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Liberia Teacher Training Program

Study of Primary School (Lower Basic Education) Teacher Supply and Demand

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List of acronyms and abbreviations

ALU	Association of Liberian Universities
ASC	Annual School Census
CFL	Christian Foundation for Liberia
ECSEL	European Commission Support for Education in Liberia
EMIS	Education Management Information System
ERA	Education Reform Act
LTP	Liberia Teacher Training Program
MER	Monitoring, Evaluation, & Research
M&E	Monitoring and Evaluation
MoE	Ministry of Education
NTAL	National Teacher Association of Liberia
PQTR	Pupil-Qualified-Teacher Ratios
PTR	Pupil-Teacher Ratios
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development

Executive Summary

This report presents findings from a study of primary school teacher supply and demand conducted jointly by the USAID-LTTP Monitoring, Evaluation, and Research (MER) team and the EMIS and Monitoring and Evaluation Units of the Department of Planning, Research, and Development at the Ministry of Education. The purpose of the study was to inform discussions and decisions regarding policies and procedures related to the recruitment and retention of primary school teachers, in both government and non-government school subsystems.

Education Reform Act 2011 as well as various other official documents concurrently or alternatively use both the terms '*lower basic education*' and '*primary school*' while referring to the education level or schooling that constitutes grades 1-6. Hence, staying in line with the Ministry of Education Publication of Education Statistics for Liberia (MoE National Statistical Booklet, 2014), this report uses the '*primary school*' for grades 1-6 as the nomenclature instead of '*lower basic education*'.

The study analyzed the Ministry of Education's 2014 EMIS database, which includes information on teachers at the majority – but not all – of the government and non-government (private, faith-based, and community) primary schools. The findings focus on the pupil-teacher ratios (PTRs) and pupil-qualified teacher ratios (PQTRs) at the national, county, and district level. The findings also include the percentages of teachers who have the minimum teaching qualification (i.e., at least a C-Certificate), the percentages of teachers who are female, and the percentages of teachers who are nearing retirement based on their age or length of service, again at the national, county, and district levels.

This study replicates one conducted using 2013 EMIS data (Goyee et al., 2014) and thus provides an updated picture of teacher supply and demand, in this case using 2014 EMIS data. It is important to note that the 2013 and 2014 EMIS databases cover somewhat different sets of schools, because not all principals submitted the annual school census questionnaires in both year and not all principals attended the workshops at which the annual school census questionnaires were distributed and explained. Given the relatively limited overlap between the 2013 and 2014 datasets (78.9% of the government schools and 39.1% of the non-government schools), this report does not make comparisons in findings between the current study and the previous one (i.e., Goyee et al., 2014).

The current study indicates that, nationally, Liberia meets the current policy goal of 44 pupils per teacher (PTR) and even the goal of 44 pupils per qualified teacher (PQTR). However, there is considerable variation in these figures across counties and districts. Moreover, the findings concerning pupil-teacher ratios (PTRs) and pupil-qualified teacher ratios (PQTRs) should be interpreted with a degree of caution. There is a general belief that the 2014 EMIS database (like the 2013 EMIS database) includes at least some "ghost" or "duplicate" teachers. To the extent that this is true, the implication is that PTRs and PQTRs are calculated based on more teachers than were, in fact, working in primary school classrooms in various districts and counties in Liberia. Thus, the actual PTRs and PQTRs may be higher than presented in this report.

Additionally, about one-third primary schools teachers do not have the minimum C-Certificate teaching qualification. Based on the 2014 EMIS data, 3,549 government primary school teachers (30.3%) and 3,806 non-governmental primary school teachers (40.6%) need to have their qualifications upgraded or need to be replaced with "qualified" teachers if Liberia is to achieve its policy goal of 100% of primary school teachers having at least a C-Certificate. Moreover, the

percentage of “unqualified” primary school teachers varies considerably across counties and districts in both government and non-government schools.

The findings from this study also shed light on how much work remains to be done to achieve another policy goal – gender parity in the primary school teaching force. Nationally, according to the 2014 EMIS data, 12.7% of government primary school teachers are female and 20.7% of non-government primary school teachers are female. Clearly, in neither subsystem is Liberia approaching the 50% figure indicating gender parity. Furthermore, the findings portray substantial variation across counties and districts in the percentage of teachers who are female. This means that while some counties and districts have made more progress in achieving gender parity in the teaching force, other counties and districts continue to be very far from achieving this policy goal.

To address the challenges of the distribution of “qualified” teachers adequate to the need across all the districts and the underrepresentation of female teachers, Liberia may need to implement special packages of financial incentives, provide training programs, organize better living conditions, and/or improve working conditions to attract and retain “qualified” and/or female teachers in certain settings. Consideration should also be given to assessing and addressing any qualifications or gender biases that influence hiring and deployment decisions in some contexts.

More positively, the findings from this study suggest that, unlike some countries, Liberia does not have a major problem in terms of the percentage of primary school teachers who are nearing retirement, as indicated by the percentage of primary school teachers whose age or length of service in schools suggests that they may retire in the near future. According to the 2014 EMIS data, at the national level, 8.8% of government primary school teachers are at least 60 years old and 3.0% of government primary school teachers have at least 21 years of experience. At non-government schools, 3.5% of primary school teachers are at least 60 years old and 1.5% of primary school teachers have at least 21 years of experience. Nevertheless, the overall percentage of teachers nearing retirement should be monitored and plans made for their replacement over the coming years. Moreover, the problem is greater in some counties and districts than others, which should be considered in plans for teacher deployment.

