suárez Robles and N. Tweah, Vice President for University Relations, University of Liberia (08 October 2021).

6.1.2 Performance in terms of access and equity

In this second section, we analyse enrolment in TVET and higher education and provide disaggregated data by sex to address equity issues. As discussed below, the administrative data available for the terminal levels of education are limited.

To have a more comprehensive picture of access to TVET and higher education, we also use the HIES 2016. While not directly comparable with administrative data, this household survey – the most recent conducted in Liberia – allows the educational status and attainment of young people (aged 15–35)³⁸ to be documented together with the distribution of current and former TVET students by field and duration of training.

6.1.2.1 Results from administrative data

The lack of consolidated administrative data on higher education impedes us to perform proper analyses on enrolment, as well as on internal efficiency and quality, for this subsector. According to the NCHE (2018), the lack of reliable data has been a challenge over the years to inform policy and planning on higher education in Liberia. In 2012, the NCHE made a first attempt to collect data on HEIs. More recently, the NCHE conducted the National Data Collection on Higher Education Institutions (NDCHEI), precisely

during the academic year 2017/2018, which, according to the institution, offered comprehensive and reliable data on higher education for the first time.

In 2018, after completing the data collection exercise, the NCHE (2018) was supposed to establish a standard database with all the data collected to be made available electronically. However, the IIEP-UNESCO Dakar team could only access partial data, which had significant inconsistency issues. For this reason and at the request of the national technical team, it was decided to not use the NDCHEI 2017/2018 in this chapter. Overall, the lack of resources constitutes a major impediment to the production of yearly statistics on higher education.

That being said, the NCHE is currently conducting a new national data collection exercise on higher education. The process is almost completed and a statistical report is expected to follow. If financial resources are made available, the MoE EMIS Statistics Division will join forces to include a dedicated section in the school census on higher education with comprehensive data for the next academic year. Unfortunately, the IIEP-UNESCO Dakar team only received unofficial data containing limited information before completing the ESA process. In

³⁸ The 15–35 age range was selected to define the youth population because it corresponds with the official definition in Liberia according to the National Youth Policy and Action Plan 2019–2023 (Liberia, 2019b), as well as the definition used in Africa according to the African Youth Charter (African Union, 2006).

Table 6.4 Number of TVET students by sex and type of ownership, 2019/2020

Ownership	No. of men	Percentage	No. of women	Percentage	Total no.
Community	59	66	30	34	89
Faith-based	274	56	214	44	488
Private	4,741	82	1,061	18	5,802
Public	4,879	62	3,057	39	7,936
Total	9,953	70	4,362	31	14,315

Source: Liberia Education Statistics Report 2019–20 (MoE, 2020c).

the absence of more comprehensive and reliable administrative data, we provide a brief overlook of higher education in the next paragraph with the information at hand. For the rest of the section, we turn to the analysis of TVET enrolment.

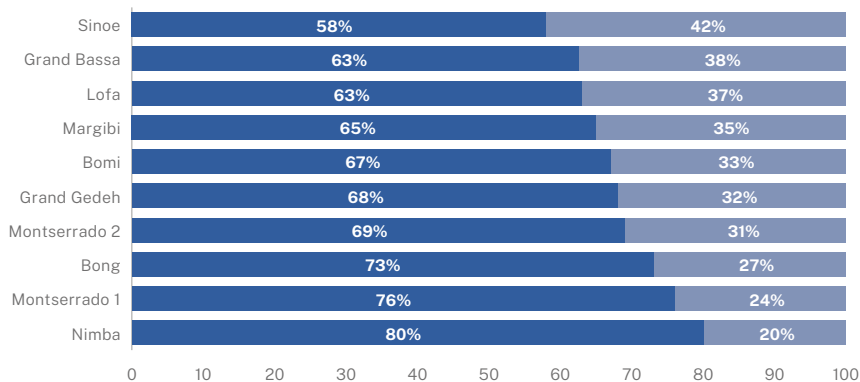
Higher education enrolment increased by 53 per cent from 2016/2017 (51,374 students) to 2020/2021 (78,355 students). In 2020/2021, women accounted for 40 per cent of students in higher education – a share that has declined slightly since 2016/2017 (42 per cent). The number of new entrants in the first year of higher education amounted for 21,903 students in 2020/2021, which corresponds to a 49 per cent increase compared with 2016/2017 (14,665). The share of female students among new entrants decreased from 55 per cent in 2016/2017 to 44 per cent in 2020/2021. In the last academic year, women were slightly overrepresented among repeaters (43 per cent) but much less concerned by school dropout (31 per cent). The higher education system had 7,389 full-time teachers of which barely 16 per cent were women. The majority of teachers held a master's degree (51 per cent) while a residual proportion held a doctoral degree (12 per cent). Teaching staff were primarily composed of instructors (67 per cent), followed by assistant professors (23 per cent). In contrast, there

were only a few professors (1 per cent). While insightful, results presented in this paragraph should be taken with caution until official data are released.

Due to the pending operationalization of LiTCOM and the intermittent schools closure due to the COVID-19 pandemic, recent administrative data on TVET – whether for enrolment, internal efficiency or quality – are currently lacking. The truth is that the MoE has never had consolidated data on TVET since no national data collection exercise has been conducted so far. Existing data are therefore scattered across TVET institutions. However, the MoE is stepping up efforts with financial support from the European Union to fill this gap, starting with the recruitment and training of staff to collect data from the different TVET institutions, which should occur in the coming months. The EMIS team will proceed with data collection in the next academic year and subsequently release a stand-alone statistical report on TVET. As far as this report is concerned, it can only draw on partial data on TVET enrolment taken from the Liberia Education Statistics Report 2019–20 (MoE, 2020c).

In 2019–20, 14,315 students were enrolled in TVET, of which only 31 per cent were women (Table 6.4). Men systematically

Figure 6.2 Distribution of TVET students by sex and county, 2019/2020



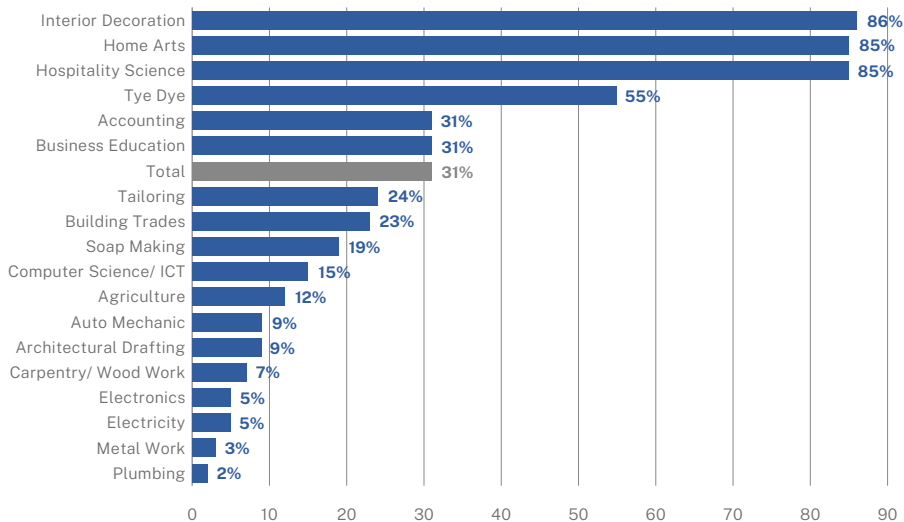
Source: Liberia Education Statistics Report 2019–20 (MoE, 2020c).

Table 6.5 TVET enrolment by field of study, 2019/2020

	Enrolment	Distribution of learners	
		Percentage by field	Percentage of female students
Computer science and ICT	1,852	13	15
Electricity	1,081	8	5
Interior decoration	1,070	7	86
Electronics	1,062	7	5
Hospitality science	985	7	85
Home arts	981	7	85
Architectural drafting	980	7	9
Agriculture	770	5	12
Metalwork	756	5	3
Plumbing	736	5	2
Tailoring	718	5	24
Auto mechanic	712	5	9
Carpentry and woodwork	570	4	7
Business education	497	3	31
Pastry	426	3	89
Accounting	364	3	31
Building trades	326	2	23
Tie-dyeing	285	2	55
Soap-making	144	1	19
Total	14,315	100	31

Source: Liberia Education Statistics Report 2019–20 (MoE, 2020c).

Figure 6.3 Share of female students in TVET by field of training, 2019–20



Source: Liberia Education Statistics Report 2019–20 (MoE, 2020c).

outnumber women regardless the type of ownership of TVET schools. Women are particularly underrepresented in private schools where they account for barely 18 per cent of all students. The highest proportion of female students is found in faith-based schools (44 per cent), followed by public schools (39 per cent).

The spatial distribution of TVET students is highly uneven. Three-fourths of TVET students are concentrated in just four counties, namely Margibi (26 per cent), Montserrado 1 (21 per cent), Montserrado 2 (15 per cent), and Nimba (13 per cent). At the other end of the spectrum, the Bong and Grand Bassa counties account for less than 1 per cent of TVET students. Men systematically outnumber women across counties (Figure 6.2). Women are particularly underrepresented in Bong (27 per cent), Montserrado 1 (24 per cent), and Nimba (20 per cent). The greatest concen-

trations of female students in TVET are observed in Grand Bassa (38 per cent) and Sinoe (42 per cent).

Looking at the distribution of TVET learners by field of study, computer science and ICT stood out with a proportion of students rising to 13 per cent (Table 6.5). In comparison, the second most frequent field of training, namely electricity, attracted only 8 per cent of TVET students. The proportion of TVET learners in most fields of study did not exceed 5 per cent, thus evidencing the fragmented nature of TVET supply in Liberia. Building trades, tie-dyeing, and soap-making displayed the lowest concentrations of TVET students.

The proportions of female students in the different training fields reproduce gender stereotypes (Figure 6.3). Women accounted for a minor share of TVET

students enrolled in some fields deemed as masculine, such as plumbing (2 per cent), metalwork (3 per cent), electricity (5 per cent), electronics (5 per cent), and carpentry and woodwork (7 per cent). Conversely, women were overrepresented in trades deemed as feminine, including interior decoration (86 per cent), home arts (85 per cent), and hospitality science (85 per cent). Breaking the intergenerational transmission of gender stereotypes is key to opening up the entire spectrum of existing education and employment opportunities to women.

There are no scholarships or other financial support schemes in Liberia that specifically target girls or marginalized groups. However, there is a local scholarship scheme that is available to all citizens without discrimination. In fact, at the time of writing, Liberia launched a L\$105 million free education scholarship scheme for all students from public schools in the country with Bong, Nimba and Margibi counties taking the lead.

For equity reasons, Liberia should consider providing targeted financial support to girls and other vulnerable youth like other countries in the region do. For instance, Sierra Leone recently adopted an updated grant-in-aid policy that provides women with automatic scholarships when applying to courses in science, technology, engineering, agriculture, and mathematics (STEAM). The country aims to expand this policy to government technical institutes to

increase enrolment of women in TVET courses (Sierra Leone, UNICEF, and IIEP-UNESCO, 2020).

6.1.2.2 Results from household survey data

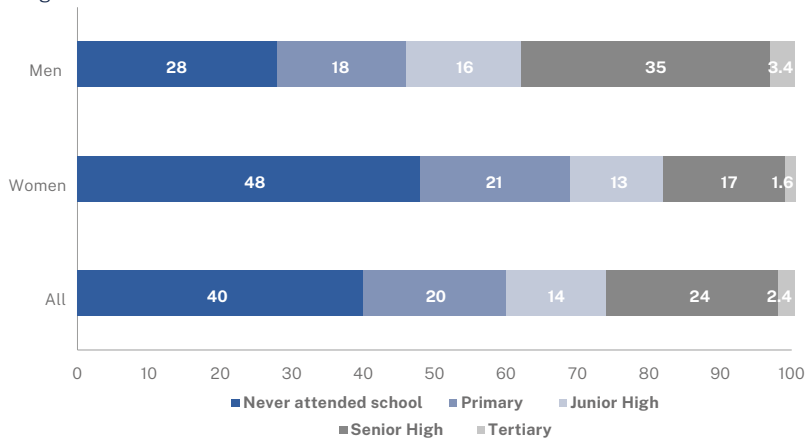
Let us first look at the youth distribution by highest level of formal education³⁹ attained and sex, excluding current students, in 2016 (*Figure 6.4*). According to HIES 2016 data, 40 per cent of youth never attended school (LISGIS, 2017). Young women were much more affected by education exclusion (48 per cent) than young men (28 per cent). Tertiary education is out of reach for the vast majority of youth. Indeed, only 2.4 per cent have attained this level, with young women lagging noticeably behind (1.6 per cent versus 3.4 per cent for young men).

TVET – defined in the HIES as any polytechnic, vocational or adult education classes – proves to be more accessible to youth. One in 10 youth have attended TVET (10.3 per cent), of which 7.8 per cent had already completed their training, and 2.5 per cent were still attending (*Figure 6.5*). In 2016, similar proportions of young men and young women attended TVET (2.6 per cent versus 2.4 per cent). This finding is in line with previous results from administrative data showing that female students were slightly outnumbered overall by male students in TVET.

However, when it comes to TVET completion, a different story emerges. While 9.5 per cent of young men completed

³⁹ In the HIES, formal education excludes preschool and TVET (polytechnic, vocational and adult education classes).

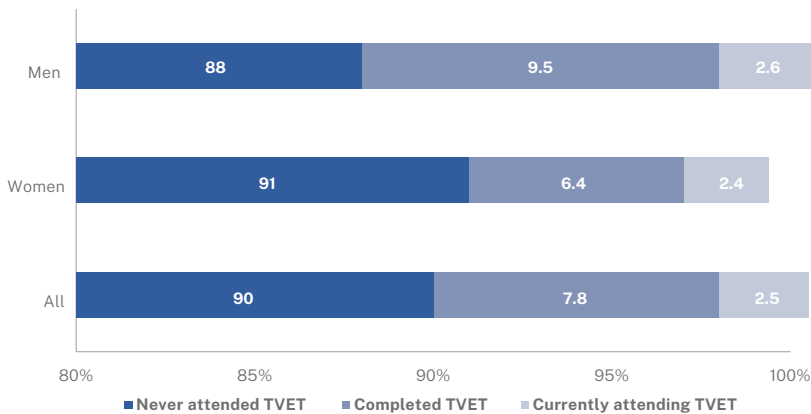
Figure 6.4 Youth distribution by highest level of formal education attained and sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded.

Figure 6.5 Youth distribution by current status in TVET and sex, 2016, percentage



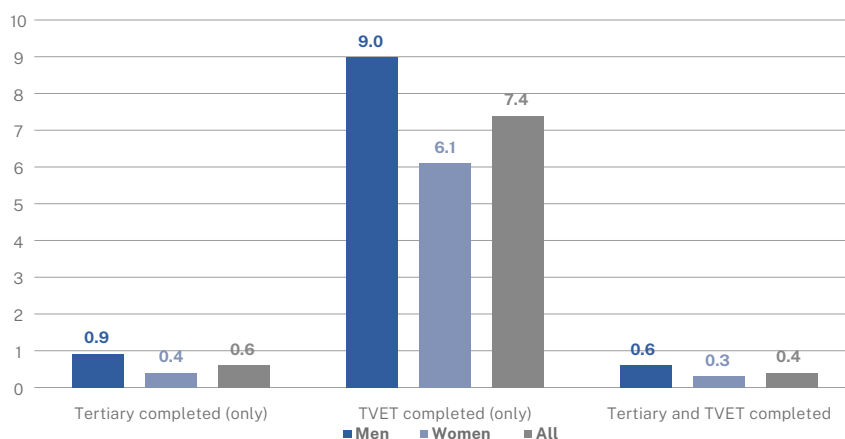
Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. TVET refers to any polytechnic, vocational or adult education classes.

TVET studies, only 6.4 per cent of young women did. In other words, female students were more prone to drop out of the TVET system than their male counterparts. As seen before, only a few young people, especially women, attained tertiary studies. Figure 6.6 shows that even fewer people completed their

studies – barely 1 per cent overall. Young women once again lagged behind, with only 0.7 per cent having completed tertiary studies as compared with 1.5 per cent of young men. In short, young women are disadvantaged both in terms of access and completion in the higher education system. Completing both tertiary and

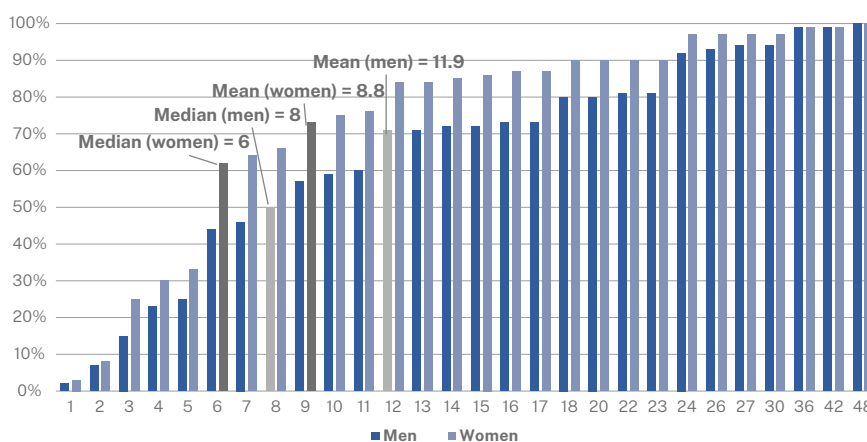
Figure 6.6 Youth with completed tertiary and/or TVET education by sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Tertiary education completed only if associate's degrees (AAD), final year of bachelor's degrees (U4), or master's degrees and above (> U5).

Figure 6.7 Cumulative distribution of young TVET students by training duration and sex, 2016, months



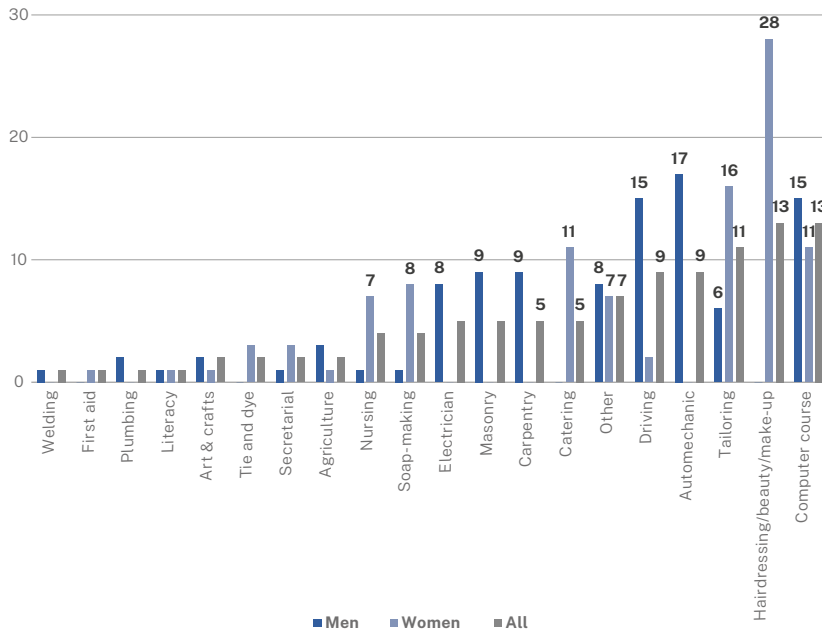
Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current and former TVET students are included. TVET refers to any polytechnic, vocational or adult education classes.

TVET studies is very rare, concerning just 0.4 per cent of young people. As shown later, tertiary-educated youth are disproportionately hit by unemployment.

Embarking on a TVET programme might help the youth to acquire more practical skills and enhance their employability.

Figure 6.8 Distribution of young TVET students by field of training and sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current and former TVET students are included. TVET refers to any polytechnic, vocational or adult education classes.

The length of training differed across sexes (Figure 6.7). Half of female TVET students followed at least a six-month training course. In turn, the median training duration for male students is eight months. The gap widened when calculating the average training duration due to the presence of outliers in the male distribution, which meant that some male students followed particularly long TVET studies (up to 72 months). Concretely, the average training duration stood at 8.8 months for female students and 11.9 months for male students.

Figure 6.8 displays the distribution of young TVET students by field of training and sex, accounting for both former and

current students, in 2016. In line with the administrative data presented previously, we found that computer science was the most frequent field of training (13 per cent) overall, and that the various TVET fields exhibited a marked gender divide. As many as 28 per cent of female learners opted for the fields of hairdressing, beauty, and make-up. In comparison, virtually none of the male learners did. Conversely, male learners primarily opted for auto mechanics (17 per cent), which is a field of training that only gathered a handful of female learners (0.4 per cent). Plumbing, welding, carpentry, and electrician are other fields that did not attract female learners. Men were reluctant to engage in catering, first aid, tie-dyeing, and nursing.

A recent study conducted a job demand and employment market analysis to identify sectors of activity with the highest potential in terms of employment opportunities for adolescent girls and young women (BRAC, FHI 360 and NoVo Foundation, 2019). These sectors include electricity, transportation, infrastructure, ICT, agriculture, services, tourism, and manufacturing. The report concluded that adolescent girls and young women should be provided with more specialized technical skills in trades such as electrician work, carpentry, bricklaying, and plumbing. Moreover, they should be sensitized on the potential of the agri-

cultural market and develop agriculture specific skills.

Figure 6.3 (administrative data) and *Figure 6.8* (household survey data) cast no doubt that, although classifications differ, female TVET students are underrepresented in most key sectors and trades. Women should be incentivized to undertake TVET studies in these fields as they offer a comparative advantage. More generally, TVET needs to be more demand-driven. By prioritizing these fields of training, the TVET system will better speak to labour market needs and contribute mitigating prevailing skills mismatches.

6.2 Labour market relevance of TVET and higher education

The objective of the second part of the chapter is to cast new light on the youth labour market outcomes, focusing on the potential role of the terminal levels of education in helping youth secure decent jobs. It raises critical questions for policymakers in Liberia where demographic pressure and low job creation aggravate the youth employment challenge. To what extent do TVET and higher education increase the youth's chances to access employment, complete the labour market transition, and occupy decent jobs? By addressing these questions, we can draw conclusions on how well education speaks to economic demand and labour market needs.

To this end, we use the HIES 2016 (LISGIS, 2017). Furthermore, a less recent survey, namely the School-to-Work Transition Survey conducted in 2014, allows us to comprehensively analyse youth labour market outcomes thanks to the detailed retrospective data (ILO, 2014). Unfortunately, the number of observations for terminal levels of education is overly small to produce reliable results.

6.2.1 Youth access to employment and labour market transition

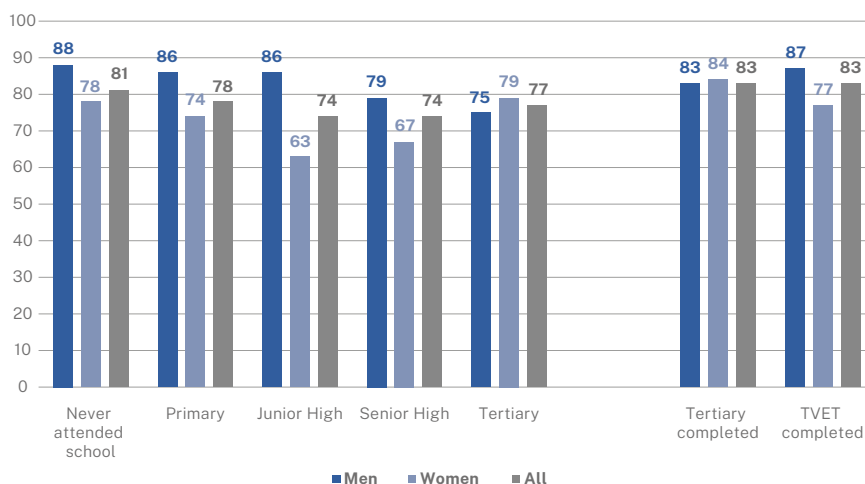
We first draw on employment, unemployment as well as not in employment, education or training (NEET) figures to gauge how easy it is for youth to access employment depending on their highest level of education attained or completed. Thereafter, the focus is on the labour market transition stages to evidence those youth who succeeded in completing the transition to stable or satisfactory employment. In addition, we take advantage of the possibilities offered by the HIES data to analyse youth's access to their first job and the transition length for youth who have completed tertiary or TVET studies.