Finally, the Ministry of Education along with its Liberian and international partners need to continue efforts to redefine the current policy-specified minimum qualification (i.e., the C-Certificate, which is obtained after a relatively short period of formal professional education). This study indicates that the current supply of teachers - and even the supply of qualified teachers - can be viewed as meeting the demand in terms of the targets outlined in education policy. However, this study does not address whether the capabilities of the teaching force meet the demand for improved learning opportunities among the students in government and non-government primary schools. In addition to exploring ways to further upgrade the qualifications of primary school teachers, attention also needs to be given to institutionalizing continuous professional development for all teachers.

Background of the Study

A number of parties have argued that future planning by the Ministry of Education and supporting donors and projects (e.g., USAID-LTTP) in the area of teacher recruitment, training, and deployment, needed to be informed by a study of teacher supply and demand. These parties include those involved in the October 2013 Joint Sector Review, the group that undertook the mid-term evaluation of USAID-LTTP in June-July 2013, and the FHI 360 team that conducted the Program Technical Quality Assessment in June 2013. It has been suggested that such planning should be based on systematic information on the number of qualified primary teachers in relation to the policy-stipulated pupil-

teacher ratio; the distribution of qualified teachers across counties, districts and schools; the proportion of female teachers; and the proportion of teachers nearing the age or length of career for retirement.

In order to investigate teacher supply and demand, the USAID-LTTP Monitoring, Evaluation, and Research (MER) team prepared a report (Goyee et al., 2014) that presents methodical analysis of the suggested indicators of teacher supply and demand using 2013 Education Management Information System (EMIS) data. The USAID-LTTP MER team, in partnership with colleagues from the Ministry of Education's EMIS and Monitoring and Evaluation Units, replicated that previous study analyzing 2014 EMIS data. This report presents the findings from the replication study and provides an updated perspective on teacher supply and demand in Liberia.

Objectives of the Study

The main purpose of this study is to inform discussions, planning and decision-making concerning the number of primary school teachers with the minimum teaching qualifications needed nationally, within specific counties, and within specific districts. The policy goal identified in the 2011 Education Reform Act (Republic of Liberia, 2011) states that there should be 1 qualified teacher for every 44 primary school pupils, that is, a pupil-qualified teacher ratio of 44. The study also examines the proportion of primary school teachers who are female and the proportion of those who are nearing retirement.

More specifically, the current study is design to answer the following research questions, based on the 2014 EMIS data:

1. For all counties and districts, in government and non-government primary schools, what are the *pupil-teacher ratios* (averages as well as highest and lowest districts' values)?
2. For all counties and districts, in government and non-government primary schools, what are the *pupil-qualified teacher ratios* (averages as well as highest and lowest schools' values)?
3. For all counties and districts, in government and non-government primary schools, what are the percentages of teachers who do *not have a C-Certificate* or a higher qualification?
4. For all counties and districts, in government and non-government primary schools, what are the percentages of teachers who are *female*?
5. For all counties and districts, in government and non-government primary schools, what are the percentages of teachers who are nearing retirement, i.e.:
 - a. are at least *61 years old*?
 - b. have at least *21 years of teaching experience*?

Methodology

The current study relied on the EMIS data collected as part of the 2014 Annual School Census (ASC). The 2014 EMIS database includes information on teachers and students from a large majority of the government and non-government (i.e., private, faith-based, and community) primary schools in Liberia.

To address the five research questions identified above, the LTTP Monitoring, Evaluation, and Research Team, in collaboration with staff from the Ministry’s EMIS and Monitoring and Evaluation Units, used Microsoft Access and Microsoft Excel to calculate frequencies, ratios, and percentages. The study’s findings are presented in charts and tables, some in the body of the text and others in annexes.

It is important to note that the 2014 EMIS data are based on somewhat different sets of schools than is the case for the 2013 EMIS data, which were analyzed in a previously reported study (Goyee et al, 2014). This is because not all principals submitted the annual school census questionnaires in either year. For instance, in 2013, 202 (6.6%) principals of the 3051 who received questionnaires did not return them (MoE, 2013, p. 142), while in 2014, 422 (9.5%) of the 3,363 who participated in the EMIS training returned the questionnaires (MoE, 2014, p. 134). Moreover, in both years not all principals attended the EMIS training at which the annual school census questionnaires were distributed and explained. As a consequence of these factors, of the 2477 government primary schools that are included in 2013 and/or 2014, 1955 schools (78.9%) are included in both the 2013 and the 2014 datasets, 102 schools (4.1%) are only included in the 2013 dataset, and 420 (16.9%) schools are only included in the 2014 data set. Additionally, of the 1587 non-government primary schools that are included in 2013 and/or 2014, 621 schools (39.1%) are included in both the 2013 and 2014 datasets, 108 schools (6.8%) are only included in the 2013 dataset, and 858 (54.1%) are only included in the 2014 dataset. Thus, this report does not highlight comparisons between the findings from the analyses of the 2013 and 2014 EMIS data. Comparisons are made in a separate report with a dataset limited only to schools that returned ASC questionnaires in both 2013 and 2014 (Noor et al, 2015; forthcoming).

While the missing data in the 2014 EMIS dataset represents a limitation to the current study, one should note that this report provides information on most of the teaching force in Liberia. That is, the 2014 EMIS database includes a larger number of schools than the 2013 EMIS database, and this is especially the case for non-government schools. Nevertheless, caution should be taken in interpreting the findings, since even the 2014 EMIS database excludes a sizeable number of schools.

Additionally, the findings concerning pupil-teacher ratios (PTRs) and pupil-qualified teacher ratios (PQTRs) should be interpreted with a degree of caution. PTRs and PQTRs at the lower and upper ends of the distribution of school-level estimates are not likely to be accurate, as some figures suggest that schools have one or very few teachers for every pupil while others imply that there are several hundred pupils per teacher. A number of explanations could account for these outliers, including that the school register—from which the enrollment data that we use for pupil numbers is taken—may either under- or over-represent the actual number of students who attend school regularly. Also, there is a general belief that the 2014 EMIS database (like the 2013 EMIS database) includes at least some “fictitious” or “duplicate” teachers. To the extent that this is true, actual PTRs and PQTRs may be higher at the school level, as well as the district and county level, than those presented in this report.

Education Reform Act 2011 as well as various other official documents concurrently or alternatively use both the terms ‘*lower basic education*’ and ‘*primary school*’ while referring to the education level or schooling that constitutes grades 1-6. Hence, staying in line with the Ministry of Education Publication of Education Statistics for Liberia (MoE National Statistical Booklet, 2014), this report uses the ‘*primary school*’ for grades 1-6 as the nomenclature instead of ‘*lower basic education*’.

Findings

Average, Lowest, and Highest Pupil-Teacher Ratios

As articulated in the 2011 Education Reform Act, the policy goal for pupil-teacher ratios (PTRs) in government schools varies by school level and is set at 44:1 in primary schools. More specifically, the Education Reform Act states that “class sizes for all levels will be established and enforced...These will be based on a pupil-teacher ratio determined for each level. Some preliminary recommendations serve as guides: lower basic education (primary) classes for public, private, and faith-based schools will not exceed the ratio of 44:1 to facilitate effective teaching” (Ministry of Education, 2011, p. 24).

This section presents the pupil-teacher ratios in government and non-government primary schools, based on analyses of 2014 EMIS data. The tables present the average PTRs for each county and the minimum and maximum district-level PTRs. Additional details are presented in Annex A, which shows PTRs for all districts along with minimum and maximum school-level PTRs, to provide a sense of the variability of ratios within districts.

As Table 1 and Chart 1 both show, the national PTR was 21.9 in government primary schools in 2014. This suggests that, on average, Liberia was well ahead of the policy goal of 44 primary students per teacher. In fact, Table 1 reveals that all counties have PTRs below the policy goal, and that in 3 counties PTRs are between 14.0 and 19.0; in 9 counties PTRs are between 19.0 and 27.0; and in 3 counties the PTRs are just above 27.0.

Table 1: Pupil-teacher ratios in government primary schools by county

County	Pupil-Teacher Ratio (PTR)	Lowest District PTR	Highest District PTR
Bomi	27.9	20.8	40.6
Bong	21.0	15.8	33.4
Gbarpolu	23.3	17.7	30.8
Grand Bassa	21.5	16.7	24.8
Grand Cape Mount	26.8	17.6	30.0
Grand Gedeh	16.7	13.4	25.4
Grand Kru	21.4	16.3	44.7
Lofa	19.7	14.9	31.1
Margibi	27.4	19.3	37.9
Maryland	23.2	11.7	30.5
Montserrado	27.6	17.7	42.0
Nimba	21.2	14.9	29.1
Rivercess	18.4	13.7	20.4
River Gee	20.3	15.3	27.8
Sinoe	14.2	9.3	17.4
LIBERIA	21.9	9.3	44.7

Even within counties, most districts have PTRs below the policy goal of 44:1, although there are variations in the PTRs across districts. Table 1 shows the lowest and highest district-level PTR in each county. Only one of the highest district-level PTRs is above the policy goal, and at 44.7, this Grand Kru district (Dorbor) is only slightly above the policy goal. Two other districts, one in Bomi (Senjeh, 40.6)

and one in Montserrado (Paynesville, 42.0) are just below the policy goal, suggesting that they need close monitoring. The lowest district PTR is below 21 in every county, with the lowest PTR found in a district in Sinoe, which has, on average 9.3 primary students per teacher.

There is even greater variation in PTRs among schools.

As can be seen in Table A1 in Annex A, the government primary school with the lowest pupil-teacher ratio is in Suehn Mecca district in Bomi (PTR=1.0), while the government primary school with the highest pupil-teacher ratio is in Monrovia Consolidated School System (MCSS)¹ in Montserrado County (PTR=425.3).²

At the district level, two districts, one in Bomi (Senjeh, 40.6) and one in Montserrado (Paynesville, 42.0) are just below the policy goal, suggesting that they need close monitoring; in Grand Kru one district (Dorbor, 44.7) is just above the goal (i.e., needs attention).

Turning to non-government primary schools (see Table 2 and Chart 1), the national average for PTR is 18.1, which is marginally lower than the average PTR (21.9) in government primary schools.