While high overall, the youth employment/population ratio tends to decline with educational attainment. In 2016, the ratio ranged from 81 per cent for youth who have never attended school to 74 per cent for youth who have attained a senior secondary school certificate (Figure 6.9). However, pursuing studies at the tertiary level proves to pay off, at least for women. Indeed, 77 per cent of tertiary-educated youth were employed,

which is 3 percentage points more than youth with senior secondary education. The level of employment is 79 per cent for women compared with 75 per cent for men. Moreover, youth register even higher employment gains by completing studies at terminal levels. The highest employment/population ratio, standing at 83 per cent, is observed among youth who have completed TVET or tertiary education. However, while tertiary completion leads to similar levels of employment across sexes with a slight advantage for women (84 per cent versus 83 per cent for men), women appear to suffer from a substantial employment penalty when completing TVET studies (77 per cent versus 87 per cent for men). As seen before, female students tend to be underrepresented in fields of training that offer better employment prospects. In short, the best option to access employment is for young men to complete TVET studies and for women to complete tertiary education.

Conversely, youth unemployment increases steadily with educational attainment up to the tertiary level. According to

Figure 6.9 Youth employment/population ratio by highest level of education attained and sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

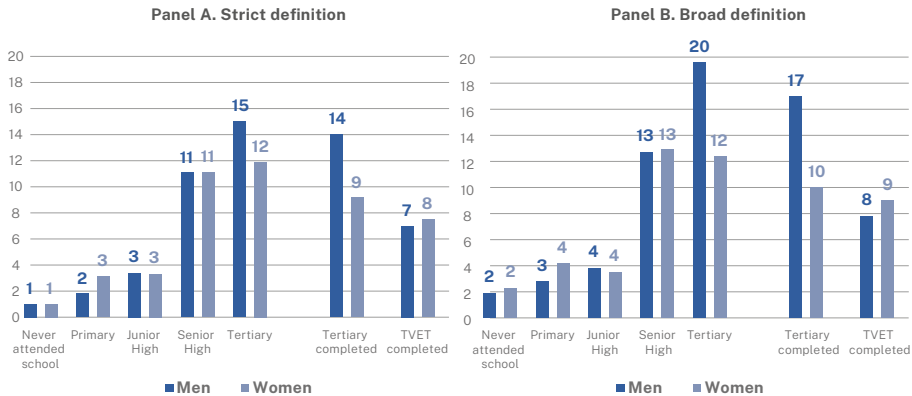
Note: Youth are aged 15–35. Current students are excluded. Results for tertiary, and tertiary completed for women should be treated with caution because of the overly low sample sizes (respectively, 39 and 28 observations).

the strict definition thereof,⁴⁰ the youth unemployment rate did not exceed 1 per cent in 2016 among youth with no formal schooling in comparison to 13.8 per cent for tertiary-educated youth. Educated youth typically come from well-off families and can more easily afford to remain unemployed while queuing for better jobs. Excess labour supply for skilled jobs also comes into play, leading to protracted unemployment spells. In turn, uneducated youth from poor backgrounds generally have no choice but to take whatever jobs they can find to sustain their livelihoods. This situation is exacerbated by the absence of social safety nets and the fact that labour is typically the main source of income for households and is, therefore, critical for the family's survival.

Young men and women alike display increasing levels of unemployment with educational attainment, but young women fare better at the tertiary level. In 2016, the unemployment rate was 11.9 per cent for young, tertiary-educated women compared with 15.0 per cent for their male counterparts (Figure 6.10, Panel A). Completing terminal levels of education reduces the risk of youth unemployment, although the impact is limited for tertiary studies, especially for men. Indeed, the unemployment rate goes down to just 14.0 per cent for young men and, more remarkably, to 9.2 per cent for young women who have completed tertiary education. In sharp contrast, the unemployment rate plummets by half among youth who have completed their TVET

40 See Box 6.3 for the definitions of the key indicators of access to employment (ILO, 2013c).

Figure 6.10 Youth unemployment rate by highest level of education attained and sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. Results for tertiary and tertiary completed for women should be treated with caution because of the overly low sample sizes (strict definition: respectively, 34 and 25 observations; broad definition: respectively, 35 and 26 observations).

studies, reaching almost identical levels for young men (7.0 per cent) and young women (7.5 per cent). These results advocate for redirecting part of the tertiary students, above all men, to vocational training and preventing dropouts to minimize the risk of unemployment.

The strict definition of unemployment, as defined by the International Labour Organization (ILO, 2013c), is often perceived as too restrictive in developing countries where most people find work through informal channels. When using the broad definition, which relaxes the job search criterion, the youth unemployment rate rises mechanically. However,

the increase is more pronounced at the tertiary level, rising from 13.8 per cent (strict definition) to 16.8 per cent (broad definition). However, while the unemployment rate remains fairly stable for young, tertiary-educated women (+0.5 percentage points based on the broad definition), it soars for young, tertiary-educated men (+4.6 percentage points) (Figure 6.10, Panel B). We observe similar results among youth who have completed tertiary studies. Conversely, among youth who completed their TVET studies, moving to the broad definition leads to a higher increase in youth unemployment for women (+1.5 percentage points versus +0.8 percentage points for

Box 6.3: Definitions of key indicators of access to employment

Youth employment/population ratio: number of employed youth expressed as a percentage of the total youth population.

Employed youth include all those who during the reference period (last 7 days prior to the date of interview): (i) worked as an unpaid apprentice even if just for one hour; (ii) worked as an employee for a wage, salary, commission or any payment in kind, including doing a paid apprenticeship, domestic work or paid agriculture (farm, livestock, fisheries) work even if for one hour; (iii) ran/operated a non-farm business of any size either owned by the individual or by the household; (iv) helped in any kind of non-farm business run by the household, even if for one hour; (v) worked on household farm activities (including raising livestock or producing crops, whether for sale or for household food) even if just for one hour; or (vi) did not do any work but did have a job or own farm or enterprise at which she/he will definitely return to work.

Youth unemployment rate: number of young unemployed workers expressed as a percentage of the youth labour force (young employed and unemployed workers).

According to the *strict definition*, *unemployed youth* include all those who: (i) were not employed during the reference period; (ii) were available for work during the last 30 days; and (iii) took any steps within the past 30 days to look for work.

According to the *broad definition*, *unemployed youth* include all those who: (i) were not employed during the reference period; and (ii) were available for work during the last 30 days. The broad definition, which relaxes the job search criterion, is used in contexts, typically in developing countries, where people resort to informal channels (family and friends) to find a job. In addition, the broad definition allows capturing discouraged workers who give up the job search, for instance, because of the lack employment opportunities or their inadequate skills.

Youth NEET rate: NEET stands for not in employment, education or training. It is calculated as the number of youth NEETs expressed as a percentage of the total youth population.

Youth NEETs include all those who, during the reference period, were not: (i) employed; and (ii) attending formal education or TVET (any professional, polytechnic, vocational or adult education class). Youth NEETs can be split into unemployed (broad definition) and inactive non-students.

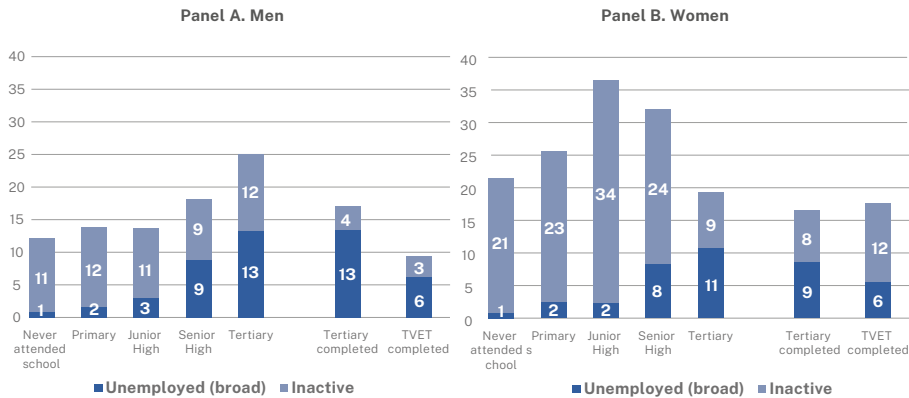
Source: ILO (2013c).

Note: Operational definitions adapted to the HIES 2016 (LISGIS, 2017).

men). What do these findings tell us? Essentially that a non-negligible share of young people, primarily men with tertiary education and women with TVET studies, give up their job search and are discouraged. In the context of low-income coun-

tries, discouragement mostly results from a lack of employment opportunities and skills mismatches. More demand-driven and gender-sensitive TVET and higher education systems would definitely help in tackling young labour underutilization.

Figure 6.11 Youth NEET rate by highest level of education attained and sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. Results for tertiary and tertiary completed for women should be treated with caution because of the overly low sample sizes (respectively, 39 and 28 observations).

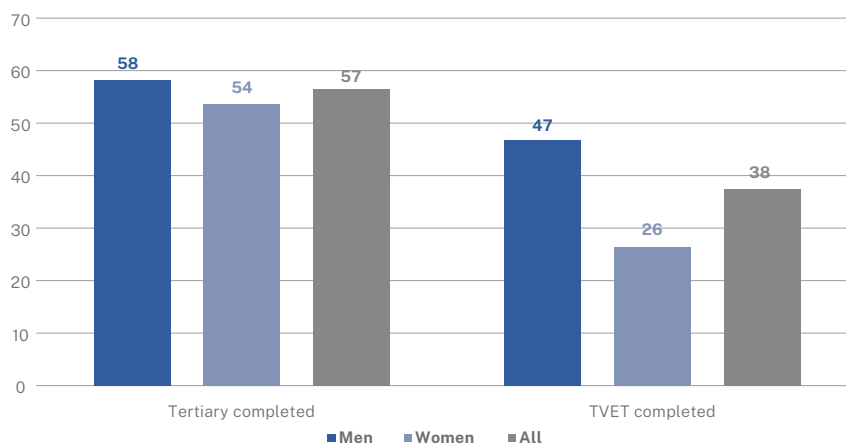
However, the Liberian economy needs to create sufficient skilled jobs to accommodate the educated workforce. As this will take time, the country should in the short run channel labour mobility from sectors and trades with excess supply to those that are expanding and labour-intensive.

Beyond discouragement, idleness is a major matter of concern that does not spare tertiary-educated youth. The youth NEET rate provides a measure of youth who are outside the formal education system – not in training and not in employment – and thus serves as a broader measure of potential youth labour market entrants than youth unemployment. It includes both discouraged workers and those who are economically inactive due to disability and engagement in household chores, among other reasons (ILO, 2013a).

Figure 6.11, Panel A, shows that one-fourth of young, tertiary-educated men are NEETs (25.0 per cent), which amounts to 7 percentage points more than those who

have attained a senior secondary school education (18.0 per cent) and the double of those who have never attended formal education (12.1 per cent). In sharp contrast, among young women, those with tertiary education are the least prone to become NEET, yet at 19.3 per cent, the figure is far from satisfactory (Figure 6.11, Panel B). The composition of NEETs provides other remarkable facts. Although the share of discouraged workers increases overall with educational attainment as expected, female NEETs remain inactive across schooling levels to a large extent, even when they have completed tertiary or TVET studies. Accordingly, education in Liberia does not seem to release women from their responsibilities in the domestic realm. Young, tertiary-educated women are nonetheless two to three times less likely to be inactive than those with lower levels of education. As for young men, the risk of becoming NEET reduces substantially when they have completed tertiary education (17.0 per cent), and above all, TVET studies (9.3 per cent).

Figure 6.12 Youth who found a job after completing tertiary education or TVET by sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Results for tertiary completed for men and women should be treated with caution because of the overly low sample sizes (respectively, 43 and 23 observations), and the overly high shares of missing values (respectively, 21,8 per cent and 17,9 per cent).

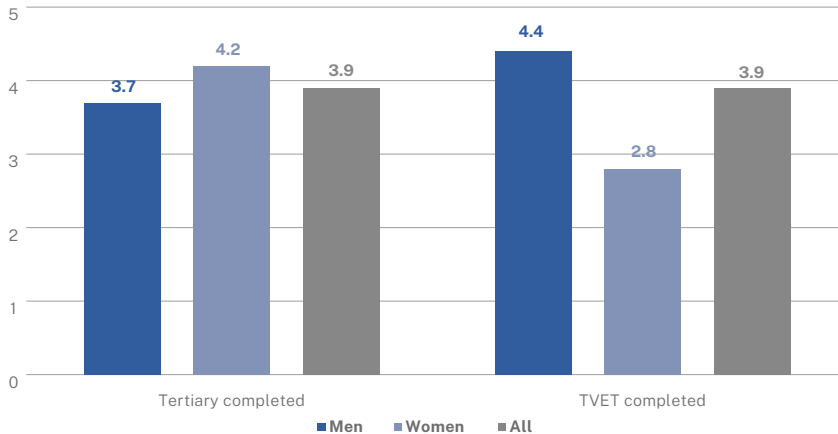
Overall, employment, unemployment and NEET statistics converge on the conclusion that completing terminal levels of education noticeably eases access to employment. However, there is a strong gender divide whereby TVET tends to benefit young men whereas tertiary education tends to benefit young women. Nonetheless, many youth are left behind who end up joining the ranks of unemployment, discouragement and idleness.

We now turn to the analysis of the labour market transition, beginning with access to first job and transition length for youth who have completed tertiary or TVET studies. As shown in Figure 6.12, the majority of youth found a job in 2016 after completing tertiary studies, precisely 57 per cent. Access to a first job appears to be a bit easier for young men (58 per cent) than young women (54 per cent). The transition is less automatic upon

completion of vocational training. Indeed, only over a third of youth found a job after completing TVET studies (38 per cent). Unsurprisingly, young women lag far behind: only a quarter found a job (26 per cent) in contrast with close to half of young men (47 per cent). The fact that access to a first job appears to be easier with tertiary education somehow comes as a surprise in light of previous results. In any case, this finding should be taken with caution due to some data measurement issues (see the note below Figure 6.12).

Among those who accessed a first job, the transition length proved to be rather short at 3.9 months on average for both tertiary education and TVET (Figure 6.13). However, young men and women are not on equal footing once again. After completing tertiary studies, young women spend a little bit longer transiting to their first job (4.2 months) than young

Figure 6.13 Average transition length between tertiary education or TVET completion and access to first job by sex, 2016, months



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Results for tertiary completed for men and women should be treated with caution because of the overly low sample sizes (respectively, 26 and 11 observations).

men (3.7 months), albeit the difference is anecdotal. By contrast and unexpectedly, young women need much less time to access their first job (2.8 months) than young men (4.4 months) after completing TVET studies.

These findings are difficult to interpret in the absence of qualitative information on the jobs held. Young people's first jobs are not necessarily stable or self-satisfactory, in which case we can hardly conclude that the labour market transition has been completed. Therefore, in the remaining paragraphs we turn to a more comprehensive analysis of the labour market transition that assesses the quality of jobs.

The ILO (2017a) definitions were used to define three labour market transition stages based on employment stability and job satisfaction: (i) transited, (ii) in transition, and (iii) transition not yet started. Transited youth include those not in school and employed in a stable job, a

temporary but satisfactory job, or in satisfactory self-employment. Youth in transition include economically active students, unemployed non-students, and those not in school and employed in non-satisfactory temporary jobs or self-employment. Finally, transition not yet started applies to all economically inactive youth. For more details, see Box 6.4.

Tertiary education offers the highest chances for youth to complete their labour market transition. In 2016, the share of transited youth reached 58 per cent for young men and 53 per cent for young women with tertiary education (Figure 6.14, Panels A and B). On the positive side, these proportions are well above those seen among less educated youth, especially for young women. On the negative side, they indicate that a large part of tertiary-educated youth, in particular women, remain in transition. Completing tertiary studies is even more rewarding, leading to shares of transited youth as

Box 6.4: Definition of labour market transition stages

Transited if currently not in school and employed in: (i) a *stable job* (paid employees or apprentices with a permanent position, or with a fixed-term position of at least a one-year duration); (ii) a *satisfactory temporary job* (paid employees or apprentices with a temporary, seasonal, freelance or self-employed position, who declared being satisfied with their job); or (iii) *satisfactory self-employment* (own-account workers, employers and contributing family workers who declared being satisfied with their job).

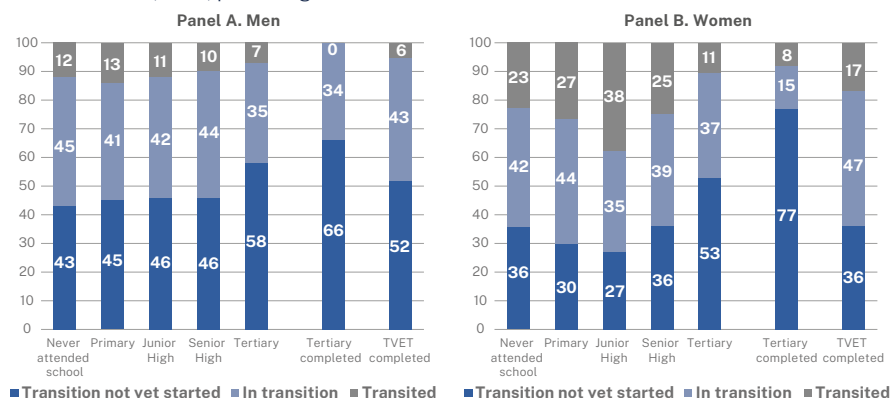
In transition if currently not in school and: (i) *unemployed* (broad definition); (ii) employed in a *non satisfactory temporary job* (paid employees or apprentices with a temporary, seasonal, freelance or self-employed position, who declared being indifferent or dissatisfied with their job); (iii) employed in *non satisfactory self-employment* (own-account workers, employers and contributing family workers who declared being indifferent or dissatisfied with their job); or (iv) employed in an *unpaid apprenticeship*. Are also considered to be in transition all active students, whether employed or unemployed (broad definition).

Transition not yet started if currently: (i) *inactive student*, or (ii) *inactive non-student*.

Source: ILO (2017a).

Note: operational definitions adapted to the HIES 2016 (LISGIS, 2017).

Figure 6.14 Youth distribution by labour market transition stage, highest level of education attained and sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. Results for tertiary and tertiary completed for women should be treated with caution because of the overly low sample sizes (respectively, 35 and 25 observations).

high as 66 per cent for men and, strikingly, 77 per cent for women. In other words, a large majority of youth who have completed tertiary education, especially women, succeed in transiting to stable or satisfactory employment.

Beyond the labour market transition, these findings give us first insights into the role of tertiary education in helping youth secure decent jobs. Unfortunately, the same does not seem to hold for vocational training. Indeed, TVET completion leads to quite modest outcomes, not to say disappointing in the case of women, for a terminal level of education. In 2016, the share of transited youth who

completed TVET studies stood at only 52 per cent for men and did not exceed 36 per cent for women. Accordingly, concerns arise over the quality of jobs held by youth, starting with women, who went through TVET.

It is well-known that the youth employment challenge in Africa lies mainly in the low quality of employment – and not in the quantity of jobs – owing to widespread poverty and the crushing weight of the informal economy. Cognizant of this fact, we explore the characteristics of youth jobs in more detail in the last section and evaluate how these differ according to the level of education.

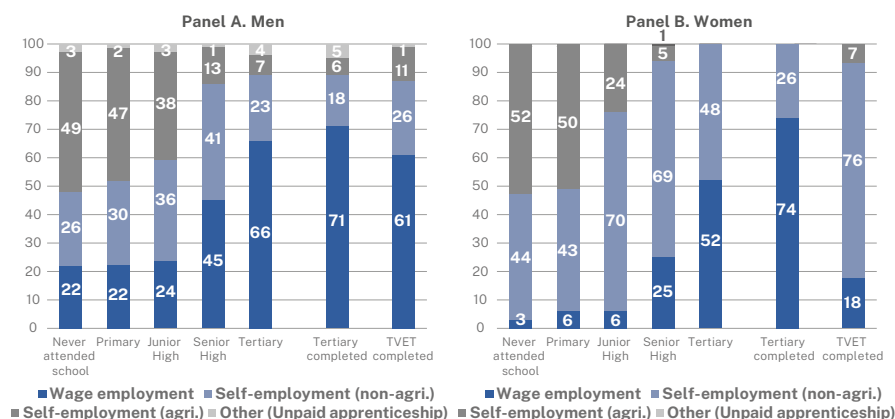
6.2.2 Youth employment quality

We lastly analyse the quality of jobs occupied by the youth to evidence the extent to which terminal levels of education ease access to decent work. To this end, we rely on a wide range of labour market indicators, including employment status, vulnerable employment, informal employment, occupational skill levels, qualification mismatches, average wages, low pay rate, and job satisfaction. However, due to data limitations in the HIES 2016 (LISGIS, 2017), most indicators are only available for young employees, leaving aside the vast bulk of working youth engaged in self-employment activities. Moreover, the numbers of observations for tertiary education and TVET is not large enough to produce reliable sex-disaggregated statistics for the population of young employees. Furthermore, the HIES 2016 uses operational definitions that do not always comply with ILO guidelines. Consequently, labour market indicators such as employment status, vulnerable employment, and informal employment

have to be adjusted according to the information available, and should be therefore considered as proxy measures.

Tertiary-educated youth mostly end up working as paid employees, with wage employment being clearly out of reach for less educated youth, especially women. *Figure 6.15* displays the distribution of young workers by status in employment according to sex and the highest level of education attained. Two-thirds of tertiary-educated men in 2016 were in wage employment (66 per cent) compared with only half of women (52 per cent). The share of wage-employed youth increases with educational attainment, climbing sharply from senior secondary school to tertiary education. Two positive outcomes for tertiary-educated women are worth to mention. First, they are twice as likely to occupy a wage job as women with a senior secondary school education. As for less educated women, very few access wage employment, not exceeding 3 per cent of

Figure 6.15 Distribution of young workers by employment status, highest level of education attained and sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded.

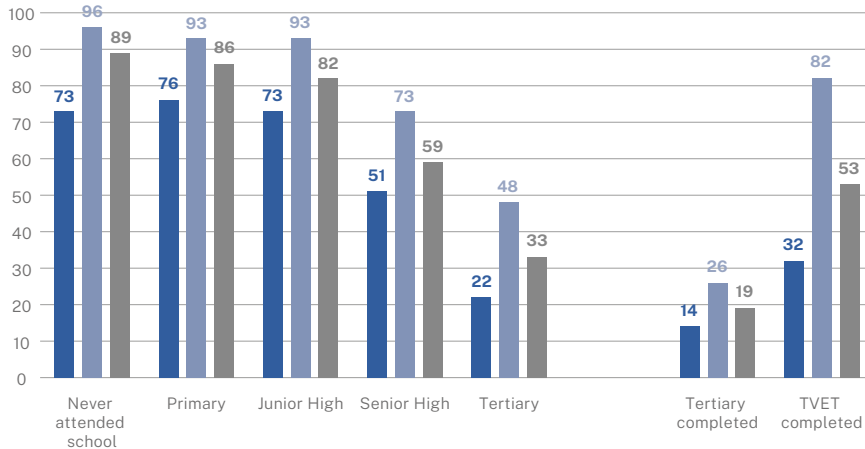
those with no formal schooling. Second, their wage employment rate increases by 22 percentage points, reaching 74 per cent, when they complete tertiary studies. Although the same holds true for men, the differences are much less pronounced. Besides, fewer men (71 per cent) who have completed tertiary studies are found in wage employment than women.

In turn, wage jobs are less accessible to the youth who have completed TVET studies. At 61 per cent, men still comprise a commendable share of paid employees, but the situation for women appears extreme: only 18 per cent work in wage employment. Interestingly, we observe the same patterns as those seen before with labour market transition. Indeed, findings provide additional evidence regarding the importance of completing tertiary education to access decent work, especially for women, as well as the inability of the large majority of women to secure quality jobs through TVET.

Hence, young women who have completed TVET studies fall back on self-employment activities outside the agricultural sector (76 per cent versus 26 per cent for men). Even young, tertiary-educated women engage in such activities (48 per cent). By contrast, agricultural self-employment essentially draws on the pool of poorly educated youth, gathering as many as 52 per cent of women and 49 per cent of men with no formal schooling. Unpaid apprenticeships are rare overall. The flexible work arrangements offered by self-employment makes it particularly attractive to women who typically bear the brunt of domestic tasks.

The ILO (2020) includes own-account workers and contributing family workers in the definition of vulnerable employment. In sub-Saharan Africa, close to eight in 10 working youth are in vulnerable employment, which is often characterized by inadequate earnings, poor working conditions, and other notable work defi-

Figure 6.16 Youth vulnerable employment rate by highest level of education attained and sex, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. Vulnerable employment includes own-account workers and contributing family workers in the non-agriculture sector, and self-employed workers in the agriculture sector.

cits (ILO, 2020). As the HIES 2016 does not rely on the International Classification of Status in Employment (ILO, 1993), we were not able to exclude employers operating in the agricultural sector from the definition of vulnerable employment. However, overall, employers account for a small residual share of working youth in sub-Saharan Africa (ILO, 2020). This is even more true in agriculture, where self-employed workers are mostly confined to small-scale subsistence activities.

Figure 6.16 illustrates quite well how school progression prevents a posteriori the advent of vulnerable employment among youth, which decreases from 73 per cent for men with no formal schooling to 22 per cent for men with tertiary education. Unsurprisingly, women fare much worse with corresponding figures ranging from 96 per cent to 48 per cent. Again, completing tertiary education pays off, but TVET remains strongly asso-

ciated with vulnerable employment with women being hit severely (82 per cent versus 32 per cent for men). As discussed, the prevailing gender-based occupational segregation does not favour women. The TVET system should pay particular attention to career guidance and customize services to women's needs while tackling deeply rooted gender stereotypes. With this, we end the gender analysis and turn to the particular case of paid employees, for which data limitations impede the computation of reliable sex-disaggregated statistics.

Informal employment is unquestionably the most salient and pervasive feature of labour markets in developing and emerging countries. Measuring informal employment allows one to go a step further to capture the extent of the decent work deficit in an economy more comprehensively. Informal employment is defined as 'all remunerative work that is not regis-

tered, regulated or protected by existing legal or regulatory frameworks, as well as non-remunerative work undertaken in an income-producing enterprise' (ILO, 2003). Although informal employment plays a key role in poverty reduction as the main source of income for the poor, it is unenviable in most cases as it encompasses those jobs that lack basic social or legal protection, or employment benefits, and that may be found in both the informal and the formal sectors of the economy. In sub-Saharan Africa, non-agricultural employment accounts for two-thirds of informal workers (66 per cent) – a sizeable share that is nonetheless largely underestimated given the weight of agriculture in African economies (ILO, 2013b). More recent estimates show that informal employment as a whole represents 70 per cent of all employment in developing and emerging countries. Sub Saharan Africa is the most affected region with as many as 89 per cent of workers occupying informal jobs with these individuals facing high risks of falling into the poverty trap (OECD/ILO, 2019).

The international statistical definition of informal employment⁴¹ considers all informal workers, irrespective of the type of production units they work in, such as formal sector enterprises, informal sector enterprises, and households (ILO, 2013b). As our analysis is limited to wage employment, we define informal employment based on the information available in the

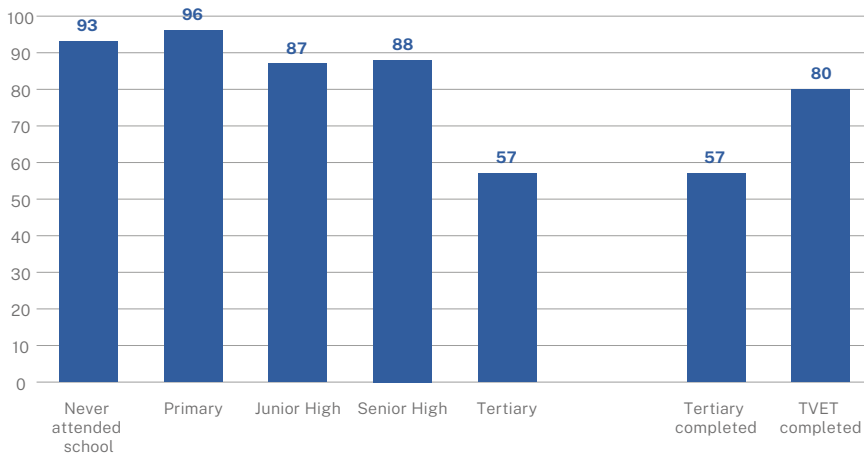
HIES 2016 to comprise all paid employees who are not registered with an employer's pension scheme or who do not have access to health insurance benefits.

Informal wage employment remains the norm among the young population in Liberia, yet tertiary education noticeably reduces the risk of ending up working informally. In 2016, the youth informal wage employment rate reached considerable levels, even for youth with a senior secondary school education who were nine-tenths as likely to work informally (88 per cent) (*Figure 6.17*). In developing countries, the pressure exerted by the surplus of low-skilled young labour market entrants continues to be a major driver of informal employment (OECD/ILO, 2019). The rate drops to 57 per cent for tertiary-educated youth, which still is far from satisfactory. In line with previous results, we find that TVET completion, which registers a level of youth informal wage employment as high as 80 per cent, is definitely not a guarantee against poor quality employment.

From an education system perspective, what matters particularly is the occupational skill level of former students. Unsurprisingly, virtually none of the young employees with primary schooling occupy high-skilled, non-manual positions (*Figure 6.18*). Young employees who have attained junior secondary school do not really do better at 2 per cent. A senior secondary

41 Based on the Seventeenth International Conference of Labour Statisticians guidelines, whose contextual framework links the enterprise-based concept of employment in the informal sector in a coherent and consistent manner with a broader, job-based concept of informal employment (ILO, 2013b). It encompasses informal workers in: (i) formal sector enterprises (contributing family workers and informal employees); (ii) informal sector enterprises (own-account workers, employers, contributing family workers, informal employees and members of producers' cooperatives); and (iii) households (own-account workers and informal employees).

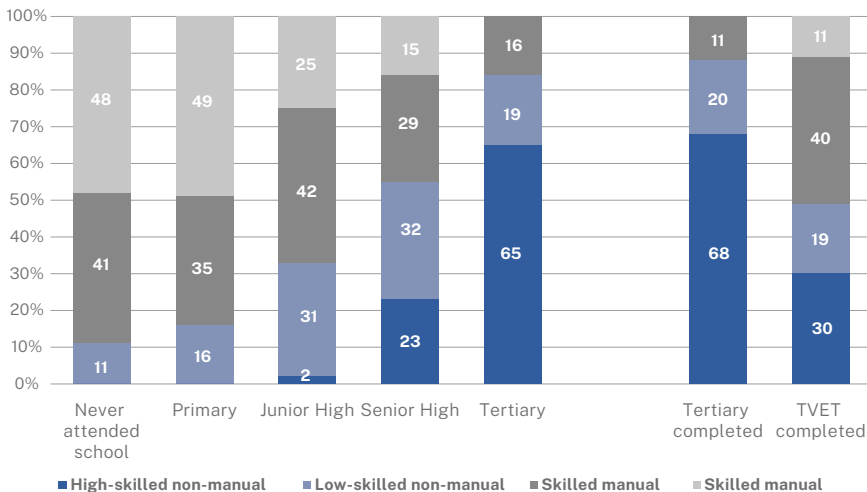
Figure 6.17 Youth informal wage employment rate by highest level of education attained, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. Informal wage employment includes paid employees/apprentices who are not registered with an employer's pension scheme or who do not have access to health insurance benefits.

Figure 6.18 Distribution of young employees by occupational skill level and highest level of education attained, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

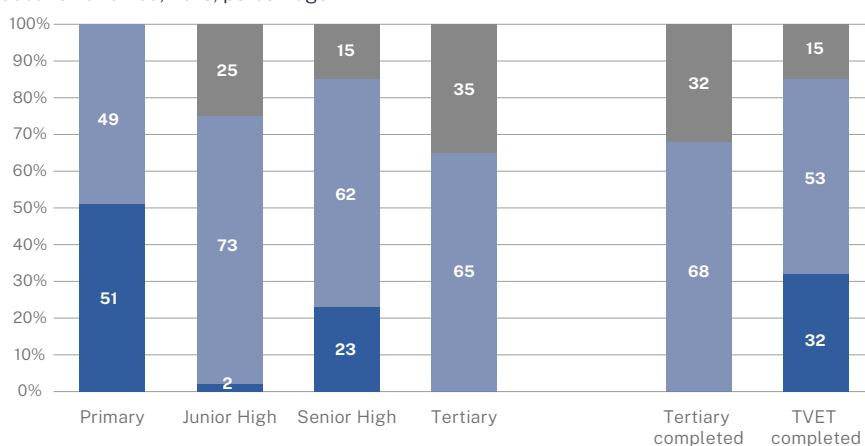
Note: Youth are aged 15–35. Current students are excluded. Occupational skill levels are defined based on the International Standard Classification of Occupations 2008 (ISCO-08) (ILO, 2012). Unskilled includes elementary occupations (ISCO-08 major group 9). Skilled manual includes skilled agricultural, forestry and fishery workers (6); craft and related trades workers (7); and plant and machine operators and assemblers (8). Low-skilled, non-manual includes clerical support workers (4); and services and sales workers (5). High-skilled, non-manual includes managers (1); professionals (2); and technicians and associated professionals (3).

school education leads to better occupational prospects with 23 per cent of young employees holding high-skilled, nonmanual occupations. In turn, tertiary educational attainment stands out with close to twothirds of young employees found in high-skilled, non-manual occupations (65 per cent). Albeit slightly, completing tertiary studies further increments the chances of reaching the highest occupational skill level (68 per cent). High-skilled, non-manual occupations include managers, professionals, technicians, and associated professionals. Since tertiary education is normally required in these occupations, the distribution of tertiary-educated youth by occupational skill level evidences some external efficiency deficits in the higher education system. However, the scarcity of high-skilled jobs does not allow us to properly allocate the increasing number of tertiary students entering the labour market.

In contrast, high-skilled, non-manual occupations are out of reach for the vast majority of young employees who have completed vocational training. Accordingly, TVET does not enable them to compete for the most qualified positions. Young employees who have completed TVET studies are primarily found in skilled manual jobs (40 per cent) that range from plant and machine operators and assemblers to skilled agricultural, forestry, and fishery workers. Moreover, a non-negligible share occupies unskilled elementary jobs (11 per cent).

Occupational misallocation translates into qualification mismatches that span across schooling levels, with opposite outcomes between low and highly educated youth. There are different ways of measuring the complex qualification and skill mismatch phenomena that affect people in employment. Due to data limitations, we used

Figure 6.19 Qualification (vertical) mismatches among young employees by highest level of education attained, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. By definition, those who never attended school are excluded in the normative approach. See Box 6.5 for the definition of qualification mismatches according to the normative approach.

the normative approach and restricted our analysis to vertical qualification mismatches by level of education (see *Box 6.5* for the detailed definition). While this approach has its advantages and disadvantages, it is considered the best measurement method for qualification mismatches (ILO, 2018).

Based on a sample of eight sub-Saharan Africa countries surveyed in the early 2010s, Elder and Koné (2014) found that the share of working youth adequately qualified for their jobs averaged only 38 per cent. Contrasted results ranged from 16 per cent in Malawi to 56 per cent in Zambia. In Liberia, the share remained stable at 30 per cent between 2012 and 2014, with the resulting qualification mismatches stemming almost entirely from undereducation (ILO, 2017b). As *Figure 6.19* illustrates, qualification mismatches seem to fade away somehow with wage employment since a large portion of young employees, regardless of the level of education attained, appear to be adequately qualified for their jobs.

Yet, the majority of young primary-educated employees fall short of the required qualification in their occupation (51 per cent), in contrast with over a third of young, tertiary-educated employees who are overqualified (35 per cent). Completing tertiary studies does not contribute much to mitigating the risk of overqualification (32 per cent). Some evidence shows that Africa is the continent with the largest

share of young, tertiary-educated workers engaged in medium- or low-skilled jobs (64 per cent) (OECD, 2017). In Liberia, qualification mismatches are more acute with TVET. In particular, 32 per cent of young employees who completed vocational training are underqualified.

As previously discussed, the deficit of high-skilled jobs incurs in excess of the supply of young, tertiary-educated labour. Besides, despite being highly educated, young employees may not be employable enough because of the poor quality of tertiary education. Employers are likely to undervalue tertiary education if it does not equip the youth with the skills and competencies employers are looking for. Consequently, tertiary-educated youth run the risk of having to fall back on less qualified jobs, with the resultant frustrated expectations and poor return on investment in education. According to ILO (2020), this in turn places less educated youth in a particularly vulnerable situation because they face both upward pressure (the risk of automation as a result of technological change, which is yet to emerge in Liberia) and downward pressure (displacement by better educated youth). Qualification mismatches can bear significant costs, including forgone earnings and productivity, lower job satisfaction, skill depreciation, and wasted education resources, with potential adverse consequences at the aggregate level on consumption, investment, and economic growth (ILO, 2018).

Box 6.5: Definition of qualification mismatches

The ILO (2018) distinguishes between skills mismatch (for overall skills or by type of skills, including job-specific/technical, basic and portable skills) and qualification mismatch (by level of education or by field of study). Due to data limitations, we restrict the analysis to qualification mismatch by level of education. It is measured in three different ways: the normative, subjective (self-assessment), and statistical approaches.

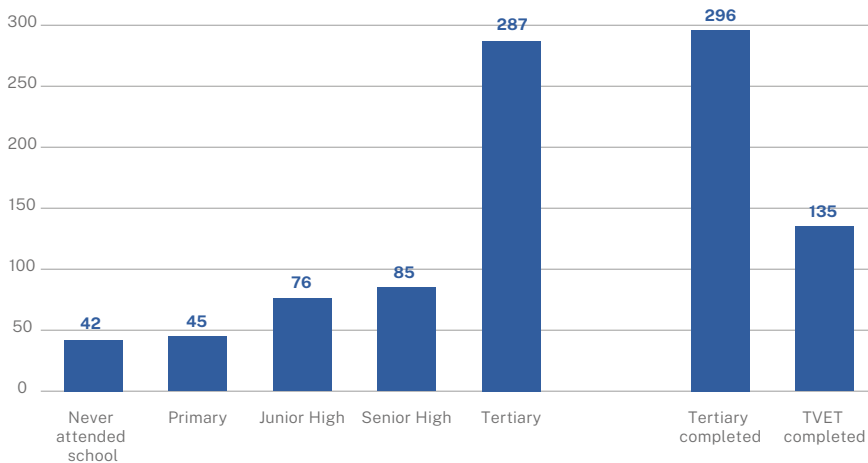
With the HIES 2016, we can only apply the normative approach, which is usually considered as the best measurement method. The main problem with the normative approach is that the assumption according to which all jobs in the same broad occupational group are homogeneous and require the same level of qualification is questionable in practice. See ILO (2019) for an exhaustive empirical analysis of skills and qualification mismatches in low- and middle-income countries based on different data sources and approaches.

Table 6.6 Required education by occupational skill level

Occupational skill level	ISCO-08 major groups	Required education
3 and 4. High-skill, non-manual occupations.	1. Legislators, senior officials and managers. 2. Professionals. 3. Technicians and associate professionals.	Tertiary education (ISCED-11 levels 5–8).
2. Skilled manual and low-skilled, non-manual occupations.	4. Clerical support workers. 5. Services and sales workers. 6. Skilled agricultural, forestry, and fishery workers. 7. Craft and related trades workers. 8. Plant and machine operators and assemblers.	Secondary or post-secondary non-tertiary education (ISCED-11 levels 2–4).
1. Unskilled occupations.	9. Elementary occupations.	Primary education (ISCED-11 level 1).

Normative approach. Based on the first-digit level of the ISCO-08 (ILO, 2012), we divide occupations into four broad groups according to the skill level and assign each broad group the corresponding level of education based on the International Standard Classification of Education 2011 (ISCED-11) (UIS, 2012). Individuals working in a given broad occupational group with the assigned level of education are considered *well-matched*. Those with a higher (or respectively lower) level of education are *over(under) qualified*. Note that we consider all workers who did not complete primary studies as underqualified. It is assumed that all jobs, including elementary occupations, require at least basic skills in terms of literacy and numeracy, which are usually acquired by completing primary education. Besides, tertiary-educated workers cannot be, by construction, underqualified because tertiary education constitutes the last cycle of the education system.

Figure 6.20 Youth average monthly wages from main occupation by highest level of education attained, 2016, US\$



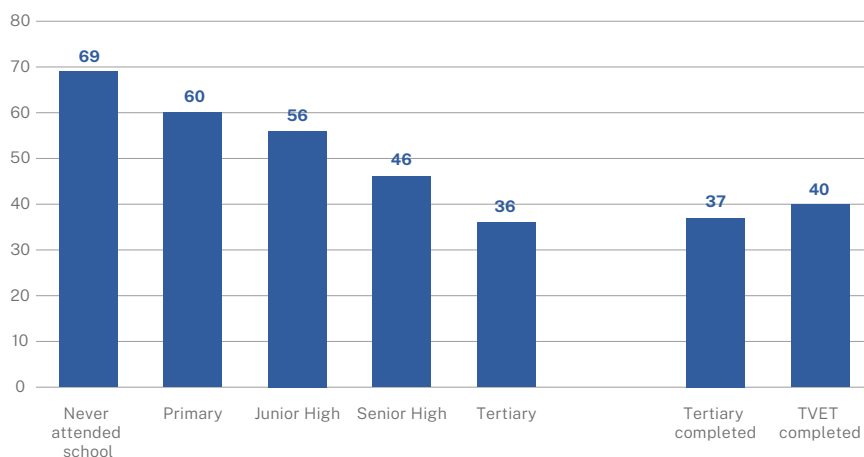
Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. Monthly wages include in-cash and in-kind payments. Data cleaning: outlying observations (last percentile) trimmed (replaced by missing values).

However, young employees who attained tertiary education enjoy overall substantial income gains. Looking at monthly wages from main occupations, including both in-cash and in-kind payments, it emerges that young, tertiary-educated employees earn 3.4 times more on average than those with a senior secondary school education, and 6.9 times more than those with no formal education (Figure 6.20). Moreover, young employees who have completed tertiary education earn 2.2 times more on average than those who have completed TVET studies. The latter receive greater wages than young less educated employees, but differentials are much more modest. For instance, those who have completed TVET studies earn 1.6 times more on average than young employees with a senior secondary school education.

Alternatively, we look at the low pay rate as evidence of young employees who are paid below the statutory minimum wage. The same pattern emerges: young, tertiary-educated employees are much less likely to be paid below the statutory minimum wage (36 per cent) than their less educated peers (Figure 6.21). The low pay rate reaches its highest value among young employees with no formal schooling (69 per cent). Although the low pay rate is negatively associated with educational attainment, nearly half of young employees with a senior secondary school education are paid below the statutory minimum wage (46 per cent). Young employees who completed TVET studies are slightly more likely to be underpaid (40 per cent) than those who completed tertiary education (37 per cent).

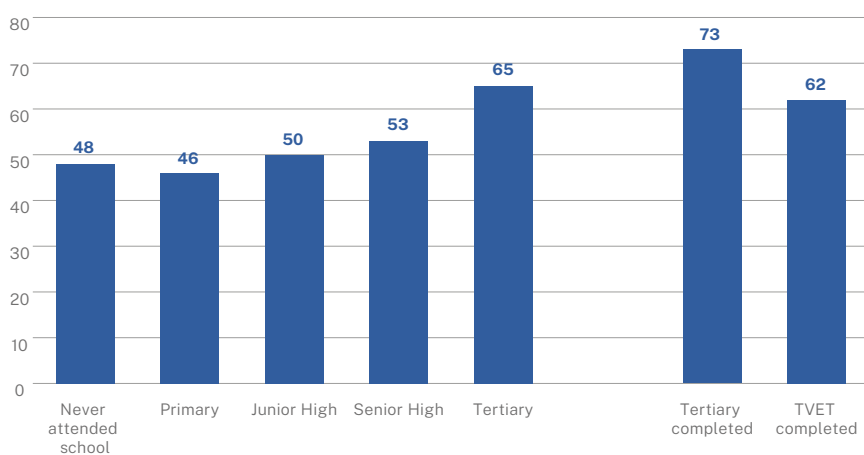
Figure 6.21 Young employees with low pay rate (below the statutory minimum wage) by highest level of education attained, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. Statutory minimum wage in 2016: L\$15 per hour for unskilled labourers. Minimum wage per month = L\$15 × 48 hours a week (normal working hours: 8 hours per day, 6 days per week) × 4.3 weeks a month = L\$3,096, equivalent to US\$32.79 (converted using the official exchange rate).

Figure 6.22 Job satisfaction rate among young workers by highest level of education attained, 2016, percentage



Source: Own calculations based on HIES 2016 (LISGIS, 2017).

Note: Youth are aged 15–35. Current students are excluded. Results should be treated with caution because of the overly high share of missing values (18.3 per cent among the sample of working youth).

These findings echo another pervasive issue in low-income economies, namely working poverty, which is exacerbated by the absence of social safety nets and the lack of income diversification. Although young employees with terminal levels of education are remunerated better, our results suggest they are not immune against working poverty.

Finally, we turn to a subjective measure of the quality of employment to account for youth self-perceptions. Are working youth satisfied with their jobs? *Figure 6.22* shows that the level of job satisfaction is relatively

low until secondary educational attainment. Almost half of young workers with a senior secondary school education are dissatisfied with their jobs (47 per cent). In contrast, two-thirds of young, tertiary-educated workers are satisfied with their jobs (65 per cent). The level of job satisfaction increases further, climbing to 73 per cent, among those who have completed tertiary studies. In turn, less than two-thirds of working youth who have completed vocational training are satisfied at work (62 per cent). With this we conclude the analysis and wrap up the chapter in the next section with some concluding remarks.

6.3 Chapter summary

Overall, this chapter has shown that higher education and, to a much lower extent, TVET increase the youth's chances to complete the labour market transition and occupy decent jobs. However, results proved the inability of the large majority of young women to secure quality jobs through vocational training. Female learners must enjoy greater representation in the fields of training offering better employment prospects. The TVET system should pay more attention to career guidance and provide tailored services to women's needs while tackling deeply rooted gender stereotypes. In particular, young women should be provided with more specialized technical skills in trades deemed as masculine and be sensitized regarding the potential of the agricultural

labour market. For the sake of equity, Liberia should consider providing targeted financial support to girls and other vulnerable groups to promote school enrolment and progression at terminal levels of education. Regarding tertiary education, part of the students, especially men, should be redirected to vocational training to acquire more practical skills, enhance their employability, and minimize the risk of unemployment. Overall, more demand-driven and gender-sensitive TVET, and higher education systems are needed to tackle young labour underutilization and mitigate prevailing skills mismatches. However, the scarcity of high-skilled jobs available does not allow the increasing number of tertiary students entering the labour market to be allocated properly.

Chapter 7

Institutional analysis



7.1 Introduction

The preceding chapters of this analysis concentrated on the outputs and impact of the education system. Conversely, this chapter looks within the system as the quality of outputs is arguably only as good as the quality of the inputs themselves. In other words, the success and development of an education system is heavily dependent on the relevant ministry's ability to plan, implement and monitor education services, necessitating strong internal coordination, collaboration, and high levels of organization. This chapter presents the main characteristics of the functioning of the educational administration in Liberia and identifies its key strengths as well as areas for further improvement.

Particular attention is paid to the areas of strategic planning, policy design and implementation, management of information systems, human resource management, and financial management. It aims to gauge the effectiveness of the educational administration by examining whether it is fulfilling its assigned functions and responsibilities. In an effort to develop the education sector in Liberia, this institutional analysis is key as it serves as a basis for tangible suggestions on how to address the identified weaknesses in the functioning of the system.