Table 2: Pupil-teacher ratios in non-government primary schools by county

County	Pupil-Teacher Ratio (PTR)	Lowest District PTR	Highest District PTR
Bomi	20.8	7.0	22.7
Bong	17.5	11.0	23.3
Gbarpolu	15.4	11.3	29.5
Grand Bassa	23.8	18.9	37.8
Grand Cape Mount	23.1	13.3	31.9
Grand Gedeh	22.1	11.2	26.2
Grand Kru	11.0	5.3	16.8
Lofa	15.7	10.2	19.9
Margibi	21.1	18.5	26.1
Maryland	25.3	14.8	29.1
Montserrado	16.6	12.3	19.2
Nimba	19.0	8.8	29.1
Rivercess	10.1	5.1	11.8
River Gee	16.9	12.0	30.8
Sinoe	19.0	6.3	28.4
LIBERIA	18.1	5.1	37.8

¹ Unlike the previous study of primary school teacher supply and demand (Goyee et al., 2014), which analyzed 2013 EMIS data, the current study does not present MCSS as a separate county but instead as a district in Montserrado County. This difference reflects a change made in the 2014 Liberia EMIS database.

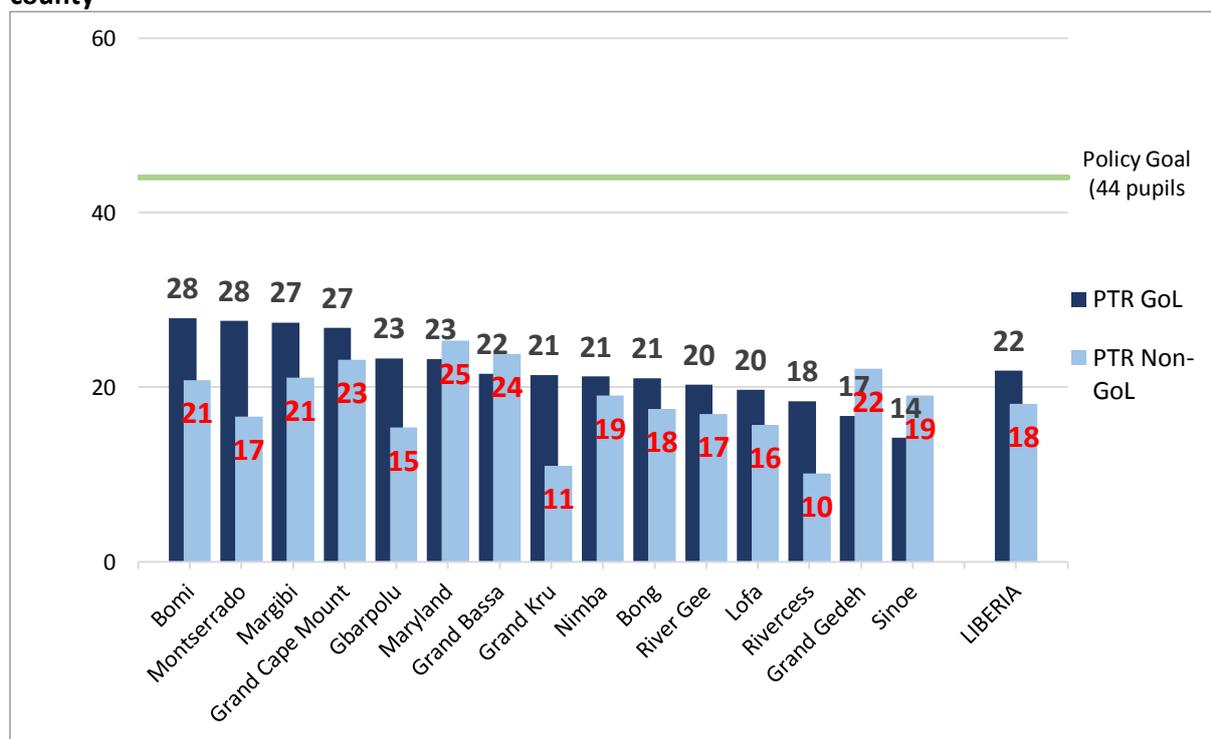
² Pupil-teacher ratios (and, thus, also pupil-qualified teacher ratios) at the lower and upper ends of the distribution of school-level estimates are not likely to be accurate. Some figures suggest that primary schools have one or very few teachers for every pupil, while others suggest that there are several hundred pupils per teacher. Neither of these extremes is likely to reflect day-to-day realities at schools. A number of explanations could account for these outliers, including the under- or over-reporting of teachers; whether a school operates on a double shift schedule; whether the school register—from which the enrollment data that we use for pupil numbers is taken—under- or over-represents the actual number of students who attend school regularly, and data entry issues.

At the county level, average PTRs in non-government primary schools range from a low of 10.1 in Rivercess to a high of 25.3 in Maryland. District-level PTRs vary from 5.1 in Yarnee District of Rivercess County to 37.8 in District 3 of Grand Bassa County. While all district level PTRs for non-governmental schools are below the national policy goal, the variation in PTRs across districts signals different average classroom environments in non-government schools in different districts.

There is even greater variation in PTRs among schools. As can be seen in Table A2 in Annex A, the non-government primary school with the lowest pupil-teacher ratio (PTR=0.5) is in Paynesville District of Montserrado County, while the non-government primary school with the highest pupil-teacher ratio (PTR=186.0) is in Right Bank 2 District in Montserrado County.

Chart 1 compares the PTRs in government and non-government primary schools. Except for Grand Bassa, Grand Gedeh, Maryland, and Sinoe counties, the PTR is higher in government primary schools than in non-government primary schools. This likely is the case because non-government primary schools, on average, have budgets that allow them to hire relatively more teachers than government primary schools. Note, however, that the differences between the average PTRs in government and non-government schools are relatively small, with the differences exceeding 5 pupils per teacher only in Montserrado, Margibi, Gbarpolu, Rivercess, and Grand Kru counties.

Chart 1: Comparison of pupil-teacher ratios in government and non-government primary schools by county



Average, Lowest, and Highest Pupil-Qualified Teacher Ratios

As discussed in the previous section, 44 or fewer pupils per teacher is the policy goal set by the Government of Liberia for primary schools. The Education Reform Act further stipulates that the minimum formal education qualification for teachers in primary schools should be a C-Certificate. Together, these goals suggest that not only should pupil-teacher ratios (PTRs) be at or below 44 in government schools, but that the pupil-qualified teacher ratios (PQTRs) should be as well.

As shown in Table 3 and Chart 2, the average pupil-qualified teacher ratio for government primary schools in Liberia was 31.8 in 2014. This national figure is lower (i.e., better) than the policy target of 44 pupils per qualified teacher. Table 3 also presents PQTRs for the 15 counties as well as the PQTRs of the lowest and highest districts within each county. All but two counties, Sinoe (PQTR=51.0) and Grand Kru (PQTR=50.0), have met the policy goal for pupil-qualified teacher ratios. Among rest of the 13 counties, three counties – River Gee (PQTR=41.1), Rivercess (PQTR=42.2), and Bomi (PQTR=43.9) – need to be closely monitored as their average pupil-qualified teacher ratios are above 40. Nimba (PQTR=24.6) and Grand Gedeh (PQTR=25.3) counties have the lowest PQTRs.

Additionally, within each county the PQTR varies across districts, as indicated by the lowest and highest district PQTRs shown in Table 3. The lowest pupil-qualified teacher ratio is in Saclepea 2 District in Nimba County (PQTR=17.1). The highest pupil-qualified teacher ratio is in Sankwen District in Sinoe County (PQTR=298.0).

The highest PQTR presented in Table 3 in government primary schools is in Sankwen District in Sinoe County, while the lowest PQTR is in Saclepea 2 District in Nimba County.

Note also that in two counties – Grand Kru and Sinoe – the PQTRs are above the policy goal of 44, and the PQTR in Bomi is just below that policy goal. These counties may require greater attention to the supply of qualified teachers.

There is even greater variation in PQTRs among schools. As can be seen in Table B1 in Annex B, the government primary school with the lowest pupil-qualified teacher ratio (PQTR=1.5) is in Gbarma District in Gbarpolu County, while the government primary school with the highest pupil-qualified teacher ratio (PQTR=500.0) is in Dorbor District in Grand Kru County.

Table 3: Pupil-qualified teacher ratios in government primary schools by county

County	Pupil-Qualified Teacher Ratio (PQTR)	Lowest District PQTR	Highest District PQTR
Bomi	43.9	32.4	65.4
Bong	29.5	19.7	45.3
Gbarpolu	36.4	28.1	58.3
Grand Bassa	38.6	26.0	60.2
Grand Cape Mount	34.7	21.8	38.9
Grand Gedeh	25.3	19.0	36.5
Grand Kru	50.0	34.0	116.7
Lofa	29.6	27.5	32.6
Margibi	35.2	28.5	42.7
Maryland	36.5	20.8	60.3
Montserrado	31.9	20.9	46.6
Nimba	24.6	17.1	32.2
Rivercess	42.2	34.5	79.8
River Gee	41.1	32.2	99.6
Sinoe	51.0	26.7	298.0
LIBERIA	31.8	17.1	298.0

In non-government primary schools, the national PQTR is 31.5 (see Table 4 and Chart 2), which is roughly the same as in government primary schools. Table 4 also shows that the pupil-qualified teacher ratio varies across counties from a high in Sinoe County (PQTR=47.8) to a low in Rivercess County (PQTR=25.8). Note that three counties (Sinoe, Maryland, and River Gee) are above the policy goal and may require greater attention to the supply of qualified teachers.

As in government schools, the PQTRs vary across districts. The highest district-level pupil-qualified teacher ratio is in Gbaepo District in River Gee County (PQTR=169.5). In two counties the lowest district-level PQTR is below 10: Suehn Mecca District in Bomi County has 7 pupils per qualified teacher and Central Rivercess 1 District in Rivercess County has 5.5 pupils per qualified teacher.

There is even greater variation in PQTRs among schools. As can be seen in Table B2 in Annex B, the non-government primary school with the lowest pupil-teacher ratio (PQTR=0.8) is in Potupo District in River Gee County, while the non-government primary school with the highest pupil-qualified teacher ratio (PQTR=297.0) is in Greater Monrovia 1 District in Montserrado County.

Chart 2 shows that, at the national level, the PQTRs in both government and non-government primary schools stands at approximately 32 but vary across counties in both categories.