7.2 Analytical framework

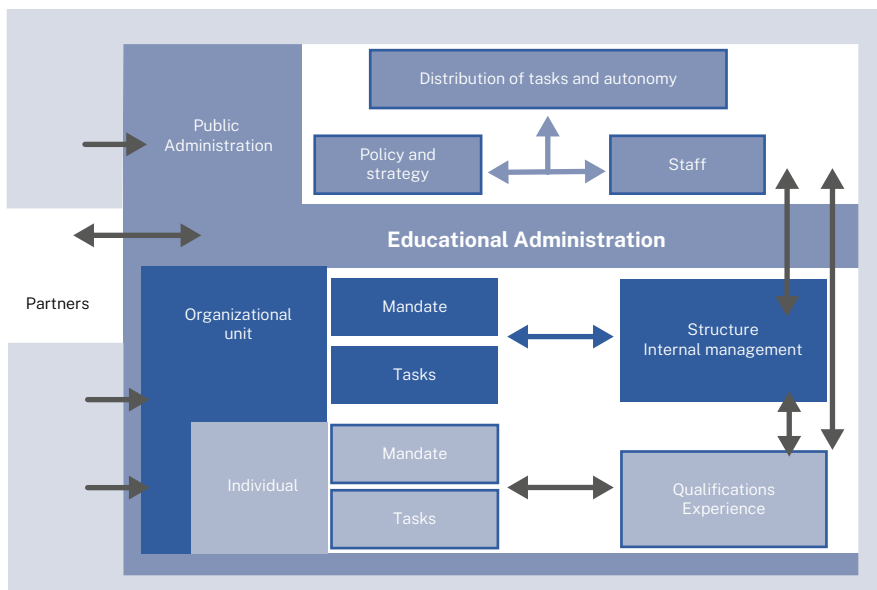
To examine the functioning of the educational administration in the Liberian context, this chapter is founded on the analytical framework developed by IIEP-UNESCO (2021a) as presented in *Figure 7.1*. The framework is arranged according to four different levels of activity known to affect the functioning and performance of public administration:

- The profile of individual staff members (including their training and incentive structures) compared with their roles and tasks.
- The effectiveness of the organizational units that make up the administration (relating, among other things, to their mandate, structure and internal management).
- The characteristics of the public administration and, in particular, of the management of the civil service.

- The quality of the relationships that the educational administration and the public administration develop with external stakeholders, both national and international, that have important roles in the planning and management of the education sector.

It is important to keep in mind that this separation is more theoretical in nature as we recognize that these levels overlap to various degrees. However, it is their functioning in totality that is centrally of concern. In practice, we examine how issues at each of these levels are interconnected and where their roots truly lie and, by doing so, we identify the more efficient entry points for change. As such, this analytical framework serves more in the capacity of a theoretical framework, thereby allowing results to be structured in a meaningful and useful way.

Figure 7.1 Analytical framework for the examination of capacity constraints



Source: UNESCO et al. (2021).

7.2.1 Methodology of the analysis

The following three methods of data analysis and collection were used in preparation:

A desk review

The first step in the work for this chapter came in the form of a review of those documents already available pertaining to the functioning of the educational administration. The documentation was identified, gathered and analysed. In the Liberian context, there is not any recent analysis of educational or government institutions. Therefore, existing research was considered, including the previous ESA and joint education sector reviews. Alongside these existing analyses, policy documents were reviewed to understand the rules and regulations of the administration.

Interviews with key actors in the educational administration

Individual semi-structured interviews were carried out at the central and

county levels based on an interview guide developed by IIEP. Due to the COVID-19 pandemic, half of the 27 interviews were conducted remotely, while the remaining were conducted face-to-face on a visit to Monrovia.

A survey of individual staff profiles and planning capacities

A questionnaire was distributed to all staff who participated in interviews and to a group of officials present at the ministry on the day of the IIEP team's visit. The survey was adapted to the information gathered during the documentary review. Questionnaires were sent by email to those who had interviews conducted remotely or were otherwise given in person to be completed by the staff themselves. In total, 40 ministry staff answered the questionnaire.

7.2.2 Limitations of the analysis

Overall, this chapter was able to identify some of the broad areas of challenge facing the educational administration in Liberia. However, some important limitations need to be considered. These include:

A limited sample size and a lack of responsiveness

Fifty-four educational administration members were identified initially as relevant interviewees for this chapter. Once identified, communication was sent via email requesting a virtual interview. The response rate to these requests was low since this process was further hampered

by connectivity challenges presented in Liberia, which also posed challenges during the actual interviews. Those individuals who could not be reached via email were contacted in person during the IIEP trip to Monrovia. However, this again proved difficult as officials were either not present at the ministry during the days of the visits or were too busy with other priorities to participate. As a result, only 27 interviews of the ideal 54 were conducted, representing 50 per cent of the total initial sample size. This particularly affected the initial intention of this chapter to cover the county level as well as the central administration. We were only able to conduct one

interview with an official at the decentralized level, meaning that the voices of those in the decentralized administrative offices are largely unrepresented in this chapter.

Remote interviews limited survey responses

The remote nature of interviews had further negative effects on the completion of the questionnaire. When interviews were conducted in person, the survey was done directly thereafter with an administrator present, thereby necessitating its completion. However, when interviews were conducted remotely, the questionnaire was sent to respondents afterwards without the same necessitation for completion. As a result, many interview respondents never completed the questionnaire, decreasing the total sample size. Surveys were further distributed to ministry staff during the team's visit to Monrovia, which helped to increase the total number of completed surveys to 40, with zero completed surveys received from those at the decentralized levels.

The role of development partners

Due to the limited time available for data collection as a result of the COVID-19 pandemic, the perspectives of development partners could not be captured as had originally been intended. As a result, this chapter deals solely with the experiences of public educational officials. This limits the validity of the analysis presented here, especially given that the development partners play such a large role in the education sector in Liberia.

The role of the non-public sector in educational planning and management

Similarly, it was not possible to consider the role of the non-public sector in education since the public sector was prioritized as it is ultimately their responsibility to provide education. However, given the importance of private education in Liberia, it would have been useful to conduct interviews with representatives from this sector as well.

7.3 Institutional level: Core characteristics of the educational administration

This section examines the institutional framework for educational planning and management by considering the structure of the MoE in theory and in practice. It examines the way this structure is both constricting authority while simultaneously attempting to promote decentralization, and the challenges the country has faced in its journey towards a more decentralized educational administration. It further outlines the key legal and administrative texts that spell out methods of functioning and how officials understand these to be relevant to their duties and responsibilities.

7.4 Institutional level: Clear yet bulky administrative structure and chain of command

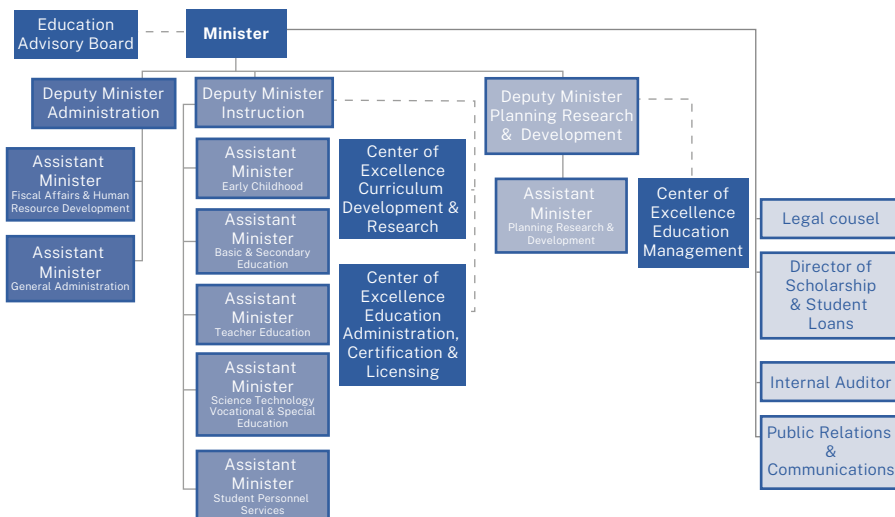
At the central level, education is the responsibility of the MoE. The ministry is responsible for all levels of education including basic, alternative, adult, higher education, and TVET. This responsibility and the structure of the MoE were outlined in the ERA of 2011 (Liberia, 2011b) and was drawn in a ministry organogram of 2012 (MoE, 2012). The ERA replaced the previous Education Law of 2001 that was developed under the authority of the warlord Charles Taylor. At that stage, the ERA represented a transition towards a new Liberia and a new educational system; however, the actual restructuring of the ministry to be in line with what is spelled out in the ERA did not take place until 2015. Since then, the structure has not undergone any major changes and the ERA remains the foremost legal basis for educational administration.

Interviews conducted with officials at the central level revealed a strong under-

standing of and relative satisfaction with the administrative structure of the MoE as shown in *Figure 7.2*. The chain of command was seen to be clear, with respondents outlining how this runs from the minister to the deputy ministers to the assistant ministers and so forth with one respondent stating, ‘the structure is good because there is a chain of command that flows from the bottom to the top and the top to the bottom’. The relative newness of the structure contributed to the fact that respondents did not see a need for change, with some respondents even citing having been involved in its development.

One challenge identified with this structure and particularly the chain of command was that it was deemed to be overly bureaucratic and inflated, stipulating many levels of approval that delay implementation. One respondent stated, ‘it takes a long time to get approval from the different level meaning that the

Figure 7.2 MoE national organogram, 2012



Source: MoE, 2012.

whole process, that should have taken a day or two, take three or four weeks'. Alongside creating delays, it was also seen to constrain the bureau or divisions' autonomy as it forces them to receive approval from specific division, bureau, department, and ministerial levels before being able to proceed with any action. These remarks were made by the directors themselves as they wished to give more responsibility or authority to their project officers but are constricted from doing this by the structure itself. There were exceptions to this system, with one respondent stating, 'if something is a priority, because maybe the minister say it is a priority, then it will get done quickly, but everything else takes time'. In this way,

the system structure including the long chains of command lends itself to interference, often from high-ranking officials, leading respondents to note that their autonomy is constricted.

Outside the structure's requirement for bulky chains of approval, officials found it useful and effective, arguing that it largely distributed responsibilities evenly. As such, the challenges identified therefore related not so much to the structure itself but to its implementation: 'I think there is absolutely no problem with the structure ... what is actually the problem is human interest which interferes with the normal function of the government'.

7.4.1 Institutional mandate: High relevance of legal frameworks and education development plans

Due to the recent history of conflict and change in Liberia, the country has only had two education sector plans, the first was issued in 2010, which was four years after the transition to a democratically elected government in 2006 and the end of 14 years of civil conflict. This plan, set for a 10-year period, was heavily adapted to a post-conflict context with accelerated education at its centre. Seven years after its inception with a new Education Act and a restructured education administration, it was seen fit to introduce a new education sector plan. The plan was more in line with the needs of a country moving away from reconstruction and towards sustainable development. This was preceded by the first ESA to be conducted in the country, which holistically considered the functioning of the educational system to identify areas of weakness to be addressed in the resulting education sector plan. The plan, entitled the *Getting to Best Education*

Sector Plan (G2B-ESP), was subsequently launched in 2017, spanning a five-year period to 2021 (MoE, 2016a).

The G2B-ESP was followed by a new national development plan launched in 2018 under the new administration entitled the *Pro-Poor Agenda for Prosperity and Development* (Liberia, 2018). Education was captured under the first of four pillars entitled *Power to the People*, which significantly view education through the lens of human capital development. The PAPD outlines four national level priorities for basic education and TVET, which include developing an ECE curriculum development and training teachers, improving pass rates in the WASSCE senior secondary exam, improving the representation of female teachers, improving overall training of teachers, and providing lifelong learning opportunities. While the improvement

of ECE quality is central to G2B-ESP and GPE's support to the plan, the other priorities in the PAPD do not emerge as central focus points of the G2B-ESP while arguably being covered in its overarching programmes. Furthermore, while the PAPD outlines these four priorities, the G2B-ESP is constructed around nine priority programmes structured according to subsector. This suggests an absence of linkages between the national development plan and the overarching education-specific plan.

This misalignment between the G2B-ESP and the PAPD can potentially be explained by the fact that they were developed under two different administrations. The PAPD was one of the first strategic documents to be released under the administration of President Weah and was seen as an extension of his campaign manifesto. As such, PAPD was an opportunity for the new administration to differentiate itself from the past; therefore, it is not surprising that it seeks to outline its own educational priorities rather than quoting those developed previously. Furthermore, while education is captured under Pillar 1 of PAPD, it is not afforded vast levels of attention with the plan being more focused on economic development and lifting Liberians out of poverty, as the name suggests.

Given the gap between G2B-ESP and PAPD, it is not surprising that education officials did not view the PAPD as a key strategic document and almost

never referred to it in discussions. Rather, G2B-ESP was perceived as the main document that guided the work of officials across departments, with the operational plan framing implementation. In this way, the G2B-ESP was really seen as an operational document and was continuing to be used for guiding annual work plans even as it approached the end of its mandate. Challenges with the education sector plan were raised by a few officials who argued that it was not all-encompassing and did not contain specific programmes or guidance for divisions with cross-sectoral mandates such as STEM education, school health, and inclusive education. This was especially relevant at county level where officials noted their use of the education sector plan to be more limited since it does not contain specific actions or programmes at county level. Officials recommended that future iterations take a subnational approach.

The ERA was mentioned equally as frequently as a key document for officials. Assigning this level of importance to the ERA is especially interesting as it is a national policy document without implementation or operational elements. Rather, the ERA outlines the responsibilities of divisions and ministries. Officials referred to it as a sort of guiding text against which they could ensure responsibilities were being met. There was even a feeling that the ERA was being used to outline to other departments where their authority ended in cases of disputes in order to avoid overlap or interference.

7.4.2 The relationship between central and decentralized levels: Communication and funding challenges

As noted in the limitations section (*Section 7.2.2*), the voices of those at the decentralized levels of the education system are underrepresented in our analysis due to limited connectivity with them. The education system was decentralized in 2011, and over the past 10 years it has become more institutionalized across Liberia. Under this system, each of the 16 counties has a county education officer (CEO) who is supported by district education officers (DEOs), with one for each of the 127 education districts in the county. The CEO is further supported by five professional staff members in the county office: a finance officer, procurement officer, monitoring and evaluation officer, planning officer, and human resources officer. The CEOs are responsible for implementing national policies and regulations through their DEOs, as well as making quarterly, annual and special reports to the Deputy Minister of Instruction who acts as their direct supervisor.

The CEOs are further responsible for overseeing and convening the county school boards (CSBs), which are composed of county residents with relevant knowledge and experience. The CSBs provide an opportunity for civic engagement in education and are intended to improve transparency. The boards are tasked with overseeing that schools are implementing national policies and guidelines appropriately. Following the introduction of the ERA in 2011, the government established CSBs in all the counties and provided training for their members. However, the

ESA of 2017 noted that these members' terms expired in 2015, leading to the dissolution of many of the boards (MoE, 2016b). Since then, the government has made a concerted effort to reactivate the CSBs. However, it is not clear in conversations with officials whether CSBs currently exist in all 16 counties, and if they do exist, to what extent they are performing their associated duties. However, it was mentioned that the CSBs do not receive financial support from the government and are convened on a voluntary basis. Thus, indicating that there simply might not be enough incentives for members to maintain their function.

DEOs are responsible for their various districts, with every principal in schools under their jurisdiction being their responsibility. DEOs are further responsible for maintaining contact and communication with all schools in their district to identify the need for new teachers and other materials, as well as communicating national education policies to private schools. However, it was made clear in conversations with officials that not all 127 DEO positions are currently occupied. Additionally, DEOs are responsible for monitoring and engaging the district school boards (DSBs). These boards reflect the same structure and purpose as CSBs but at district level. The ERA provides much less guidance on how DSBs should be operationalized than it does for CSBs. Furthermore, it is not clear which board takes precedence or how authority levels are divided between

the two boards. From conversations with officials, it is not clear whether there are any DSBs currently functioning, although given the limited functioning of CSBs, it can be assumed that they are not functioning as well.

Efforts to transfer educational monitoring and management responsibilities to the counties and districts have been hampered by funding challenges. Interview respondents were generally favourable of the decentralized structure. They argued that this system could work well if it was given adequate financial and logistical support. A key role of the decentralized structure is to facilitate communication all the way down to school level. Interview respondents cited that CEOs tend to meet with all their DEOs once a month, with DEOs also holding meetings with their principals once a month. However, even these low-tech forms of information dissemination rely on funding for both transportation and accommodation. This is a particular challenge for principals who are often unable to pay for the associated costs to travel to monthly meetings and, therefore, miss out on key messages from the MoE. Communication challenges were also

reported at the county level. Delays were observed frequently due to connectivity challenges, which affect the review of the reports that CEOs are expected to submit to the Deputy Minister for Instruction once a month. The situation contributes to a lack of information dissemination at county level.

As a result of these communication challenges, many of which can ultimately be related to funding, the dissemination of new educational policies has been limited. One respondent noted, ‘policy documents are only disseminated within five kilometres of Monrovia, they don’t reach the 15 counties’. As such, schools are seen to be operating without access to the academic calendar, relevant curriculum or teachers’ code of conduct, with the latter having been developed in 2014. This creates a situation wherein policies are developed but do not reach those they are meant to benefit, thereby having limited impact. In other words, ‘the problem is the end of the supply chain’, which in this case is the district level and their lack of financial and logistical support needed to carry out the vast responsibilities assigned to them.

7.4.3 Institutional limitations: Political concerns and interference prevalent

While lines of authority are ultimately clear, interference still occurs and often comes from high-ranking officials. As one official stated, ‘the terms of reference are clear, but functionally there is too much interference from the ministers in our functions’. Respondents argued that in practice, much is left to the will of the deputy and assistant ministers who may be hesitant to be critical

of the system itself for fear of losing their political appointments. This led one interviewee to argue, ‘all ministers serve the will of the president’. This creates a situation whereby directors and civil servants are stifled by the layers of ministers, both assistant and deputy, and the minister themselves, which clouds the transparency of the theoretically clear structure.

7.5 Organizational level: Structure and internal management

While the MoE is the largest organizational unit, the system is also constructed of bureaux and divisions that each contribute to the effective functioning of the system as a whole. This section considers the efficiency of these units in Liberia in terms of their mandates, structures, and internal management. It identifies communication and coordination challenges across both horizontal and vertical planes and underlines how financial and resource challenges permeate throughout the sector. It further raises the dominance of non-formal recruitment practices, especially the processes of political appointment and internal recruitment, and examines how greater consultation could improve ownership in the administrative framework.

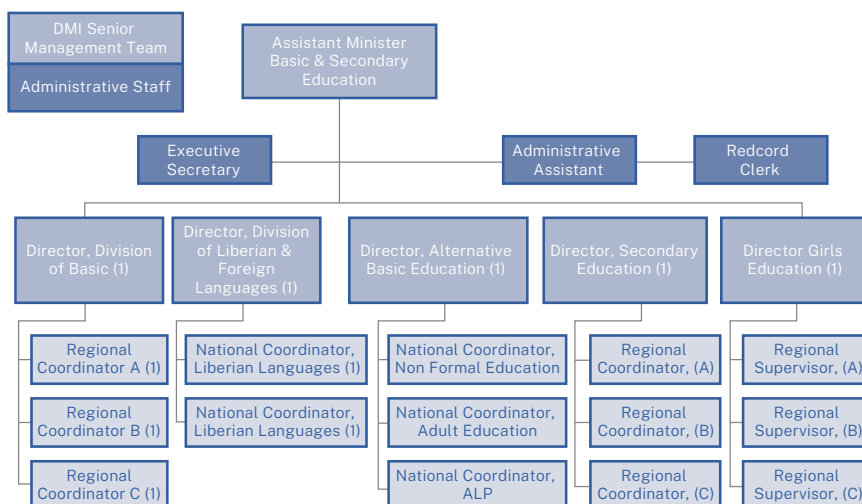
7.5.1 Internal structure: Alignment between prescribed and actual duties limited by funding

A normative structure surrounds any administration. It describes the roles and responsibilities of each subunit including organograms that define the internal structure and number of staff per unit. This is often instituted in a central law or document that therefore provides a solid basis upon which the system functions and expands.

During interviews, the large majority of respondents referred to the ERA of 2011

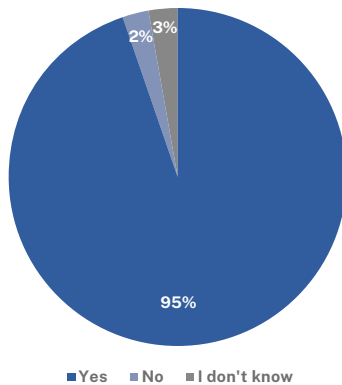
as the key regulatory document for the sector. This document was said to outline the responsibilities of deputy ministers, assistant ministers, bureaux, and the decentralized structures succinctly. High levels of confidence were expressed in the ERA, with officials stating its clear division of responsibilities helped to avoid overlapping. Furthermore, the ERA was seen to provide a strong legal foundation for the work of officials.

Figure 7.3 Organizational structure, 2012



Source: MoE (2012).

Figure 7.4 Is there an official document that describes the attributes of your current position?

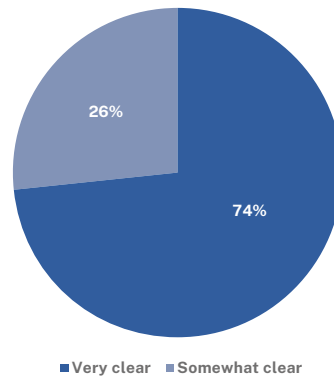


Source: Authors' calculations based on survey data, 2021.

Figure 7.3 provides an example of the structure of the subunits, known as divisions, which are arranged under each of the five bureaux. Across the bureaux, there is a total of 15 directors who supervise 15 divisions of varying sizes and mandates. While the five bureaux are outlined in the ERA, the divisions and directors are not and, therefore, their responsibilities are not anchored in a legal text. Although a direct linkage between this and the occasional overlap and interference was not drawn, we can interpret that it may be an underlying cause. However, widespread overlap is avoided due to the clear terms of reference (TOR) for each position.

While the ERA was identified as the key document at the unit level, TORs were seen to be the most relevant documents at individual level. TORs were said to exist for every position in the ministry and spell out the responsibilities and duties associated with each position: 'The TOR is very clear and it gives clearly the responsibility of what you should do and what you

Figure 7.5 If yes, how clear do you find the description of the mandate of your unit?



shouldn't do and who you report to'. Actual duties were seen to strongly align with what is spelled out in the TORs, with the only issue cited being related to funding: 'I can't do everything in my TOR without the resources to do so'. In this way, while the TORs are seen to be clear and closely aligned with duties in practice, a lack of resources prevent officials from being able to complete all responsibilities as they are outlined.

This situation of the overall clarity of responsibilities and mandate, however marred by some confusion at the division level as cited by interview respondents, was confirmed in responses to the questionnaire with 74 per cent citing that they found the mandate of their unit 'very clear' and 26 per cent citing 'somewhat clear' (Figure 7.5). Additionally, 95 per cent of staff reported having an official document that described their position, with only 5 per cent citing that this type of document did not exist or that they were unaware whether there was one (Figure 7.4).

7.5.2 Internal management: Lack of communication and coordination structures

The structures identified above can only function effectively and as envisioned with the support of strong management and tools for organization. These tools aim to facilitate coordination and communication across the MoE and include elements such as staff meetings, availability of information, accountability mechanisms, and planning documents. Therefore, this section considers which tools the MoE uses and how effective they are to facilitate efficient communication and coordination across bureaux and divisions.

Work plans are one of these aforementioned coordination tools that allow individuals or units to plan their activities over a set period of time and allocate responsibility accordingly. They help to ensure that expectations are outlined clearly, especially in terms of deadlines for completion. Survey responses revealed that work plans are present, and more than three-quarters of respondents

reported having an annual work plan in their unit (*Figure 7.6*). Interview respondents confirmed the existence of work plans, which further deepened our understanding. They mentioned the presence of quarterly work plans alongside annual work plans and even personal work plans at individual level – all of which were said to align to the education sector plan, again demonstrating its continued operationalization and use.

A smaller proportion of respondents (66 per cent) cited having been involved in the preparation of this work plan (*Figure 7.7*). This indicates that work plans may not be aligned to the actual needs or realities of officials working environments and could set timelines that are unrealistic for the people they implicate. Furthermore, this lack of participation lessens ownership of the associated work plans, which can lead to more limited compliance. Individual work plans were further stated

Figure 7.6 Is there an annual work plan in your unit/bureau/division?

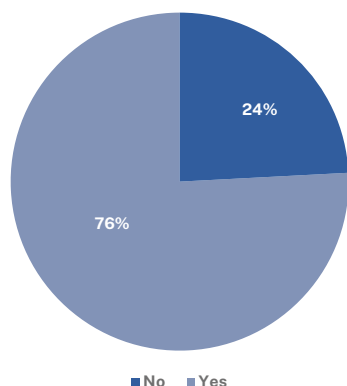
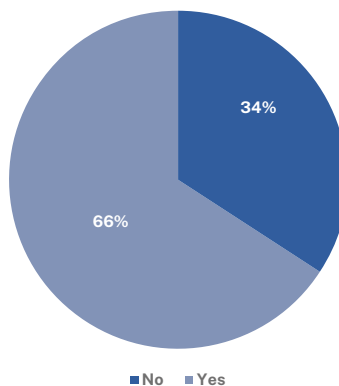
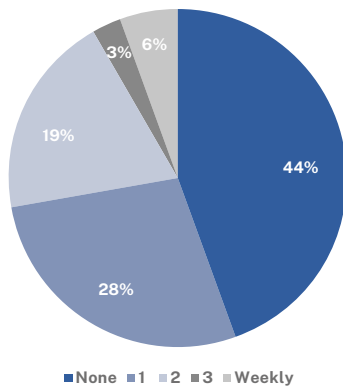


Figure 7.7 If yes, were you involved in its preparation?



Source: Authors' calculations, survey data, 2021.

Figure 7.8 Over the past 12 months, how many all-staff meetings have you attended?

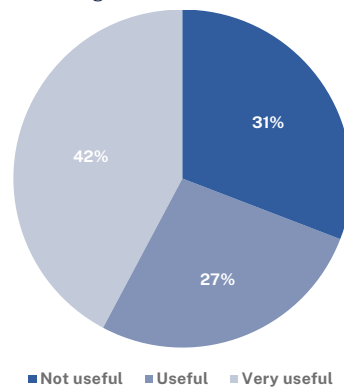


Source: Authors' calculations, survey data, 2021.

to act as a tool for evaluation, with individual staff progress being appraised against the work plans. It was argued that staff largely respect these work plans and work to meet the deadlines which they set out, however, work plans are often hampered by a lack of funding, which makes completing tasks on time difficult.

Meetings, especially those with all staff, are a key tool for coordinating actions across divisions and bureaux; however, these were seen to be lacking in the MoE. While it must be recognized that the term 'all staff' as presented in the survey question may be interpreted to refer to all staff in the ministry itself or all staff in a particular bureau, for example, results indicate a severe lack of cross-ministerial or cross-bureau coordination. Close to half of survey respondents reported attending no all-staff meetings in the past 12 months, with a further 30 per cent citing having attended only one (Figure 7.8). However, it must be considered that the 12 months leading up to the administration of this survey were dominated by the COVID-19

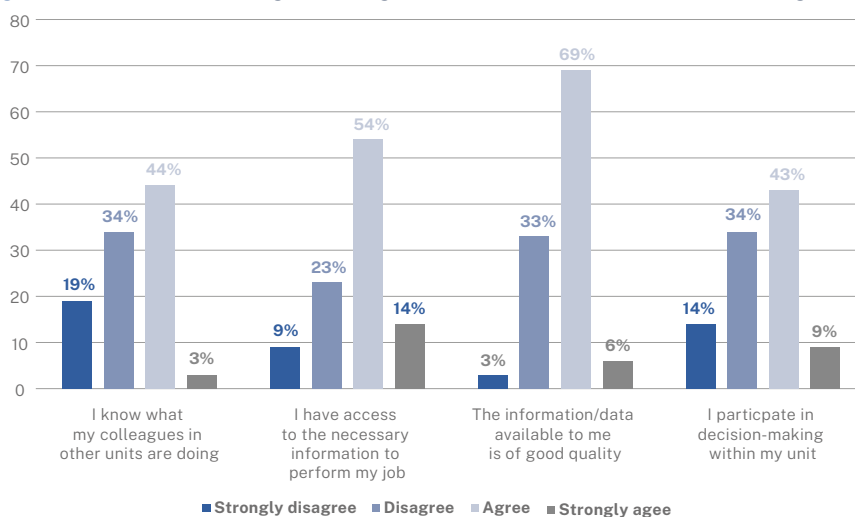
Figure 7.9 If you have participated in one or several all-staff meetings, how useful did you find the meeting?



pandemic, which limited the government's ability to have face-to-face meetings and may have had an effect on all-staff meetings. This being said, interviews confirmed the lack of large-scale ministry meetings even before the pandemic, with respondents stating that this had been more common under the previous administration.

When staff did attend meetings, 73 per cent found meetings useful or very useful (Figure 7.9), which seems to indicate that officials would appreciate an expansion of these meetings. This was confirmed in interviews during which respondents stated a desire to have more large-scale meetings to aid with cross-bureau or cross-division communication. This spilled over to the need for more recurring inter-bureau meetings as well. No interviewees reported the existence of regular meetings between divisions or bureaux, even when their projects or mandates were aligned closely. In this way, there is a need to examine how to improve horizontal communication in a systematized and institutionalized way.

Figure 7.10 Perceived knowledge of colleagues work and assessment of decision-making



Source: Authors' calculations based on survey data, 2022.

The challenges related to communication were also seen vertically, with officials reporting that information rarely trickles down from the top. Division heads and supervisors particularly reported feeling excluded from communications with deputy and assistant ministers. Division heads and supervisors reported that they were either not included or included infrequently in weekly senior management team meetings with ministers. They further only rarely received feedback on what had been decided and discussed. There was a stated need for divisions or bureaux to have their own meetings following the senior management team meetings where the messages received could be disseminated.

Communication was also reported to be hampered by a lack of access to electricity and the internet, making information dissemination through email challenging. As such, a significant amount

of communication happens in person – a strategy that has been difficult to implement during the COVID-19 pandemic. It is further made difficult by the large quantity of field visits ministry staff are required to conduct, which often see staff away from the MoE and in areas of low connectivity for days at a time.

This lack of inter-bureau and inter-division communication is again reflected in survey responses with 53 per cent of respondents strongly disagreeing or disagreeing with the statement 'I know what my colleagues in other units are doing' (Figure 7.10). Despite these communication challenges, the majority of officials reported having access to the necessary information to perform their jobs, with 75 per cent of respondents further agreeing with the statement 'the information/data available to me is of good quality'. However, 25 per cent of respondents also indicated

that the information they are supplied with is not sufficient (*Figure 7.10*). This affects their ability to perform their roles negatively, which again underlines the need to examine the introduction of more institutionalized methods of information dissemination.

When prompted with the statement ‘I participate in decision-making within my unit’, 52 per cent of respondents disagreed or strongly disagreed (*Figure 7.10*), suggesting a lack of intra-division collaboration and collective planning. This may also be due to the inflated bureaucratic system as discussed above, which necessitates approval from deputy ministers for the majority of tasks. It can lead to a situation wherein officials are not adequately invested in their work, instead feeling ignored or undervalued. This issue was not, however, raised by interview respondents although they mostly occupy higher level positions that necessitate decision-making as part of their responsibilities. The survey, on the other hand, was distributed to a wider range of staff, and as such, we can assume that this sentiment might be mostly felt among those of a lower level positions.

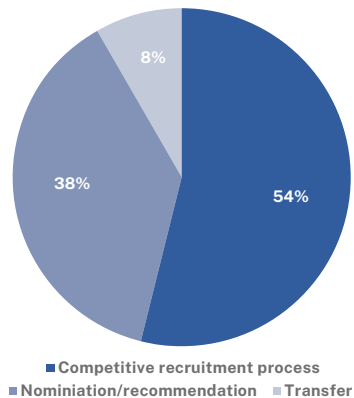
A final management tool that was seen to be lacking in the Liberian context was accountability mechanisms, with existed more in principle than in practice. While lines of authority and accountability were reported to be clear and functioning, individual performance management and evaluation were seen to be more problematic. Currently, the system is said to function on a system of self-evaluation, which is carried out based on individual or unit work plans that are submitted to human resources. However, once submitted, respondents cited that these evaluations were not used further, for example, to identify areas for further capacity development. This led one respondent to argue, ‘there is no rigorous system of staff internal evaluation’. Rather, progress was seen to be tracked more at the division level through monthly or bimonthly meetings that track activities against those set out in the division-level work plans. While this provides an opportunity to check in and identify priority areas, evaluating a unit as a whole does not provide the opportunity to identify needed areas for individual capacity development or of individual redress, which are crucial for the evolution and improvement of the system in itself.

7.5.3 Internal management: Frequent internal recruitment and lack of skills alignment

An examination of recruitment practices of surveyed staff reveals almost a 50/50 split between those who gained their position through competitive recruitment processes and those who gained them via nominations, recommendations or transfers. This is partially due to the high proportion of political appointees in the ministry, with the minister, the three deputy ministers and the eight assistant ministers all appointed by the

President directly. However, persons in these positions only represented 5 per cent of respondents to this question, and when they were excluded, 44 per cent of respondents still cited attaining their position through a nomination, recommendation or transfer (*Figure 7.11*). This indicates the widespread nature of non-competitive recruitment processes across all levels of the MoE and not solely at the ministerial level.

Figure 7.11 How did you get your current position?



Source: Authors' calculations, survey data, 2021.

Criticism of the system of appointment was noted in interviews, with respondents indicating that political appointees often lack professional or academic backgrounds in education. The limited sample size of our survey, which included only two political appointees, makes it difficult to examine the factuality behind these complaints. However, as will be seen below, there is a general lack of experience in the field of education. It creates some tension between directors, who as the highest ranked civil servants in MoE are generally highly qualified, and their superiors. This situation is worsened by the bureaucratic nature of the system that does not allow directors to make decisions without approval from their relevant assistant or deputy minister. Furthermore, interview respondents noted that while TORs outline the educational requirements for each position in the administration, the TORs of political appointees do not have the same minimum requirements in terms of years of experience in educational positions. Strengthening the TORs and necessitating a certain number of years of educational experience was

suggested as one area of improvement that would help to ensure that political appointees are appropriately qualified for the positions they occupy. It would serve to ease tension between these individuals and high-ranking civil servants.

The functioning of informal recruitment practices outside political appointments as is evidenced in Figure 7.11 was expanded on by interview respondents who noted that individuals may be chosen for positions due to personal connections with those in positions of power, frequently without regard for their professional qualifications or experience. This included reports of nepotism in terms of recruitment. Some respondents cited children or family members of high-ranking ministry officials would be likely to receive positions in the ministry as well.

Internal recruitment was also reported to be heavily prevalent across the ministry. According to officials, once a position becomes available, human resources first looks internally at those in the ministry to see whether anyone with the appropriate skills can be transferred to this position. Only thereafter will they open the application to external candidates through the national civil service job board. This provides an opening for higher-ranking ministry staff to recruit staff who they have previous experience working with or with whom they want to work with, by informally suggesting these candidates to be considered by human resources. The precedence of internal recruitment allows for individuals to be assigned to these positions without intense scrutiny of their appropriateness for their new roles. This results in a situation wherein divisions or bureaux are all staffed by friends or former colleagues of higher-ranking offi-

cials, often limiting the space for challenges to the status quo. This is especially true when new officials take up office. Respondents cited that new officials attempt to fill the bureau or division with individuals they know and trust from previous divisions without regard for their suitability for these new roles. When interference does not occur, the human resources department will identify an existing staff member and suggest they transfer to this new role, without that staff member having necessarily demonstrated interest in changing positions.

When positions are opened to the competitive recruitment process, they are posted on the national civil service job board and candidates can only apply once they have passed a series of civil service tests. However, it was mentioned that these tests have mostly been halted as a result of the pandemic. Once a shortlist of candidates is selected by human resources, these individuals are subjected to a set of interviews before a final candidate is chosen. Interview respondents cited being largely uninvolved in the recruitment process, with this being referred to as solely the responsibility of human resources. As such, many directors reported feeling left out and without having any ability to contribute to the selection process, including as a member on the interview panel. As one director stated, 'I am not involved in recruitment. One day they [the

new staff member] just arrives with the recruitment letter and the TOR'. This was said to be different from previous administrations where the recruitment process was more engaging and specifically provided directors with the opportunity to be part of the selection process.

Offices across divisions are understaffed – either as the result of vacant positions or due to an insufficient number of staff members allocated according to the organogram. Many respondents cited vacancies in their units, with the majority stating that these positions were actively being recruited for. However, some noted that there were not adequate finances for bringing on any more staff, and as such, the positions would remain vacant until the budget could accommodate them. Furthermore, even when all positions were filled, the majority of respondents argued for the need to expand the total number of positions in their units. However, space for creating additional position is limited by the institutional structure laid out in the organogram, which sets a fixed number of positions and does not include procedures for reviewing or expanding the structure. The need for more staff and expansion in many divisions is particularly interested given the restructuring the MoE underwent in 2015 at the central offices which saw the total number of staff reduced from over 700 to roughly 500 (Results for Development, 2018).

7.5.4 Availability of resources: Key challenges in funding and a lack of consultation in financial decisions

The lack of financial resources was mentioned consistently as the greatest challenge facing MoE officials. In a way, it paralyses the ministry as it is unable to develop or create new programmes without additional funding sources. As *Chapter 3* demonstrated, development spending is almost non-existent in the ministry. Thus, officials are consistently constrained to carry out their tasks without being given financial opportunities for innovative development programming. As such, the majority of the MoE's activities is simply work that is done to maintain the status quo; to replace teachers when they leave but not to hire new ones; and to develop policies and curricula without the means to print and distribute them. Therefore, the government is heavily reliant on donors for programmes or project funding as well as office equipment and supplies. This leads to a system of dependency with arguably limited sustainability.

Mixed levels of access to key office equipment were reported by survey respondents, with computers, printers and phones being relatively accessible. Extremely low access was observed for internet connectivity, with 72 per cent of respondents citing having no access to an internet connection as ministry buildings have no access to a central Wi-Fi network (*Table 7.1*). Low levels of reported access can also be related to the consistent power outages that were observed on frequent visits to the ministry, which mean that even when internet connections or routers are available, they are not always functioning. It is difficult to understand how officials are able to accomplish tasks without consistent internet access, especially during the COVID-19 period and increasingly more transitions to virtual working. Furthermore, 94 per cent of respondents cited having to pay for their own cellular phone despite using it for work, often also having to use

Table 7.1 Access to and frequency of use of office equipment

	Access				Frequency			
	Yes	No	Intermittent	At own expense	Daily	Weekly	Monthly	Never
Computer	83%	17%	0%	0%	100%	0%	0%	0%
Printer	73%	27%	0%	0%	68%	27%	5%	0%
Photocopier	48%	52%	0%	0%	68%	23%	9%	0%
Internet connection	19%	72%	3%	6%	69%	8%	0%	23%
Electricity	94%	3%	3%	0%	92%	8%	0%	0%
Phone	84%	16%	0%	0%	100%	0%	0%	0%
Cellular phone	6%*	0%	0%	94%	100%	0%	0%	0%
Email	100%	0%	0%	0%	100%	0%	0%	0%

Source: Authors' calculations, survey responses, 2021.

Note: * Paid by the office.

personal funds to set up internet connections for their computers (*Table 7.1*). Complaints of working conditions and using personal funds for work-related expenses, including laptops and transportation, were echoed in interviews. One interviewee stated, ‘I use my own vehicle, I buy my own gas, how sustainable is that?’

The lack of equipment was confirmed in interviews, with almost all respondents citing insufficient access to office equipment. Furthermore, it was frequently noted that the materials they did have, such as computers and printers, were often given to them by partners following the conclusion of their projects, rather than by the government itself. This was observed during visits to the ministry where many pieces of office equipment, including desks and chairs, still had labels from their associated development partners. Additionally, a lack of transportation was cited to be particularly challenging, resulting in ministry staff often being reliant on partners to take them to the field. This was reported to severely constrain the ability of units to carry out their defined functions, especially regarding monitoring and evaluation. One official in this department stated, ‘to do monitoring we need to be able to visit the schools, instead the principals come to us and report’. This was not just limited to an undersupply of vehicles but also due to a lack of fuel or funds for fuel – an issue which is particularly relevant in a country that has recently faced extreme fuel shortages.

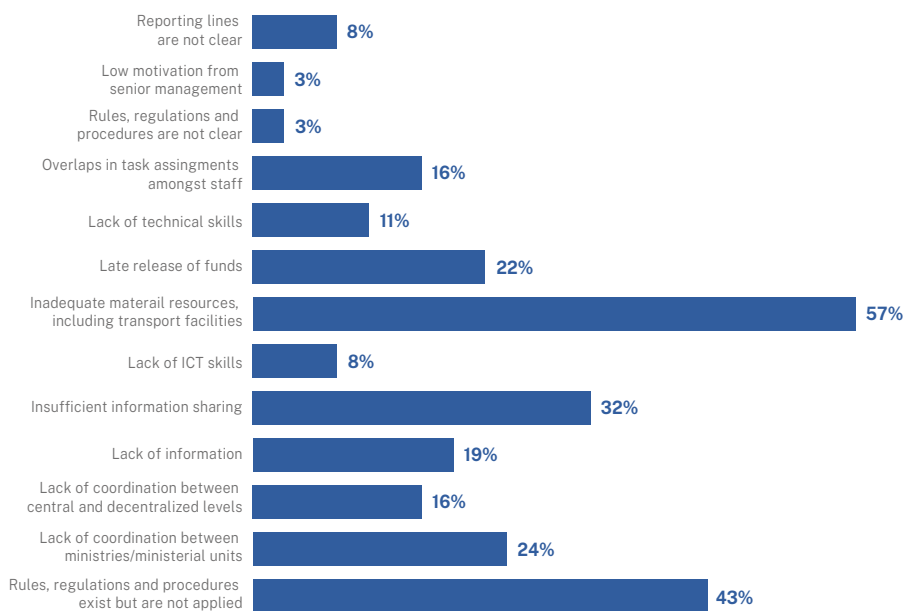
Financial resources were reported to be even more scarce, with interview respondents citing a complete absence of budget allocated to their respective bureaux or divisions. One element that was seen

to contribute was the low proportion of the overall budget allocated to education, which is below the internationally recommended 20 per cent. Accordingly, financial support was reported to be received solely in the form of salaries for employees, with funding for programming almost exclusively coming from partners: ‘they [the government] pay for the salaries but they don’t give any resources for activities or operations, for this we work with partners’. This reliance on donor funding was recognized to be unsustainable with officials demonstrating a clear desire to escape the cycle of donor dependency with one official stating, ‘we will always be donor dependent unless we increase the budget’.

Constrained funding was seen to further limit the ability of the system to be truly decentralized and weaken connections with the counties themselves. For example, it was reported that there should be three regional coordinators for basic education to coordinate the CEOs and DEOs from a location closer than the central office. However, due to funding constraints, all three coordinators were reported to still be in Monrovia rather than being located in their respective regions, thereby limiting the utility of their role to create an intermediate level between the counties and the central offices. This was echoed by another official who stated, ‘my work is not actually to work in here [the ministry], we should be in the field, but because of the financial challenges we are not there’.

The funding allocation process was further not seen as transparent, with a lack of communication identified. Officials reported being asked to draw up budgets for their respective bureaux or divisions

Figure 7.12 What are the most important challenges you face to carry out your work well?



Source: Authors' calculations based on survey data, 2022.

and submit them to the MFDP on an annual basis, but argued that when the budget was released, their demands were not reflected. Furthermore, they argued they were not consulted in this process; therefore, they reported feeling isolated from a key part of the decision-making process that has huge effects on their work. This lack of consultation again diminishes ownership of the results, deepening the disconnect between lower level officials and the bureaucratic hierarchy. The structure of the budget was further cited as an issue, with repeated calls heard for restructuring to a programme-based budget as opposed to the current structure that addresses the ministry as a whole. As one official put it, 'when you embed programmes into the general operational costs of the ministry, it becomes exact to extract what is allocated to

specific programmes, it is hard when they put it all under one big umbrella'.

An additional challenge identified regarding funding was reallocation or redirection. According to interviewees, while specific sums may be allocated to departments according to the budget, funds may be redirected to areas of greater priority or immediate need throughout the financial year. The President and Vice President were observed to be particularly strong voices in budget reallocations with one respondent stating 'if the President or the Vice President says this is a priority, you can't say no'. Furthermore, budget reallocation often does not consider the needs or plans of the divisions from which it is taken, further increasing feelings of exclusion from the decision-making processes. As such, divisions are unable to concretely

plan and budget for activities due to the fear of budget reallocation with one respondent stating, ‘from one stage to another, you don’t know where the funding for your programme is coming from’.

Survey respondents were asked to indicate the top three challenges they faced to carry out their work well out from a list of preselected options. Inadequate access to material resources, including transport, was most frequently cited by survey respondents as one of three top challenges to carrying out their work well (*Figure 7.12*), confirming the comments made in interviews as discussed above. This was followed by ‘rules and regu-

lation and procedure exist but are not applied’, which was reported by 19 per cent of respondents. While the exact rules, regulations and procedures were not specified in this question, taken in conjunction with interview responses, we can interpret this to refer to recruitment guidelines and procedures, as discussed above, even extending to policy documents whose implementation is seen to be constricted by funding. It is important to note that only 1 per cent cited that these same rules, regulations and materials were not clear, demonstrating that the issue lies not in their design or their existence, but rather in the implementation thereof.

7.6 Individual staff level: Profiles, competencies and incentives

The functioning of any administration ultimately rests on the performance of the individual officers themselves. Their abilities and performance levels are in turn constituted by their experience, initial qualifications, and additional professional development opportunities. It is further driven and influenced by monetary and non-monetary incentives, such as working conditions and remuneration, and support from superiors and colleagues.

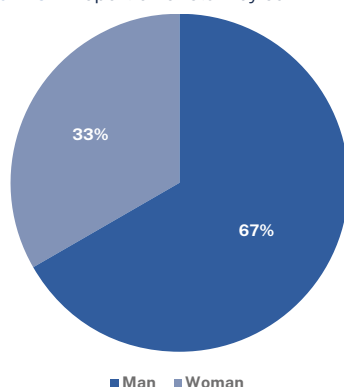
7.6.1 Staff profile

Responses to the survey reveal that MoE staff are mostly male (*Figure 7.13*). This dominance of male officials was confirmed in interviews with one official stating, ‘there are more males in every ministry in the country, even the Ministry of Gender’. The average age for men and women is similar and demonstrates a middle-aged educational administration (*Figure 7.14*). The range is of ages observed is relatively large as well, with the youngest being 28 and the oldest 58.

As *Figure 7.15* demonstrates, staff are highly qualified, with 95 per cent possessing either a bachelor’s or master’s degree. When disaggregating data by sex, men and women are seen to have similar qualifications. For both sexes, 52–53 per

cent of staff have a bachelor’s degree, with there being slightly more female officials with master’s degrees at 38 per cent in comparison to men at 33 per cent. Staff are largely inexperienced in the field of educational planning, with 49 per cent of survey respondents citing having 0–5 years’ experience in this field compared with 15 per cent cited having 0–5 years of educational work experience overall (*Figure 7.16*). This suggests that while staff may be midway in their careers, with 49 per cent having 6–15 years of educational work experience, this experience has not been in educational planning and management. While our sample size of political appointees is too small to consider this facet in detail, it does confirm some of the complaints

Figure 7.13 Proportion of staff by sex



Source: Authors’ calculations based on survey data, 2021.

Figure 7.14 Average staff age by sex

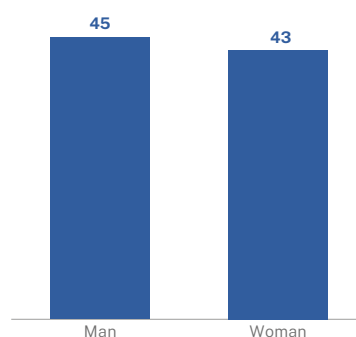
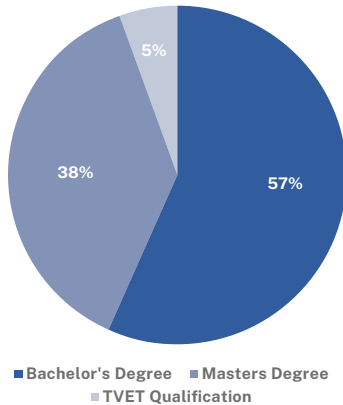
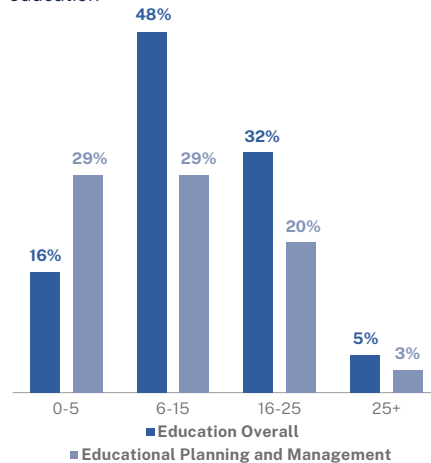


Figure 7.15 Staff qualification levels



Source: Authors' calculations based on survey data, 2021.