Table 4: Pupil-qualified teacher ratios in non-government primary schools by county

County	Pupil-Qualified Teacher Ratio (PQTR)	Lowest District PQTR	Highest District PQTR
Bomi	29.2	7.0	33.6
Bong	32.2	20.5	35.5
Gbarpolu	36.9	26.7	80.0
Grand Bassa	42.2	34.2	92.0
Grand Cape Mount	40.5	22.2	58.8
Grand Gedeh	33.8	19.1	44.0
Grand Kru	30.4	17.3	34.0
Lofa	36.3	21.4	84.4
Margibi	31.6	28.2	34.5
Maryland	44.2	22.3	61.7
Montserrado	28.7	19.1	34.2
Nimba	34.5	18.4	58.8
Rivercess	25.8	5.5	47.0
River Gee	45.9	29.7	169.5
Sinoe	47.8	14.7	121.0
LIBERIA	31.5	5.5	169.5

Chart 2: Comparison of pupil-qualified teacher ratios (PQTRs) in government and non-government primary schools by county

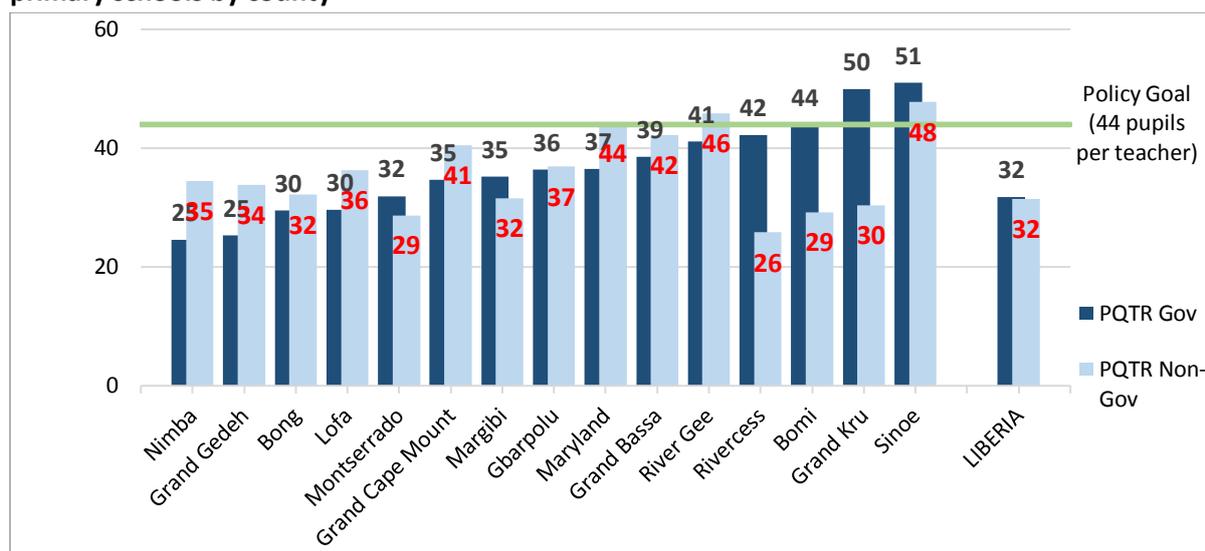


Chart 2 compares the PQTRs in government and non-government primary schools. Note that in seven of the counties (Bong, Gbarpolu, Grand Bassa, Margibi, Montserrado, River Gee, and Sinoe), the PQTRs for the two categories of primary schools are more or less equal. In the other eight counties, however, the differences between the PQTRs for government and non-government primary schools exceed 5 pupils per teacher. In Grand Cape Mount, Grand Gedeh, Lofa, Maryland, and Nimba counties the PQTRs are lower (i.e., better) in government primary schools compared to non-government primary schools. Similarly, in Bomi, Grand Kru, and Rivercess counties the PQTRs are lower (i.e., better) in non-government primary schools than in government primary schools

Proportion of Government and Non-Government Primary Schools Teachers without the Minimum Teaching Qualification

Another way of examining teacher demand is to identify the percentage of teachers who do not currently possess at least the minimum qualification, specified as a C-Certificate in the 2011 Education Reform Act. This section presents national- and county-level estimates of the numbers and percentages of teachers in government and non-government schools who do not have at least this C-Certificate qualification.

Table 5 displays the extent to which teachers lack the minimum teaching qualification in government primary schools. At the national level, almost one-third (30.3%) of government primary school teachers do not have at least a C-Certificate. This amounts to 3,549 primary school teachers who would need to have their qualifications upgraded or to be replaced in order to have a teaching force that is at least minimally qualified.

At the county level, there is great variation in the proportions of primary school teachers who do not have a C-Certificate. In one county – Sinoe – seven out of every ten (71.7%) primary school teachers do not have the minimum required qualification. In two other counties, more than half of primary school teachers lack the minimum qualifications: Grand Kru (57.2% unqualified) and Rivercess (56.1% unqualified). The two counties with the lowest percentages of unqualified teachers in government primary schools are Montserrado (11.8% unqualified) and Nimba (12.8% unqualified).