Figure 7.16 Years of experience total and in education



made by officials that appointed staff do not always have backgrounds in education. It further suggests that the ministry may be lacking educationists overall.

This is also reflected in that fact that only 36 per cent of staff reported having taught in a school for a least one year prior to entering the ministry.

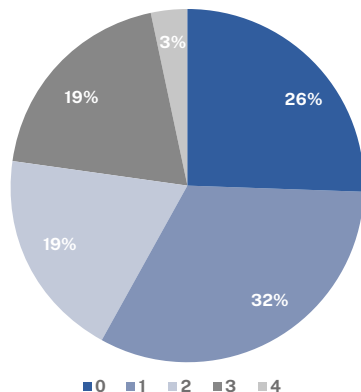
7.6.2 Staff working conditions: Weak incentives and minimal support

Staff turnover is seen to be relatively low, with over 50 per cent of respondents reporting not having changed positions at all in the last 10 years or only have changed positions once (*Figure 7.17*). Additionally, there seems to be vast barriers to promotions, with the most frequently cited challenge being no positions available, followed by a lack of a transparent job offer process (*Figure 7.18*). This is further reflected in *Figure 7.19* wherein 60 per cent of respondents either strongly disagreed or disagreed with the statement 'in my unit, promotion reflects the performance of individuals'. Furthermore, 85 per cent of respondents cited other challenges to getting a promotion than those in the survey, such as that promotion is determined by 'management decision' or 'political will' (*Figure 7.18*).

This aligns with the lack of competitive recruitment processes as outlined above and suggests a need for more transparent promotion criteria and processes.

There is widespread dissatisfaction with the financial compensation associated with working in the ministry, with 84 per cent of respondents strongly disagreeing or disagreeing with the statement 'I am satisfied with the financial conditions of my position'. Despite this, officials stated that they would enter the same career path if they could choose again, suggesting alternative incentives also associated with their positions. Staff were seen to be well supported by their supervisors, with 72 per cent stating that they are satisfied with the support they receive (*Figure 7.19*).

Figure 7.17 How many times have you changed positions in the past 10 years?



Source: Authors' calculations based on survey data, 2021.

Figure 7.18 In your opinion, what are the obstacles to get a promotion

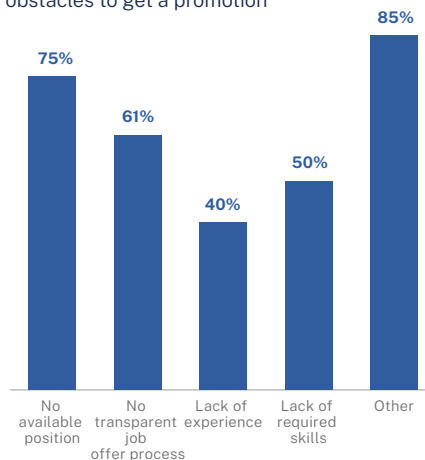
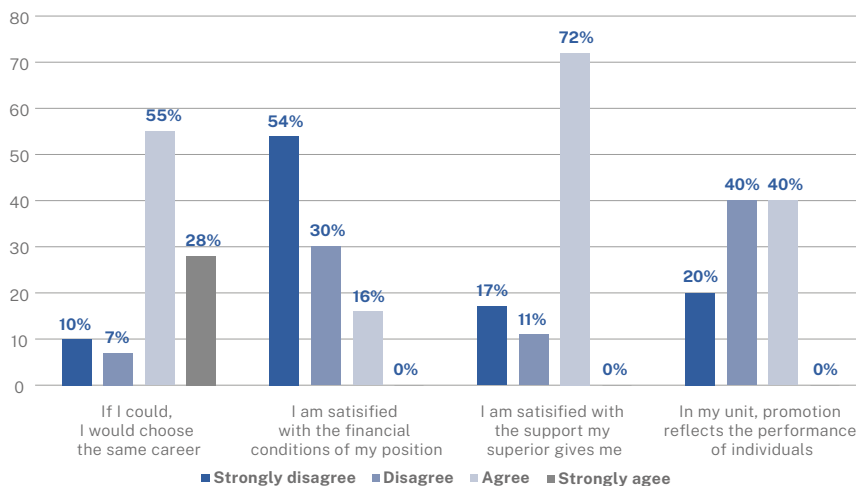


Figure 7.19 Alignment with indicators of communication and performance

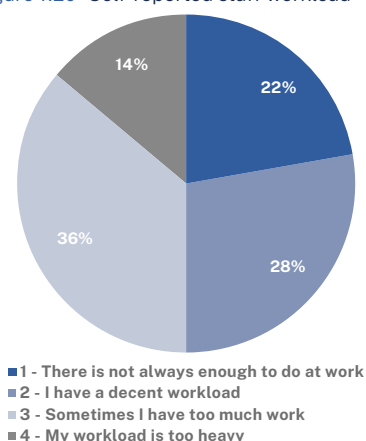


Source: Author's calculations based on survey data, 2021.

Workloads are seen to be unevenly distributed with 22 per cent stating that they do not always have enough work to do, while 36 per cent cited they sometimes have too much work (Figure 7.20). This

suggests a need to examine the distribution of responsibilities, including how they could be redistributed to ensure staff time is used more efficiently.

Figure 7.20 Self-reported staff workload



Source: Authors' calculations based on survey data, 2021.

In terms of support available to staff, official documents as well as the documentation centre were seen to be the two most useful aspects, however, both also had the highest proportion of respondents citing these not to be useful at all, demonstrating mixed opinions. Other colleagues were seen to be a strong resource with no respondents citing colleagues were not useful at all, demonstrating a sense of teamwork that came across strongly in interviews as well (Table 7.2).

Table 7.2 Available staff support

	Not useful at all	Somewhat useful	Useful	Very useful
My supervisor	7%	7%	48%	37%
My colleagues	0%	19%	54%	27%
Manual/guide	8%	17%	42%	33%
Official documents	15%	5%	35%	45%
Documentation centre	14%	5%	36%	45%

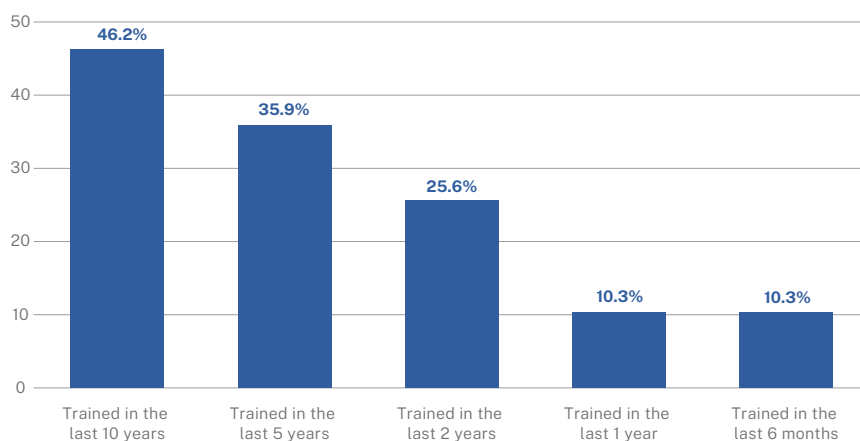
Source: Authors' calculations based on survey data, 2021.

7.6.3 Training needs and the availability of opportunities

Survey responses indicate that staff rarely undertake CPD training, with less than half of all respondents having attended any form of professional training in the past 10 years, and only 10 per cent reporting having attended training over

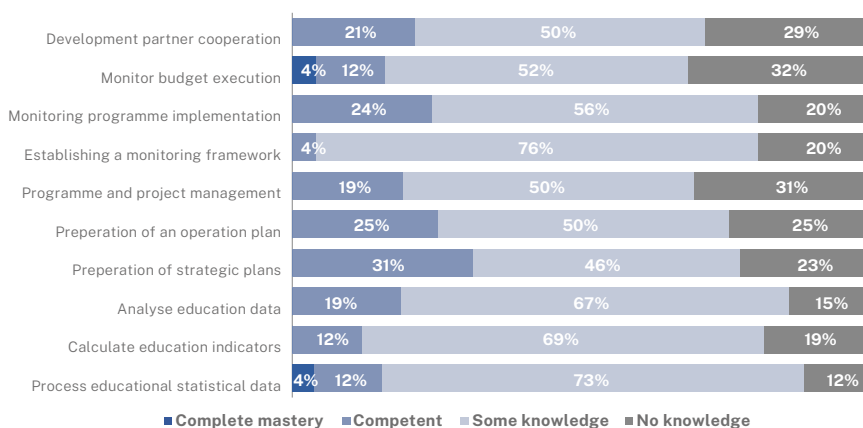
the past year (*Figure 7.21*). When probed further in interviews, training opportunities were seen to be offered infrequently to staff, with no staff capacity development plans in existence. This was associated with a lack of funding for these activ-

Figure 7.21 Apart from your academic or initial training, have you received any professional training of more than 15 days?



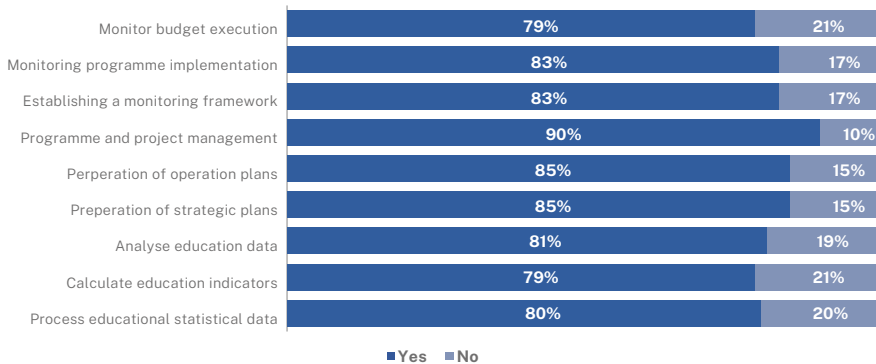
Source: Authors' calculations based on survey data, 2021.

Figure 7.22 Staff competency levels in planning and management



Source: Authors' calculations based on survey data, 2021.

Figure 7.23 Training needs in planning and management



Source: Authors' calculations based on survey data, 2021.

ities with one member of the staff development team stating, 'there is no budget where in comes to capacity building, you cannot do training without the budget'.

The questionnaire issued to officials invited respondents to self-assess their competency levels regarding a core set of planning and management targets. Results demonstrate low levels of proficiency across educational planning and management tasks – an element that may not be surprising given our knowledge of the limited nature of officials' previous work experience in educational planning and management and the absence of CPD opportunities. There were only two competency areas where any respondents cited complete proficiency, with a high proportion citing only some levels of knowledge across the board. The lowest levels of knowledge were seen in moni-

toring budget execution, the preparation of annual operational plans, and programme and project management (Figure 7.22).

Respondents were asked to express their training interest in relation to the listed educational planning tasks. Responses demonstrate a great interest and need for training for all planning tasks. Interestingly, even in areas where staff purported having complete proficiency or high levels of competence, a high demand for training was still demonstrated. This was confirmed in interviews with all respondents citing the need for further training for themselves and their staff. While mentioned, planning and management tasks were not seen to be key priority areas for capacity development according to interviewees, but were identified to be in the areas of ICT and project management (Figure 7.23).

Chapter 8

Achieving gender equality in and through education: The Liberian context



8.1 Introduction

This chapter complements the gender analysis discussed throughout the previous chapters and further explores the key gender barriers that constrain education progress for girls and boys. The chapter outlines the rationale for looking more deeply into gender equality in and through education, and notes key emerging issues where more gender-nuanced research is needed. A clearer understanding of gender differences in opportunities, social norms, and outcomes helps inform more effective targeting of resources to achieve better education results for both boys and girls.

Gender equality is inextricably linked to the right to education for all and an essential pillar for achieving the SDG 4 goals and targets for education and leaving no one behind. In the Liberian context, completing a full cycle of quality education is a challenge for all young people, and particularly so for girls. While on aggregate, significant progress has been made towards gender parity at ECE and primary levels, women and girls from disadvantaged groups remain underrepresented at all levels of education. Poverty and rurality intersect with gender to exacerbate inequalities.

Beyond girls' access to education and gender parity in numbers, the Education 2030 Agenda shifts to a broader focus on gender equality and empowerment *in and through* education, recognizing that the realization of individual education rights is also an enabler of all other rights, including rights to non-discrimination and empowerment (UNESCO, 2015). Gender equality further acts as a driver of a 'ripple' effect that not only delivers benefits to individual girls but also brings beneficial intergenerational impacts for

families, communities, national development, and a peaceful, prosperous society as a whole (World Bank, 2018a).

Ensuring gender-equal education for girls is thus a strategic national investment for leveraging positive individual, social, economic, and political impacts. Discriminatory gender and social norms, attitudes and practices, however, contribute to an environment where girls struggle to achieve their rights to access education, enjoy a gender-equal learning environment when they are in school, and be equally empowered in economic, political and social spheres through their education. Understanding these contextual factors that constrain progress towards gender-equal outcomes is key to optimizing the broader impacts of investment in girls' education and to realizing education and other rights for all across the board.

The data further highlight gender norms and patterns where boys may be disadvantaged in their education prospects, underlining the principle that advancing gender equality is of interest and benefit to everyone.

The analytical framework for the chapter is influenced by the *Global Education Monitoring Report – Gender Report 2019* (GEMR-GR) gender analysis framework, which comprises six domains (UNESCO, 2020b):

- Education opportunities, which look at gender parity in access, completion and learning outcomes.
- Gender norms and values, which examine expectations about men and women's roles/behaviours in society.

- Institutions outside education and education laws and policies, which review the enabling environment, both inside and outside the education sector, which creates the conditions to promote gender equality in education.
- Education systems, which measure gender equality within the education system, including distribution of resources, teaching and learning practices, and learning environments.
- Education outcomes, which measure gender equality in empowerment as a result of education.

The key indicators used are informed by the United Nations Girls' Education Initiative's (UNGEI, c2021) Gender Equality in Education (GES) Toolkit, which provides a snapshot of where the country stands regarding gender equality in and beyond its education system across each of the six GEMR-GR domains. A summary snapshot for Liberia is attached in the *Annex*, with details elaborated in the subsections below. Three emerging issues where further research is needed to complete the gender analysis include the following as discussed in the subsections below:

Gender impacts of the COVID-19 pandemic

Following the state of emergency declared to combat the outbreak of the COVID-19 pandemic in early 2020, only patchy and anecdotal evidence is available regarding the gender effects of school closures at the time of writing. The MoE's School Census 2021/2022 will provide data for more systematic analysis. Evidence from around the world (UNICEF, c2021b) meanwhile indicates that the brunt of the pandemic's impacts have fallen on women and girls due to

an increased domestic burden of caring work; a 'shadow pandemic' of SGBV (UN Women, c2021); and a lack of access to technology for remote learning and access to information and social-emotional support (UNGEI, 2020). Post-Ebola evidence in Liberia also shows a significant increase in the number of girls who dropped out of school as a result of pregnancy and early marriage. Whether or not a similar pattern with COVID-19 will emerge or preferably can be prevented, will require a solid sex-disaggregated evidence base for tracking and informing intervention design. Viewed more positively, the crisis-generated disruption has also been framed as a potential opportunity to shift the status quo and 'build back equal' for girls by putting gender-responsive measures in place to address the long-standing gender barriers and transform the gender inequalities that hold girls – and boys – back (UNESCO et al., 2020).

Gender, disability, and rights to, within and through education

Girls with disabilities are among the most marginalized groups in the world and sex-disaggregated data are lacking (Al-Ghaib, Andrea, and Gondwe, 2017). The Inclusive Education Policy notes that there is no up-to-date data obtainable on disabled persons in Liberia (MoE, 2018). Even less is known regarding the gendered patterns of the experiences of boys and girls with disabilities in terms of their access to education; the quality of their experience in school; their progress through the system; their education outcomes; and their access to information, services and participation. The Inclusive Education Policy notes challenges in gathering up-to-date data on children with

disabilities. On the whole, data are not disaggregated by sex, making it difficult to assess gendered patterns of discrimination. These are especially important as girls with disabilities enter puberty and have to manage their menstruation with comfort and dignity, be aware of their sexual and reproductive health rights, access services and information, participate in decision-making, and be protected from SGBV, in addition to claiming their education and other rights. A systematic survey of qualitative as well as quantitative data would shed light on how gender intersects with disability to shape education achievement for this underresearched group.

Gender implications of climate change and climate education

Liberia is ranked number 22 of 163 countries where children are most at risk from the climate crisis (UNICEF, 2021b). Existing gender norms and inequalities put girls particularly at risk. Impacts, for example, include having to travel further for scarce fuel and water; a greater

risk of violence, trafficking, and early marriage as household economies are squeezed; less access to food than males when food sources are scarce; challenges in managing menstruation when water is scarce; less access to information; and exclusion from decision-making processes (Plan International, c2021).

Educating women and girls is a key prerequisite for their meaningful participation in effective climate action (Kwauk and Braga, 2017; Plan International, c2021; UNICEF, 2021b). A recent study, however, shows that currently no country formally recognizes the contributions that an investment in girls' education could make towards their climate strategy, and only four countries of 95 surveyed met the criteria for climate education that is gender responsive (Kwauk, 2021). Given the climate change risk and the highly gendered nature of its impacts as documented in other countries, an in-depth study would provide the evidence needed for the Liberian education sector to respond strategically to the challenges identified.

8.2 Enabling environment for gender equality: Laws, policies, plans and challenges in institutional capacity

This section reviews the Liberian legal, policy, planning, and institutional landscape in terms of its potential to advance gender equality. It reviews how far laws and policies in and beyond the education sector protect against discrimination on the basis of sex, and promote gender equality and the empowerment of all women and girls at all levels.

8.2.1 Education laws provide some measure of legal protection against gender discrimination in education

Liberia has ratified the UNESCO (1962) Convention Against Discrimination in Education, which is a legally binding instrument that enshrines education as a fundamental right and underscores the state obligation to proscribe any form of discrimination in education while promoting equality of educational opportunity.

In terms of national legislation, Liberia scores 32 of a maximum 60 points on a UNESCO (2020a) scale of 12 indicators measuring the status of national legal frameworks related to the rights to education of women and girls, indicating scope for continuing improvement from this initial baseline. In particular, ‘no legal provision has been identified relating to the right to education of pregnant and parenting girls’ (Front Page Africa, 2021).

The principal guiding instrument, the ERA (Liberia, 2011b), does not explicitly affirm education as a right (UNESCO Indicator 4), but does seek to promote ‘equal access to education opportunities for all Liberians, without discrimination of any kind’, and to promote gender equity and equality throughout the education system and opportunities for education. In line with UNESCO Indicator 5, the Act enshrines compulsory free basic education up to Grade 9, though does not include free senior secondary school (Indicator 6) or pre-primary, which is ‘encouraged’ but

not free or compulsory (Indicator 7) (MoE, 2016a). Eliminating cost barriers is of particular benefit to girls, who are disproportionately and adversely affected by high costs of schooling.

The law sets clear directions on zero tolerance for weapons and violence in schools (UNESCO Indicator 11), including sexual offences committed by teachers, such as sexual coercion, intimidation, extortion; and sexual assault or abuse, including impregnation of girl learners, rape and gang rape, which are criminalized under the penal code. No protection is specified, however, against other forms of violence, and UNESCO (2019b) notes that ‘remedial action is not considered sufficiently protective for this indicator’.

Regarding the national education budget, the Education Law outlines options to boost financing, such as channelling of funding streams from natural resource revenues to the MoE as ‘social responsibility fees’, which merit further exploration and could help expand fiscal space for gender-responsive programming.

Regarding legal protection of the education rights of pregnant and parenting girls (UNESCO Indicator 12), it is noted that ‘No legal provision has been identified relating to the right to education of pregnant and parenting girls’ (UNESCO, 2019b; Webster Clayeh, 2020).

8.2.2 Education policy provides a supportive framework for gender equality

The MoE developed a supportive policy framework for gender equality, which underpins the commitment to the inclusive and equitable education goals of SDG 4 (United Nations, 2015a) and Education 2030: Incheon Declaration and Framework for Action (UNESCO, 2015). Key policy instruments include the following:

National Policy for Girls' Education

The National Policy for Girls' Education (MoE, 2013), (under revision, 2021), comprises three specific objectives focusing on: establishing the enabling legislative and institutional framework to initiate, coordinate, monitor, and evaluate programmes; mainstreaming gender at all levels of government from a central level down to community level; and creating momentum for collective and concerted efforts, at all levels, to eliminate gender disparities in education, training, and management. Many of the policy's directions have been included in the current G2B-ESP framework.

National Girls' Education Strategy

The National Girls' Education Strategy (under development, 2021), will provide a costed five-year strategic framework for implementing the goals of the National Policy for Girls' Education in the sector plan structure, focusing on addressing demand-and supply-side issues as well as building ministry capacity for gender-responsive education sector management, accountability and learning.

School Health Policy

The School Health Policy (MoE, 2019d), while not explicitly highlighting gender equality goals, is guided by a number of principles that contribute to more gender-equal outcomes. These include: incorporating age-appropriate, gender-sensitive sexuality education and sexual and reproductive health services into the reformed national curriculum, and reducing teenage pregnancy, GBV, rape and abuse, including sex for grades. To promote healthy and safe school environments, the Department of School Health, Physical Education and Sports is tasked to ensure that schools create a space for menstrual hygiene management on campuses, that schools are free of barriers for children with disabilities, and that schools must 'take concrete actions to safeguard the well-being of female students, and ensure that girls have access to schooling even after they become pregnant'.

National Career Guidance and Psychosocial Counselling Policy for Liberian Schools

The National Career Guidance and Psychosocial Counselling (CG-PC) Policy for Liberian Schools (MoE, 2019b) prioritizes the training of teacher counsellors to address learners' career development and psychosocial needs, with 'special consideration for the girl-child'. The policy recognizes that psychosocial issues can hamper learning, especially for girls who are 'more at risk from anti-social behaviours and

sexual gender-based violence'. The recruitment of professional female career guidance counsellors is framed as a strategy to help bridge gender disparities in girls' retention, completion and transition rates, particularly given the low numbers of female teachers in the education system, especially at post-primary level.

Establishment of a CG-PC Division is mandated to lead policy implementation. School-related GBV, which is faced by girls particularly but can also affect boys as well as gender-diverse children, is to be tackled by establishing a mechanism in each school on how to handle all school-related GBV involving the counsellors, survivors of the violence and parents, investigation procedures against the perpetrators, and referral pathways to deal with different types of violence, including bullying and sexual violence, in line with the Teachers' Code of Conduct.

Inclusive Education Policy

The Inclusive Education Policy (2018) is primarily geared towards including learners with disabilities by recognizing that inclusive education is clearly defined as applying to all marginalized children and youth, including disadvantaged girls (MoE, 2018). National education planning explicitly includes a focus on gender equality.

Code of Conduct for Teachers and School Administrators in Liberia

The Teachers' Code of Conduct (MoE, 2014), in line with the ERA, criminalizes sexual harassment under the penal code. However, dissemination down to school and learner level, implementation, monitoring, accountability, and financing all remain challenging (ESA (Institutional Analysis; MoE, 2019c).

8.2.3 Education sector planning is also based on gender-responsive principles

The education sector plan, namely the Getting to Best Education Sector Plan (2017–2021), is informed by sex-disaggregated data and gender analysis. It includes a girls education and learner well-being programme stream, although the implementation of gender-focused programme components have lacked funding (MoE, 2016a). The approach

is to mainstream gender across the education sector through the three programme components of Strategy 7 (namely, to implement the National Policy on Girls' Education; counter school-related GBV; and strengthen school health and learner well-being), and by integrating gender into each of the other programmes.

8.2.4 Beyond the education sector, Liberia is party to other key international, regional and national frameworks that protect rights to gender equality and education

Internationally, Liberia has ratified half of the available international human rights treaties (9 of 18) that are predicated on the principles of non-discrimination and inclusion. These include:

- The Convention on the Rights of the Child (ratified 1993), which includes articles on rights to non-discrimination (Art. 1) and education (Art. 28) (UNOHCHR, 1989).

- The Convention on the Elimination of All Forms of Discrimination Against Women (CEDAW), ratified without reservations in 1984, though not the Optional Protocol (UNOHCHR, 1979). CEDAW General Recommendation 36 elaborates on gender-equal rights to, within and through education which states parties need to consider in policy and planning.
- The CRPD, ratified by Liberia in 2012, emphasizes the need to ‘incorporate a gender perspective in all efforts to promote the full enjoyment of human rights and fundamental freedoms by persons with disabilities’ and the right to education for children with disabilities (Art. 24) (UNOHCHR, 2006).

Regionally, Agenda 2063: The Africa We Want, to which all African Union countries, including Liberia, are signatories, encompasses both education and gender equality aspirations and goals, with gender inequality highlighted as ‘one of humanity’s most pressing concerns’ (African Union, n.d., 2016, 2020). Its aspirations include an explicit focus on gender equality, equal rights and empowerment of women, girls and youth, where the full potential of women and youth, boys and girls are realized, seeking to eliminate all forms of GBV and discrimination (social, economic, political) against women and girls and all harmful social practices (especially female genital mutilation and child marriages) that act as barriers to quality health and education rights for women and girls (WHO, 2020).

In 2007, Liberia ratified the Protocol to the African Charter on Human and People’s Rights on the Rights of Women in Africa (Maputo Protocol). This regional convention to address violence against women

has yet to be domesticated into national legislation (African Union, 2003). National frameworks further provide a legal foundation and action agenda for gender equality though notable gaps remain.

The Constitution of the Republic of Liberia (1986), for example, does not explicitly guarantee the right to education without discrimination based on sex or gender, but does mandate the responsibility of the government to provide ‘equal access to educational opportunities and facilities to all citizens to the extent of available resources’ (Article 6).

The Children’s Law (Liberia, 2011a), which domesticates the Convention on the Rights of the Child into a national legal framework and enshrines the right to education for ‘every child’, does not explicitly prohibit discrimination against girls. It mandates free and compulsory primary level education, requires that secondary education be made progressively free and accessible to all children, and sets the minimum age for marriage at 18 for girls and boys. However, it does not stipulate a minimum age for child labour. The Act also allows ‘justifiable’ correction or punishment, implying acceptance of corporal punishment.

- The Amended Rape Law (Liberia, 2017), passed by the all-male senate in 2017, removed an earlier provision barring bail for defendants in rape cases, replacing it by a bailable provision (Karmo, 2017).

The final version of the Domestic Violence Act (Liberia, 2019a) does not ban female genital mutilation and cutting (FGM/C), although it had been included in earlier submissions (Guilbert, 2016).

In terms of national planning, the national development vision, Pro-PAPD (2018–2023), includes goals for empowering women and girls through education (Liberia, 2018). Pillar 1, Power to the People, sets targets for: reducing the out-of-school ratio and increasing retention and completion rates for girls; raising minimum infrastructure standards for boys and girls; ensuring appropriate responses to SGBV; increasing the proportion of appropriately qualified and trained teachers to 60 per cent; and doubling the number of female teachers in public school classrooms.

The national policy framework has been strengthened by the Multi-Sectoral Road Map to Address Sexual and Gender-based Violence. It was developed urgently in response to the declaration of rape as a two-year state of emergency by the President in October 2020, following mass public demonstrations against increased cases of SGBV against women and girls during COVID-19 (Sieh, 2020). The MoE has a key role to play in the implementation of the road map – both to enact measures to prevent, report and punish cases of GBV in and around schools, as well as to educate young women and men in the skills needed for developing rela-

tionships based on non-violence, dignity and mutual respect.

The National Gender Policy (NGP) (2018–2022) provides an accountability framework for gender equality and women's empowerment in Liberia. It outlines seven priority areas linked to SDGs, including education, adopting a similarly twin-tracked approach of targeted interventions and gender mainstreaming, and including a focus on marginalized boys and young men as a vulnerable group (Ministry of Gender and Development, 2009).

The Ganta Declaration (2019) initiated a one-year suspension of Sande society and bush school activities, a practice whereby young women and girls are initiated into adulthood through a series of activities including FGM/C, which is practised in 11 of the 15 counties in Liberia (Spotlight Initiative, 2019). However, the suspension, which was extended during COVID19, only covers girls below 18 and penalties for practising it are not considered sufficient to act as a deterrent (SeeD, 2021), especially where alternative livelihood options are scarce. Liberia is one of only three countries in West Africa without legislation to ban FGM/C (SeeD, 2021).

8.2.5 Legal, policy and planning impacts are undercut by institutional capacity and implementation limitations

Despite strengthening the legal framework, implementation challenges continue to constrain gender-equal access to justice. Weak dissemination and enforcement of the law on a national scale, coupled with power structures that marginalize women, have meant that women's legal redress of rights violations is severely limited in practice, with a tendency of leniency towards perpetrators of SGBV (OECD, 2019; SeeD, 2021).

Within the MoE, lack of financial capacity is a key constraint, as highlighted in Chapter 5, with gender programmes potentially a soft target for cuts. With limited resources from domestic financing, reliance on project-based donor funding to compensate for resource gaps also constitutes a constraint to the sustainability and institutionalization of policy initiatives.

For the National Policy on Girls' Education, for example, the G2B-ESP notes as a challenge that 'Though [the policy] is very strong, it is not being disseminated, fully implemented, or monitored'. While the policy was integrated into the education sector plan as a measure to address this challenge, the 2018–2019 Implementation Report of the G2B cited delays in implementation of 11 activities related to the Girls' Education Policy 'due to lack of funding' (MoE, 2019a).

The Inclusive Education Policy further highlights the gap between policy aspirations and implementation constraints. The policy notes that:

Liberia has also developed a number of policies to guarantee gender equality and non-discrimination in education, which include measures to encourage girls to attend schools without social discrimination, and strategies to safeguard curriculum content from gender bias. (MoE, 2018)

Critically, however, the policy states that, 'While the legal framework is in place however, the operationalization and implementation of these policies is still a pending subject for the GoL⁴²' (MoE, 2018). Anecdotally, it is reported that many good policies sit 'on the shelf' and do not reach school level, with more support needed for implementation (ESA Institutional Analysis Survey).

Similarly, the School Health Policy notes that effective implementation requires:

strong institutional structures and coordination among government agencies and other stakeholders at central and decentralized levels through the establishment of Health Committees at national, county, district and school levels. (MoE, 2019d)

⁴² Government of Liberia.

Funding for implementation, mandated to come from MoE and other ministries' budget allocations, development partners, and community support, is a key constraint.

The lack of policy clarity on the rights of pregnant and lactating girls to education, as well as limited protection against corporal punishment and other forms of violence in schools, which affect girls and boys differently, creates a hostile and intimidating environment for learning.

While the Code of Conduct for Teachers and School Administrators in Liberia (MoE, 2014) mandates sexual violence as a crime under the penal code, awareness at school and subnational level is low (ESA Institutional Assessment Survey) and enforcement is limited. Institutional capacity constraints in MoE are mirrored more broadly across the government. The World Bank's (2020a) Country Policy and Institutional Assessment 2020 for Liberia, for example, highlights weak institutional capacity across all criteria, scoring below the regional average for sub-Saharan Africa. The report further underscores that the impact of legislation and policy is constrained by low financial and institu-

tional capacity for implementation, monitoring and accountability. The country's score for the gender equality criterion showed a decline from earlier surveys, with underfunding of the Ministry of Gender, Children and Social Protection cited as a key constraint.

A review of the Liberian National Gender Policy similarly found that its impact is constrained by implementation challenges, which are noted as including: human resource capacity gaps; staff turnover and decision-making level of gender focal points at ministries and agencies; coordination and monitoring of policy implementation, and lack of National Budgetary allocation for policy implementation (Ministry of Gender, Children and Social Protection, 2017).

Data challenges limit capacity for monitoring gender equality. Only 41 per cent of the indicators needed to monitor the SDGs from a gender perspective are currently available (UN Women, 2020). Data gaps are seen in key areas, including gender pay gaps, ICT skills, and a lack of comparable methodologies for monitoring physical and sexual harassment regularly.

8.3 Gender norms, attitudes and practices in society

This section reviews the key gender norms, attitudes and practices that reinforce gender inequality in Liberia and impede education opportunities for girls and boys. Discriminatory social norms underpinned by high levels of SGBV fuel significant gender inequality and limit girls' chances of engaging in and completing education. High levels of gender inequality in society are both a *driver* and a *result* of gender inequality in education. Key metrics for measuring gender inequality include the United Nations Gender Inequality Index, which ranks Liberia 156 of 162 countries for 2020, which is below the regional average for sub-Saharan Africa (UNDP, 2020c). Similarly, the Social Institutions and Gender Index for 2019 ranks Liberia among the category of countries with 'high gender inequality' (OECD, 2019). These measurements indicate a challenging environment for achieving gender equality in and through education.

A recent study, *Women in Liberia, and Reaching Equality: Are We There Yet?* indicates that gender equality is far from fully accepted in Liberia (SeeD, 2021). Produced as part of the Liberian Social Cohesion and Reconciliation (SCORE) programme, the nationwide study explored attitudes of Liberians (1,975 men and 1,899 women) across four domains, namely: rejection of violence against women; support for women's inclusion in decision-making; support for the economic advancement of women; and livelihood security. The study found that only around one-third of citizens are highly supportive of gender equality. The remaining two-thirds of Liberians either oppose it or only prioritize certain aspects of equality, with 62 per cent of men and 33 per cent of women reporting they are opposed to gender equality. Those who support gender equality also tended to reject FGM/C and SGBV and support equal education for girls (SeeD, 2021).

Table 8.1 Attitudes to gender quality by sex

Profiles	Percentage	
	Female	Male
Those who <i>support</i> gender equality	35	38
Those who <i>oppose</i> gender equality	33	62
Those who <i>partially support</i> gender equality	32	0

Source: SeeD (2021).

8.3.1 SGBV: Declared a 'national emergency' in 2020

Rates of SGBV in Liberia remain high and have risen since the outbreak of the COVID-19 pandemic. Rape remains one of the highest reported crimes in Liberia, with 1,141 cases reported in 2020. Although the actual figure is likely to be higher, prosecutions are rare. Between 2016 and 2020, 78 per cent of GBV cases were sexually violent in nature, and 70 per cent thereof

were perpetrated against children (United Nations, 2021). Violence against women and girls surged during the current pandemic crisis (Sieh, 2020), with perpetrators often being people in positions of authority and protective roles, such as police and parents. Following street protests in Monrovia at the surge in incidences, particularly against very young

girls, the Liberian President declared rape a national emergency in September 2020. A multi-ministerial national security task force on sexual and gender-based violence was set up, which was tasked to design and implement a road map to tackle the crisis (Executive Mansion, 2020). Sexual abuse has severe negative social impacts, including high rates of school dropout, early pregnancy, and single motherhood. In turn, these social effects fuel intergenerational poverty and lack of education, and generate an overall culture of impunity that perpetuates low expectations of justice and trust in the system.

Additionally, domestic violence rates are high, with studies in other countries documenting an increase during pandemic-induced lockdowns. In Liberia, pre-pandemic data show that over one-third (35 per cent) of ever-partnered women and girls (15–49) have been subjected to physical and/or sexual violence by a current or former intimate partner in the previous 12 months (UN Women, 2020).

Attitudes have shifted slightly towards rejecting violence against women and

girls, though there are indications that women have internalized the normalization of domestic violence. In 2020, it was reported that Liberians are slightly more likely to reject violence against women than they were in 2018 (SeeD, 2021). However, compared with 25 per cent of men, 37 per cent of women aged 15–49 years consider a husband to be justified in hitting or beating his wife for at least one of the specified reasons, namely: if his wife burns the food, argues with him, goes out without telling him, neglects their children, or refuses sexual relations (LISGIS et al., 2021).

FGM/C is still strongly supported by 46 **per cent** of Liberians (SeeD, 2021). Nearly 40 per cent of women aged 15–49 who have heard of the practice are reported to have undergone FGM/C (LISGIS et al., 2021), a practice associated with Sande or bush schools. While the LDHS 2019/2020 indicates declining support, fewer than six in 10 people are against FGM/C (LISGIS et al., 2021), and support has actually increased in five counties (Grand Bassa, Sinoe, Gbarpolu, River Cess, and Bomi) (SeeD, 2021).

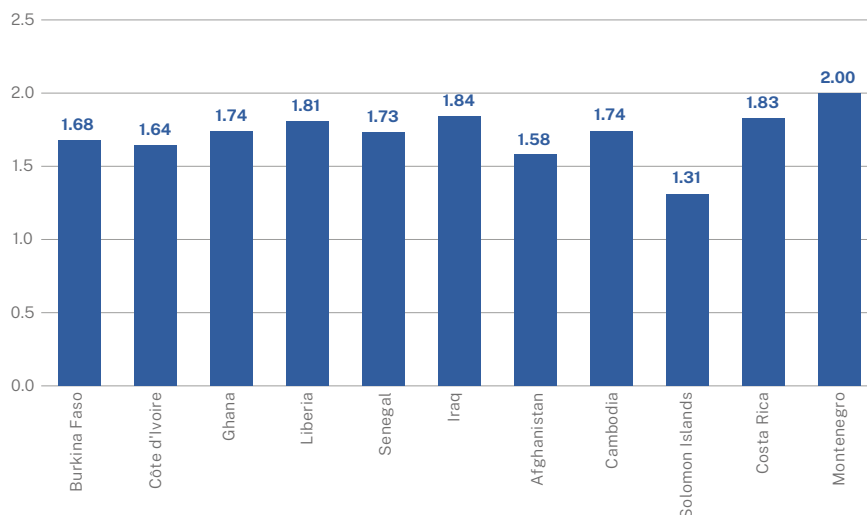
8.3.2 Unequal division of labour in the home leaves girls with less time to study

Women and girls aged 15 and over spend 6.3 per cent of their time on unpaid care and domestic work, compared with the 2.7 per cent spent by men (UN Women, 2020). Adolescent girls, in particular, spend almost double the amount of time than adolescent boys engaged in

household chores.⁴³ Among adolescents engaged in household chores, Liberia has the most unequal gender balance of countries in sub-Saharan Africa where data are available and among the highest levels of imbalance in the world, as illustrated in *Figure 8.1*.

⁴³ As measured by percentage of adolescents aged 10–14 years who, during the reference week, spent at least 21 hours on unpaid household services; adjusted gender parity index (UNESCO, 2020b).

Figure 8.1 Gender parity of adolescents engaged in household chores, selection of countries



Source: Adapted from GEMR-GR (UNESCO, 2020b).

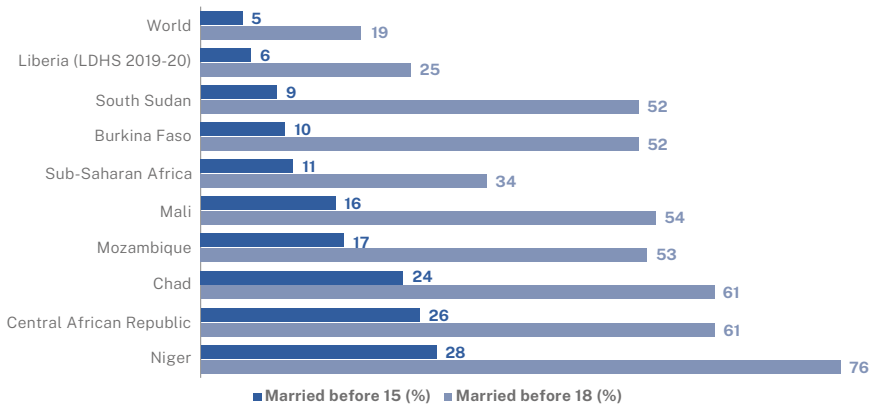
Note: Based on UNICEF data GEMR-GR (UNESCO, 2020b), showing the five countries with the highest imbalance in sub-Saharan Africa, compared with countries with the highest imbalance in each world region.

8.3.3 High rates of early, child and forced marriage present a key barrier to girls' education

Nationally, the rate of early, child and forced marriage below the age of 18 has declined in Liberia, though it remains high by global standards (Figure 8.2). Furthermore, Figure 8.3 shows that the rate has declined from 35.9 per cent (8.8 per cent below age 15) in 2013 (LISGIS et al., 2014) to 25 per cent (5.8 per cent below age 15) in 2019 (LISGIS et al., 2021).

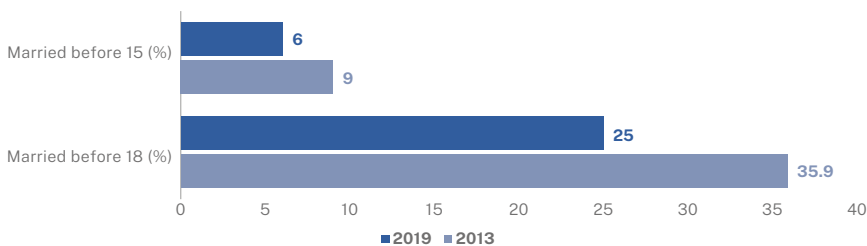
National averages, however, mask significant urban and rural disparities, with the median age for marriage of girls lower in rural areas (19.1 years) than in urban areas (23.3). Rates are highest for girls with no education and for girls whose mothers have had no or minimal education (LISGIS et al., 2021).

Figure 8.2 Proportion of women aged 20–24 year married or in union before age 15 and before age 18 (percentage)



Source: LISGIS et al. (2014); UNICEF (c2021a).

Figure 8.3 Proportion of women entering early marriages, 2013 and 2019



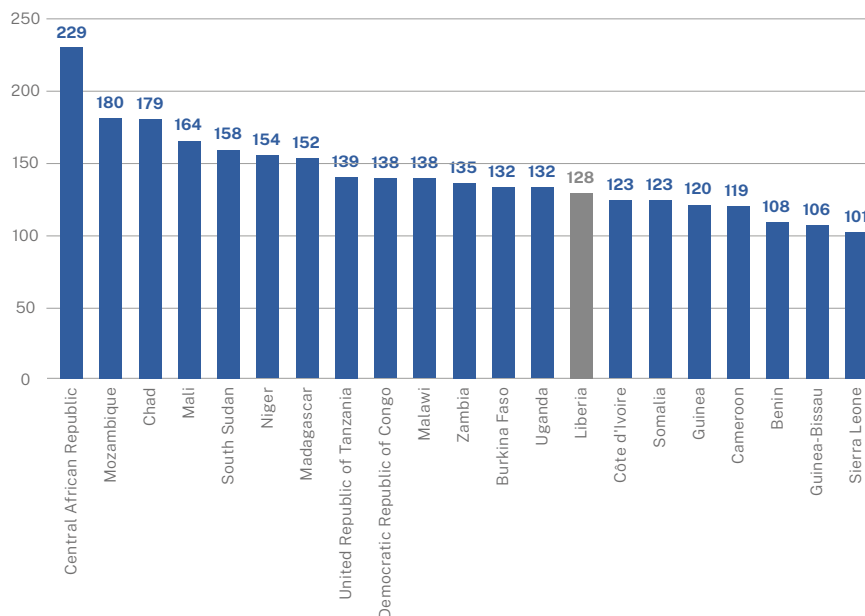
Source: LDHS 2013 (LISGIS et al., 2014); LDHS 2019/2020 (LISGIS et al., 2021); UNICEF (c2021a).

8.3.4 High rates of early marriage linked to high teenage pregnancy rates impede girls' prospects of completing their education

Early childbearing rates (within and outside marriage) in Liberia remain high and are associated with high school dropout rates. Nearly one-third of women aged 20 to 24 have given birth before the age of 18, rising to 39 per cent in rural areas compared with 26 per cent in urban areas (LISGIS et al., 2021). As shown in *Figure 8.4*, the adolescent birth rate remains among the highest in the world (UNFPA, 2021), though it declined to 128

per 1,000 women in 2019 (LISGIS et al., 2021), down from 150.3 per 1,000 in 2015 (UN Women, 2020). Whether this decline can be sustained following the COVID-19 pandemic will need to be researched. The likelihood, however, is that both early marriage and teenage pregnancy rates will rise as they did after the Ebola outbreak, which will have negative impacts on girls' education, health and life prospects (Malala Fund, 2020).

Figure 8.4 Adolescent birth rate per 1,000 girls aged 15–19, highest 20 countries



Source: drawn from UNFPA (2021); Liberia figure from LDHS 2019–20 (LISGIS et al., 2021).

The National Policy for Girls' Education does not explicitly protect the right of pregnant girls to continue attending their usual school, despite requiring the MoE to provide programmes to support pregnant learners to access education (MoE, 2013). Discriminatory and stigmatizing attitudes towards girls who become pregnant may further prevent many girls from returning to the classroom, like after the Ebola crisis. From a practical perspective, school facilities, systems and infrastructure are not conducive to supporting lactating mothers. The School Health

Policy (MoE, 2019d), informed by the Liberia Global School-Based Student Health Survey 2017 (MoE, 2017b), highlights that almost half of schools never allow pregnant girls to attend school, with only around 10 per cent of schools having a health room or access to a health professional. Anecdotally, pregnant girls are considered to set a negative example to other learners and may be steered towards night school or other alternative education options, despite this not being formal policy. Lack of support increases their risk of dropout.

8.3.5 Attitudes towards women in leadership are shifting; support for education remains steady

The SCORE study found that trust in female leadership has declined since 2108 (SeeD, 2020, 2021). Despite the landmark achievement of voting in the first female president in Africa in 2006, the Liberia SCORE index shows low trust in female leadership in general, and a slight decline since 2018, from 6.1 down to 5.7 on a 10-point scale (SeeD, 2020, 2021). Reported instances of violence against women in the 2021 elections (IPU, 2021) both reflect negative attitudes towards women in leadership roles and deter women from entering what is traditionally a male-dominated sphere.

On the other hand, support for women in managerial positions and in the workforce has increased significantly in the last three years, from 5.8 in 2018 to 7.6 in 2020 on a 10-point scale (SeeD, 2021). In practice, however, only one in five managerial positions are held by women (SeeD, 2021). In general, support for women in the workforce at any level has also risen from 6.9 to 7.5 (SeeD, 2021), indicating that attitudinal barriers preventing transition of girls from school to work may be shifting and creating a more favourable environment for female employment.

8.4 Gendered education opportunities and barriers in the education system

This section looks at gendered patterns in education opportunities relating to access, completion and learning achievement, including how gender intersects with other dimensions of disadvantage to exacerbate disparities. It also reviews gender barriers in the quality of the learning environment which further contribute to gender inequalities.

8.4.1 Education opportunities: Key gendered trends and headlines

Previous chapters highlighted that while trends are generally positive, with gender parity achieved on aggregate at ECE and primary level, education participation is generally low for both boys and girls. Girls generally enjoy fewer education opportunities than boys. However, patterns vary

among different groups, with urban girls from the highest wealth quintile making significant progress. Patterns in children aged 6–17 years who are out of school are changing – more boys are out of school than girls, and boys are more likely to have never attended school.

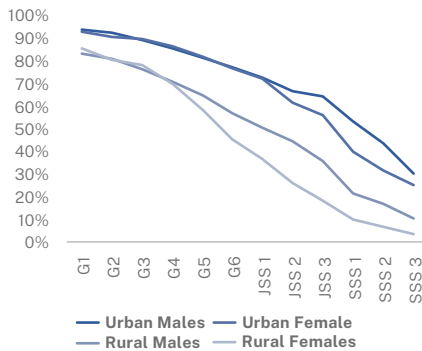
8.4.2 Gender inequality intersects with other dimensions of disadvantage to further constrain education opportunities

LDHS 2019–20 data highlight gender inequality intersecting with other dimensions of disadvantage such as location and wealth, with the poorest rural girls having the fewest education opportunities (LISGIS et al., 2021). They are the most likely to have no formal education (57 per cent) and the least likely to attend secondary school (2 per cent). Disadvantage increases with age, with overall gender parity achieved at ECE and primary levels, and the gaps widening at post-primary levels.

Looking at access probability, the data confirm that the poorest girls are the least likely to enter primary education

and continue through to junior secondary school, while their chances of completing senior secondary school are virtually zero. *Figure 8.5* and *Figure 8.6* illustrate access probability in terms of the proportion of the population aged 5–24 years who have accessed each grade of education, both currently enrolled and those who have attended that year in the past but are currently not enrolled or in higher levels of education. The data are organized by locality, wealth and gender. The data highlight the formidable challenge faced by the poorest girls and boys in rural areas getting to the end of secondary school compared with their wealthier urban counterparts.