Table 5: Number and percentage of government primary school teachers without the minimum teaching qualification for that level

County	# of primary school teachers without a C-Certificate or higher qualification	Total number of primary school teachers	% of Primary school teachers without them minimum teaching qualification
Bomi	124	340	36.5
Bong	326	1,163	28.0
Gbarpolu	119	347	34.3
Grand Bassa	254	577	44.0
Grand Cape Mount	99	446	22.2
Grand Gedeh	191	581	32.9
Grand Kru	261	456	57.2
Lofa	497	1,496	33.2
Margibi	119	546	21.8
Maryland	217	593	36.6
Montserrado	172	1,452	11.8
Nimba	292	2,274	12.8
Rivercess	210	374	56.1
River Gee	208	418	49.8
Sinoe	460	642	71.7
LIBERIA	3,549	11,705	30.3

In non-government schools, 3,806 or 40.6% of primary school teachers lack the minimum teaching qualification (i.e., a C-Certificate). Thus, both the percentage and the number of teachers without a C-Certificate are higher in non-government primary schools than in government primary schools. There is variation across counties in the percentages of unqualified teachers in the non-government primary schools. In six counties – Gbarpolu, Grand Kru, Lofa, Rivercess, River Gee, and Sinoe – more than 50% of teachers do not have at least a C-Certificate. Non-government schools in Bomi have the lowest percentage of unqualified teachers (i.e., 28.7% without at least a C-Certificate).

Both the proportion and the number of teachers without minimum required qualification are higher in non-government primary schools.

Table 6: Number and percentage of non-government primary school teachers without the minimum teaching qualification for that level

County	# of primary school teachers without a C-Certificate or higher qualification	Total number of primary school teachers	% Primary school teachers without the minimum teaching qualification
Bomi	48	167	28.7
Bong	166	365	45.5
Gbarpolu	24	43	55.8
Grand Bassa	219	508	43.1
Grand Cape Mount	53	126	42.1
Grand Gedeh	49	142	34.5
Grand Kru	37	58	63.8
Lofa	136	240	56.7
Margibi	289	961	30.1
Maryland	92	215	42.8
Montserrado	2,147	5,423	39.6
Nimba	378	855	44.2
Rivercess	28	46	60.9
River Gee	66	106	62.3
Sinoe	74	123	60.2
LIBERIA	3,806	9,378	40.6

Proportion of Government and Non-Government Primary Schools Teachers Who are Female

Another policy goal identified in the 2011 Education Reform Act is to increase the percentage of female teachers, with the ultimate goal of reaching gender parity. As stated in the Education Reform Act, “to achieve educational equity, the Ministry of Education will provide additional and differentiated resources to support the success of all pupils, including: ... the recruitment, support, and retention of ... gender diverse ... instructional personnel” (pp. 37-38). This section of the report presents the proportions of female teachers in government and non-government primary schools across Liberia.

Table 7 (and Chart 3) present the numbers and percentages of government primary school teachers who are female nationally and in each of the 15 counties. Nationally, females account for only 12.7% of government primary school teachers, a very low proportion given that under conditions of gender parity 50% of all teachers would be female.

As with the national figures, there is a substantial gender imbalance among teachers in government primary schools in all counties. The counties with the lowest percentages of female government primary school teachers are Gbarpolu (6.1%), Grand Cape Mount (7%), Grand Kru (5.3%), Rivercess (5.1%), and Sinoe (9.8%), all of which have females in less than 10% of their teaching positions. The percentage of female teachers is highest in government primary schools in Montserrado (23.1%).

In three districts – Bokomu (in Gbarpolu County) as well as Dorbor and Grand Cess (in Grand Kru County) – 0% of primary school teachers are female.

There is also variation in the district-level percentage of female non-government primary school teachers (see Table D1 in Annex D). Of particular note, there are three districts in which there are no female government primary school teachers: Bokomu (in Gbarpolu County) as well as Dorbor and Grand Cess (in Grand Kru County). In contrast, four districts have at least 30% of their government primary school teachers who are female: District 5 (in Grand Bassa County) as well as Greater Monrovia 1, Left Bank 2, and the Monrovia Consolidated School System (MCSS) (in Montserrado County).

Table 7: Number and percentage of government primary school teachers who are female

County	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
Bomi	39	340	11.5
Bong	127	1,163	10.9
Gbarpolu	21	347	6.1
Grand Bassa	67	577	11.6
Grand Cape Mount	31	446	7.0
Grand Gedeh	95	581	16.4
Grand Kru	24	456	5.3
Lofa	109	1,496	7.3
Margibi	87	546	15.9
Maryland	87	593	14.7
Montserrado	335	1,452	23.1
Nimba	342	2,274	15.0
Rivercess	19	374	5.1
River Gee	45	418	10.8
Sinoe	63	642	9.8
LIBERIA	1,491	11,705	12.7

Tables 8 (and Chart 3) present the numbers and percentages of non-government primary school teachers who are female nationally and in each of the 15 counties. Note that in non-government schools nationally, 20.7% of teachers are female, a figure that is higher than in government schools but still far from gender parity (i.e., 50%).

As with the national figures, there is a huge gender imbalance in non-government primary schools in all counties. Gbarpolu (7%), Grand Kru (8.6%), Lofa (9.2%), and Rivercess (4.3%) counties have the lowest proportions of female teachers in non-government primary schools. In all these counties, females make up less than 10% of the teaching force in government schools. The percentage of female teachers is highest in non-government primary schools in Maryland (26.5%). At the county level, the percentages of female teachers in the government and non-government schools are similar in many counties. One exception is Maryland County, where 26.5 percent of teachers in non-government schools are female versus 14.7 percent in government schools.