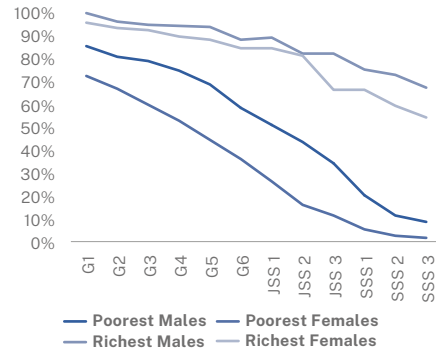
Figure 8.5 Access probability by level, locality and gender, 2020



Source: Author calculations based on EMIS data (MoE, 2020a).

Note: JSS – junior secondary school; SSS – senior secondary school.

Figure 8.6 Access probability by level, wealth quintile and gender



Source: Author calculations based on EMIS data (MoE, 2020a).

Note: JSS – junior secondary school; SSS – senior secondary school.

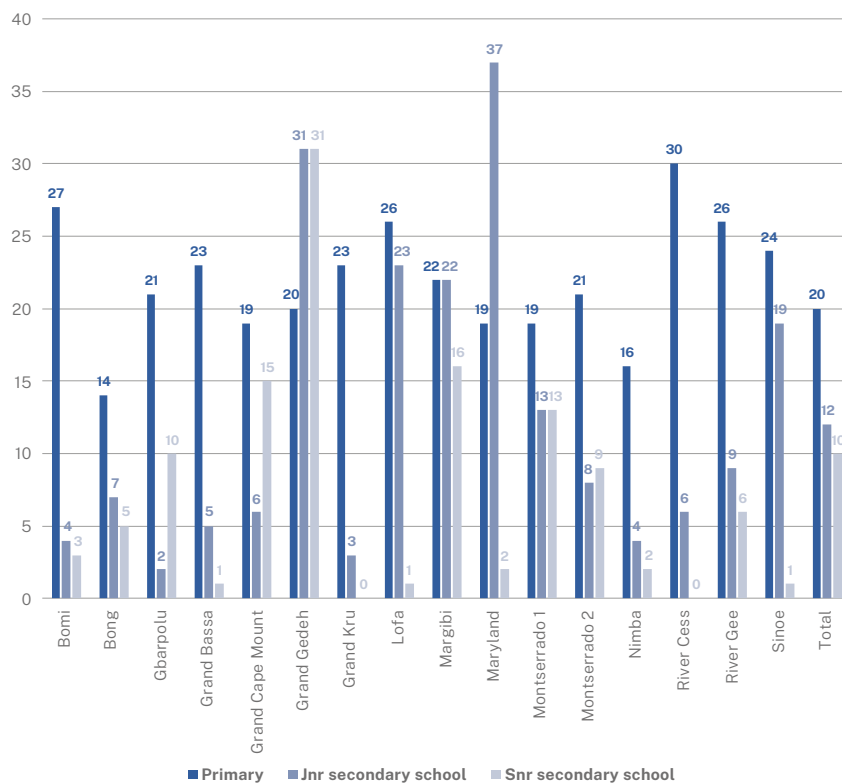
8.4.3 Gender barriers in the teaching force lead to a lack of female teachers as role models at every level

As highlighted in *Chapter 2*, the Liberian teaching force is characterized by critically low numbers of female teachers at every level, with gender gaps that widen at each level. EMIS data further show wide disparities in percentages of female teachers by county, with gaps widening sharply after primary (MoE, 2020a). Maryland has the highest percentage of female teachers at each level, though still reaching less than 40 per cent at primary level. No female teachers are reported at senior secondary school level in two counties, namely Grand Kru and River Cess (*Figure 8.7*). EMIS figures for female teachers average 20 per cent at primary level, 12 per cent junior secondary school level, and 10 per cent at senior secondary school level (MoE, 2020a).

In Liberia, the percentage of female teachers is significantly lower than average and among the lowest in the

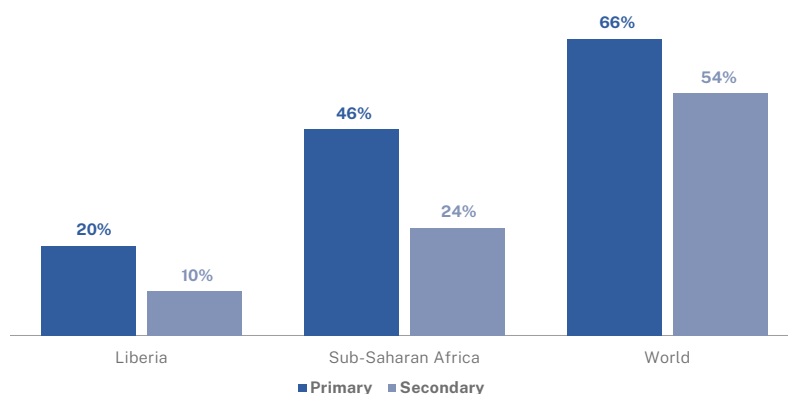
world. *Figure 8.8* shows that the world average for female teachers is 66 per cent at primary level, for example, and 54 per cent at secondary level (UIS, c2019). The sub-Saharan Africa average, though lower, is still considerably higher than Liberian figures, at 46 per cent for primary and 24 per cent for secondary level (UNESCO, 2020b). This is important because in the African context, the presence of female teachers has a positive effect on girls' school attendance and on parents' willingness to send and keep them there. Female teachers further provide female role models in positions of authority, which can be highly motivational to girls (Haugen et al., 2014, cited in UNESCO, 2020b). Conversely, the predominantly male environment in schools can create safety concerns for girls and their parents, and deter women from entering the profession (Haugen et al., 2014).

Figure 8.7 Percentage of female teachers by county and level, 2020



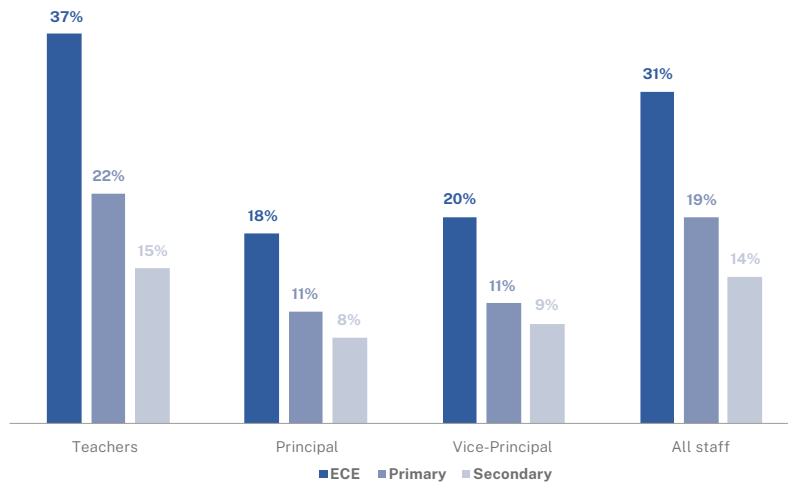
Source: Authors' calculations based on EMIS data (MoE, 2020a).

Figure 8.8 Average proportion of female teachers by level, regional comparisons, 2020



Source: Authors' calculations based on EMIS data (MoE, 2020a); GEMR-GR (UNESCO, 2020b).

Figure 8.9 Proportion of female staff by level, 2021



Source: Authors' calculations based on MoE (2021b) payroll data, August 2021.

Similarly, very few school principals and vice principals on government payroll are women. This mirrors patterns of low female involvement in the teaching profession overall, with figures lowest at senior secondary school level

(Figure 8.9). This severely limits female teachers' access to decision-making power, and contributes to a further lack of female authority figures and role models in schools for girls to aspire to and emulate.

8.4.4 School-related GBV continues to create hostile and unsafe learning environments; measures taken to address it are hampered by implementation challenges

Sexual violence is widespread in Liberian schools and negatively affects boys as well as girls, though girls remain at greatest risk of sexual violation, coercion and transactional sex for grades (Postmus et al., 2015; Steiner et al., 2018). Rates are reportedly at 22 per cent of boys compared with 30 per cent of girls. A 2014 study found that one in five learners –both girls and boys–report experiencing SGBV and GBV from teachers or staff, often related to 'sex for grades' (Save the Children, 2014). This is an issue in both public and private schools (Romero and Sandefur, 2019).

Data collection challenges constrain systematic monitoring. The Annual School Census (MoE, 2020a) included a question on whether there is a system in place to track learner's report of physical abuse, but cases tend to be unreported or underreported due to the sensitivity of the issue (Romero and Sandefur, 2019). Establishing safe school committees and school health clubs (also known as girls clubs or buddy clubs) and recruiting school counsellors are among measures to enable safe reporting, build awareness of rights, and strengthen girls' agency and leadership.

Furthermore, corporal punishment is widespread across schools. Fifty-one per cent of learners in control schools in the Center for Global Development evaluation report being hit by their teachers ‘at least occasionally’ (Romero and Sandefur, 2019, data not disaggregated by sex). Data are lacking on gendered patterns of

corporal punishment by male and female teachers against boys and girls. Studies from other countries suggest that boys are likely to be punished harder and more often than girls, particularly the poorest boys, whereas girls are more likely to be punished to reinforce gender stereotypical behaviour (Humphreys, 2008).

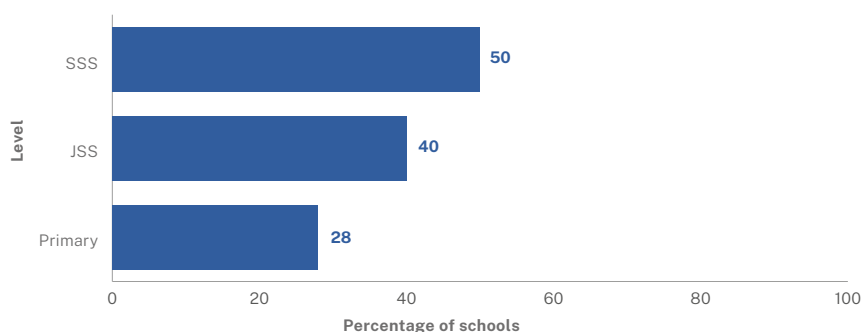
8.4.5 Inadequate water and sanitation facilities are a particular constraint for girls’ hygiene, privacy and dignity needs

Lack of single-sex sanitation and menstruation management facilities is an additional barrier for girls. Only 56 per cent of schools have functional WASH facilities. Of these, 24.5 per cent were found to be allocated for female learners with the remaining 75.5 per cent reserved for male learners (cited in MoE, 2020b).

High numbers of overaged girls reach puberty when still in primary school, which have the fewest single-sex toilets. While new data from an MoE survey of infrastructure are pending, the School

Health Policy (MoE, 2019d), informed by the Liberia Global School-Based Student Health Survey 2017 (MoE, 2017b), highlights that 73 per cent of schools do not cater for girls’ menstrual hygiene management. This represents a serious barrier for girls, especially as they reach puberty when a lack of girl-friendly latrines in which to manage their menstruation hygienically, safely, and with dignity discourages attendance, particularly for girls with disabilities. It also acts as a further barrier to female teachers entering the profession.

Figure 8.10 Proportion of schools with single-sex toilets by level, 2020



Source: Adapted from GEMR-GR 2020 (UNESCO, 2020b).

Note: JSS – Junior secondary school; SSS – Senior secondary school.

8.5 Education outcomes and women's empowerment

This section looks at how far gender-equal outcomes and women's empowerment are being achieved as a result of, or *through*, education. Indicators for this domain relate to labour force participation and political representation in line with SDG 5.5 – Gender Equality Target. Scores in these domains illustrate the level of economic empowerment of women and how far women have a voice in decision-making at the political level.

8.5.1 Labour force participation is relatively high by regional standards, but jobs are clustered in lower, less well paid levels

Liberian women are participating in the labour force at higher than regional average rates but face discrimination in the workplace. As noted in *Chapter 2*, women are concentrated in low-level, low-skilled, and precarious jobs. Alternatively, they are self-employed and are channelled into stereotypical trades, such as hairdressing and tailoring, where they have fewer opportunities for advancement to higher managerial roles and are paid less than men.

Only 20 per cent of women hold senior, middle management, or managerial posi-

tions (UN Women, 2020, cited in SeeD, 2021), while employed women aged 15 and over are more likely to live below the poverty line than men (47.3 per cent of women 43.1 compared with per cent of men).

Young women aged 15–24 are less likely to be in employment, education and training, though rates are declining for both sexes (16.7 per cent of young women compared with 8.9 per cent of young men) (UN Women, 2020).

Table 8.2 Labour force participation by gender, county comparisons, percentage

	Labour force participation rate	
	Female	Male
Liberia	72.1	80.6
Sub-Saharan Africa	64.4	79.8
Low HDI countries	57.7	72.3

Source: Adapted from Liberia Human Development Report (UNDP, 2020a).

8.5.2 Political representation of women in Liberia is among the lowest globally, limiting women and girls’ rights for their voices to be heard

Representation of women in parliament, a key SDG indicator of women’s empowerment, is low compared with regional and world averages. Women make up only 12 per cent of parliamentarians (IPU, 2021), though this is double the figure for 2004 (SeeD, 2021). There are eight women in the 73-member House of Representatives and just one woman in the 30member senate – a 22-year low for Liberia (IPU, 2021). Liberia is the lowest performing country

in the region for women in Upper House and the third lowest in the world (IPU, 2021). Of the 118 total candidates, only 18 women contested 12 of 15 counties (IPU, 2021). This severely limits women’s voices in decision-making and access to political power. No enforceable legislative quotas are in place to promote women’s political participation at the national or local level, though a recent initiative to this end has been launched (Daily Observer, 2020).

Table 8.3 Women’s representation in parliament

Country/region	Percentage	World rank (out of 190)
Liberia	12.0	151
Rwanda	61.3	1
Papua New Guinea	0.0	190
Sub-Saharan Africa average	24.9	n/a
World average	25.2	n/a

Source: *Women in parliaments: World Classification 2020* (IPU, 2021).

8.6 Implications for the new education sector plan

This section recaps the key messages from the chapter and points to areas for further consideration in the new education sector plan. Overall, the data show that despite progress in recent years, persistent gender inequality challenges remain across all six domains of the GEMR-GR analytical framework (UNESCO, 2020b).

High levels of gender inequality are seen with particular regard to gender norms, attitudes and practices, in the learning environment in education systems, and in education outcomes that reflect women's empowerment. Inequalities in these domains interact with and constrain gender-equal education opportunities for girls and boys, and hinder implementation of gender-responsive legislation, policy, and plans.

The legal, policy and planning framework are broadly supportive of gender equality in and through education, but the impacts are undercut by institutional capacity, budget, and implementation limitations. Dissemination, implementation, monitoring and funding have consistently been identified as key challenges. These challenges are expected to be exacerbated further due to the COVID-19 pandemic as capacity and resources are allocated to responding to the pandemic.

Social norms, such as SGBV, early marriage and pregnancy, unequal division of domestic labour, and mistrust of women in leadership roles, are key constraints for girls' education opportunities.

In terms of education opportunities, the data show that despite progress, the poorest rural children, especially girls,

face the biggest obstacles to access and complete education. Gender inequality intersects with other dimensions of disadvantage, such as location and wealth, to constrain gender-equal education opportunities.

While dropout of boys is an increasingly pressing issue, ensuring equal education opportunities and outcomes for girls remains unfinished business. Challenges for girls to claim their education rights are multidimensional and interconnected. It stretches beyond the education sector and involve demand, supply, and enabling environment constraints. Specific challenges for boys' education access and retention are less researched.

Within the education system, gender barriers to education include critically low numbers of female teachers, especially at the higher levels, thus there are few female authority role models for girls in schools. High levels of SGBV and lack of single-sex WASH facilities in schools constitute a particular barrier for girls.

In terms of education outcomes, there is limited women empowerment. While female participation in the workforce is relatively high, women are concentrated in the lower levels, are paid less, are often in precarious positions, and are more likely to be unpaid. Political representation remains very low compared with global and regional levels. Thus, women are left with very little voice in decision-making at the political level, which constrains their power to effect transformational change.

In line with global good practices and building on the existing policy framework, G2B-ESP and the National Strategy for

Girls' Education (draft), the new education sector plan should consider a twin-track approach that includes gender-targeted activities and mainstreams gender throughout all programmes. It should further build institutional capacity for gender-responsive management,

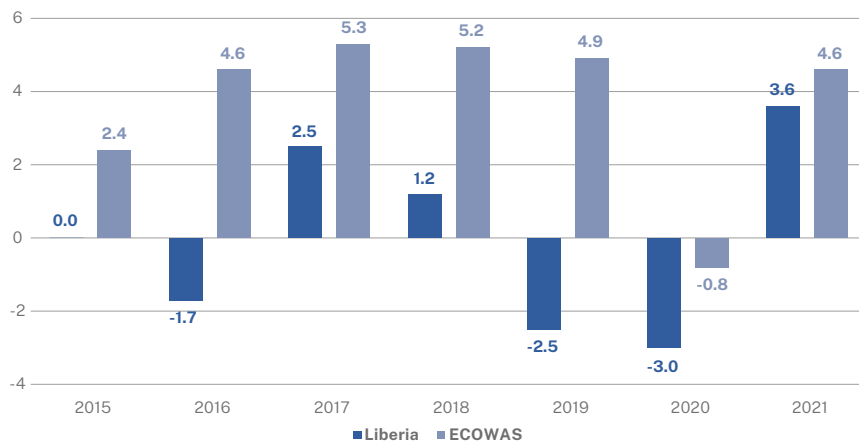
budgeting, monitoring, accountability and learning in the sector.

Allocation of adequate resources for implementation will be the key to achieving gender equality policy goals and gender transformative change.

Annex

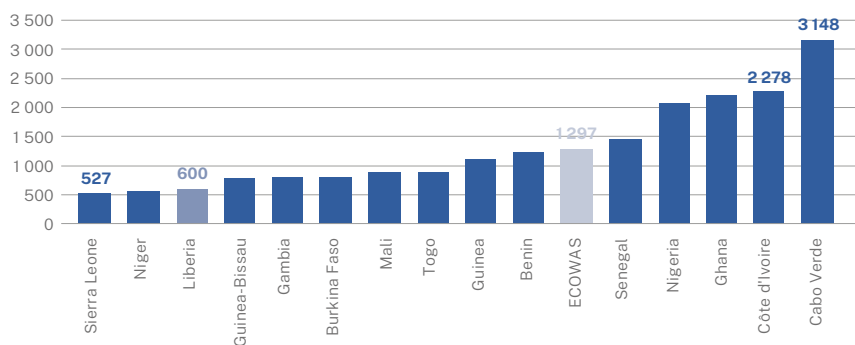


Figure A1 Evolution GDP annual growth rate (constant), Liberia and ECOWAS countries average, 2015–2021, percentage



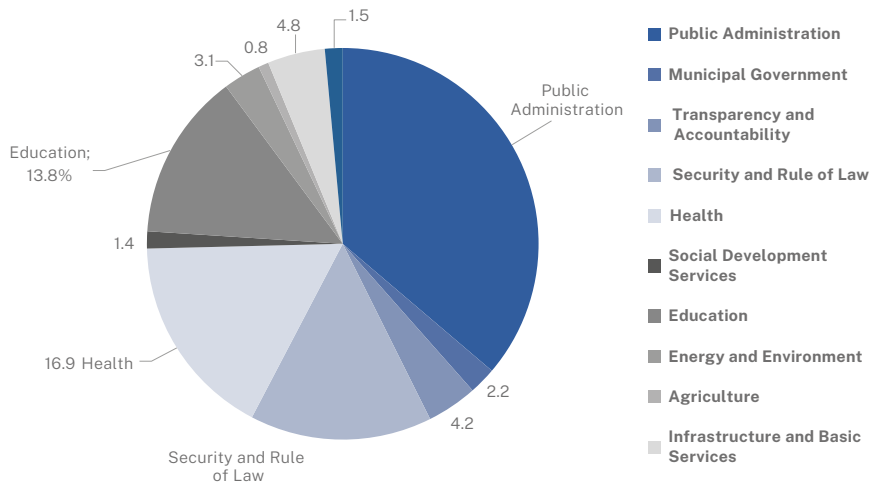
Source: CBL (2015–2021) and IMF (2021b) World Economic Outlook April 2021 for ECOWAS countries.

Figure A2 GDP per capita (current), ECOWAS countries, 2020



Source: IMF (2021b) World Economic Outlook database October and April 2021.

Figure A3 Share of education expenditure in total national expenditure, Actual, 2019/2020, percentage



Source: National Budgets (MFDP, 2013–2022), World Bank (2021f).

Table A1 Key macroeconomic indicators, 2010–2026

	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026
GDP (current, US\$ billion)	1,97	2,34	2,68	3,04	3,09	3,09	3,26	3,32	3,26	3,08	3,04	3,38	3,66	3,79	4,09	4,40	4,74
GDP (constant, US\$ billion—base 2019)	2,42	2,61	2,83	3,07	3,10	3,10	3,05	3,12	3,16	3,08	2,99	3,09	3,24	3,40	3,59	3,79	4,01
GDP growth (annual growth rate, cst %)	6,4	7,7	8,4	8,8	0,7	0,0	-1,6	2,5	1,2	-2,5	-3,0	3,6	4,7	4,9	5,7	5,5	5,7
GDP per capita (current, US\$)	505,2	582,5	646,8	716,5	708,8	691,4	709,9	706,3	677,3	623,8	600,5	653,3	690,7	698,4	734,7	773,5	814,3
GDP per capita (constant, US\$—base 2019)	621,6	648,5	683,2	723,7	710,1	692,4	664,0	663,8	655,6	623,8	590,9	597,4	611,0	625,6	646,2	666,5	688,1
CPI (annual growth rate, %)	7,3	8,5	6,8	7,6	9,9	7,7	8,8	12,4	23,5	27,0	17,0	5,9	11,8	9,6	5,4	5,0	5,0
GDP deflator (Index, base 2019)	81,3	89,8	94,7	99,0	99,8	99,9	106,9	106,4	103,3	100,0	101,6	109,3	113,0	111,6	113,7	116,1	118,3
Exchange rate (L\$ to US\$, period average)	71,4	72,2	73,5	77,5	83,9	86,2	94,4	112,7	144,1	186,4	191,5						

Source: CBL (2010–2021), IMF (2021b) World Economic Outlook database October 2021.

Note: Estimates start in 2016 for GDP; CPI: consumer price index.

Table A2 Government revenue (on budget), 2014/2015–2019/2020 (million US\$)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
Total govt revenue	638.2	548.8	555.8	452.5	482.4	543.4
Domestic	436.9	452.6	465.6	422.4	469.7	435.1
Tax revenue	381.8	401.7	385.5	375.9	388.8	351.6
Non-tax revenue	55.2	50.9	80.2	46.5	80.9	83.5
External	201.3	96.1	90.1	30.2	12.7	108.2
Grants	60.1	68.2	72.8	9.5	–	–
Loans	141.1	27.9	17.3	20.7	12.7	108.2
Total govt expenditure	619.1	619.1	528.3	535.4	540.2	513.0
Recurrent	544.5	578.1	528.3	524.6	509.1	465.3
Development	74.6	40.9	–	10.7	31.1	47.8
Deficit	19.1	–70.3	27.4	–82.9	–57.8	30.3

Source: National Budget (MFDP, 2013–2022), various years.

Table A3 Distribution of national expenditure (on budget), by type, 2014/2015–2019/2020 (%)

	2014/15	2015/16	2016/17	2017/18	2018/19	2019/20
21 Compensation of employees	38.4	38.5	50.8	57.4	58.6	57.8
22 Use of goods and services	34.1	38.1	33.6	23.8	21.4	13.8
25 Subsidy	–	–	–	0.5	0.2	0.1
26 Grants	13.9	15.3	13.2	11.8	8.9	5.8
27 Social benefits	0.2	0.2	0.3	0.1	0.2	0.5
31 Non-financial assets	12.1	6.6	–	2.0	5.7	9.3
41 Domestic liabilities	0.4	0.4	0.6	1.3	1.3	7.8
42 Foreign liabilities	0.9	0.9	1.4	3.0	3.6	4.9
Total (%)	100	100	100	100	100	100
Total (million US\$)	619.1	619.1	528.3	535.4	540.2	513.0

Source: National Budget (MFDP, 2013–2022), various years, and World Bank (2021f).

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About the book

Prepared in the middle of the global pandemic, the 2022 Education Sector Analysis has given the Government an opportunity to reflect on the strengths and weaknesses of the Liberian education system, especially its resilience in crises of the magnitude of COVID-19. These ESA findings can support the development of policies that promote the fulfilment of Being Best promise children and youth in Liberia.



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