Like at the county level, there is also variation at the school level in the percentage of female teachers in non-government primary schools (see Table D2 in Annex D). Of particular note, there are twelve districts in which there are no female non-government primary school teachers. These districts are Belle and Kongba (in Gbarpolu County); Gola Konneh (in Grand Cape Mount County); Barclayville, Sass

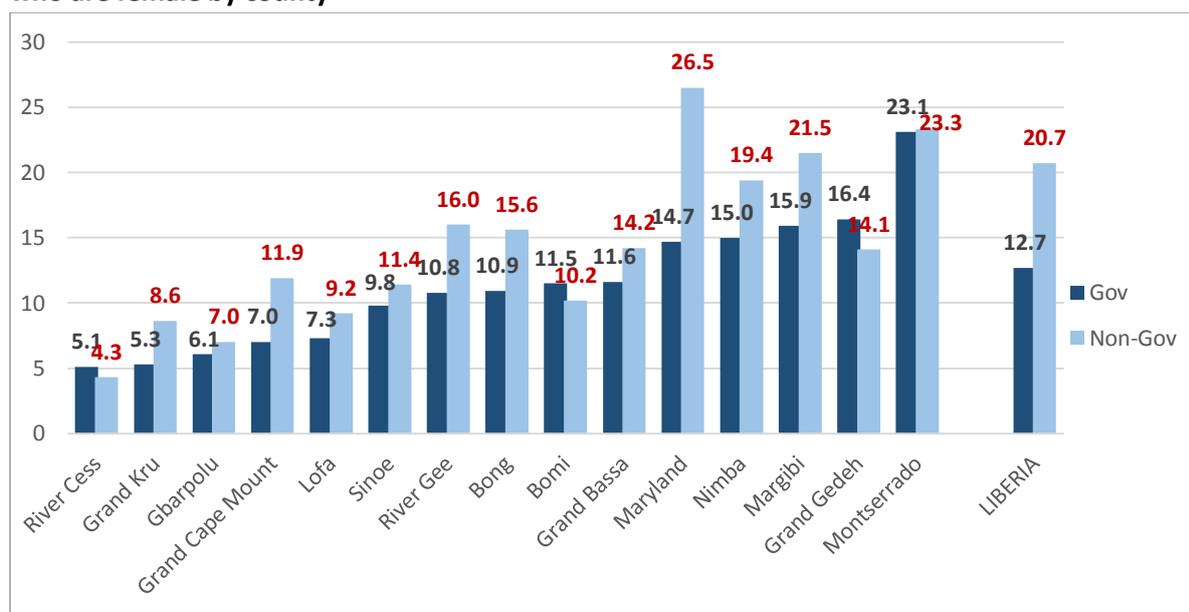
Town, and Wedabo (in Grand Kru County); Yarpeah-Mah (in Nimba County); Central Rivercess 1 and Monweh (in Rivercess County); and Sankwen and Tarjuwan (in Sinoe County). In contrast, in five districts at least 30% of non-government primary school teachers are female: Dewoin and Suehn Mecca (in Bomi County), Tallah Tombey (in Grand Cape Mount County), and Harper 1 and Karleway 1 (in Maryland County).

Table 8: Number and percentage of non-government primary school teachers who are female

County	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
Bomi	17	167	10.2
Bong	57	365	15.6
Gbarpolu	3	43	7.0
Grand Bassa	72	508	14.2
Grand Cape Mount	15	126	11.9
Grand Gedeh	20	142	14.1
Grand Kru	5	58	8.6
Lofa	22	240	9.2
Margibi	207	961	21.5
Maryland	57	215	26.5
Montserrado	1,264	5,423	23.3
Nimba	166	855	19.4
Rivercess	2	46	4.3
River Gee	17	106	16.0
Sinoe	14	123	11.4
LIBERIA	1,938	9,378	20.7

If the policy goal of gender parity among teachers is to be achieved, efforts will have to be devoted to recruitment, deployment, and retention of female teachers. This is the case in almost all counties and for both government and non-government subsectors. The challenges of reaching gender parity among primary school teachers, however, seems to be higher in some counties and districts than others. Policy makers and educational administrators at the school, district, county, and national level should investigate the reason(s) for the low percentages of females among primary school teachers. These reasons may potentially include low female attendance in and completion of secondary school, females not being attracted to the education sector, family responsibilities taking precedence over paid employment roles, and locations of available teaching posts.

Chart 3: Comparison of percentages of government and non-government primary schools teachers who are female by county



Proportion of Government and Non-Government Primary Schools Teachers Who are Nearing Retirement

This section presents the percent of teachers that are approaching retirement in government and non-government primary schools, an important factor to consider in the context of teacher supply and demand. This information helps to anticipate the number of teachers who will need to be replaced if they retire in the near future. According to government policy in Liberia, teachers can retire at 65 years of age or after 25 years of employment. Tables 9 and 10 along with Chart 4 provide relevant information on this topic, displaying the percentage of teachers in government primary schools in each county who either are: a) at least 61 years old or b) have at least 21 years of experience.

As presented in Table 9, in government schools at a national level, 8.8% of primary school teachers are approaching retirement age (i.e., those who are 60+ years old), while 3.0% are nearing retirement based on years of experience (i.e. 21+ years of service). At the county level, we observe River Gee to have the highest proportion of government primary school teachers approaching retirement at 60+ years old (19.1%), while Grand Kru has the highest proportion of government primary school teachers approaching retirement at 21+ years of service (8.1%). The county with the lowest proportion of government primary school teachers approaching retirement is Margibi, both with respect to the percent who were at least 60 years old (5.1%) and with respect to the percent having at least 21 years of experience (0.9%).

There is even greater variation among districts in terms of the proportions of government primary school teachers nearing retirement. As shown in Table E1 in Annex E, two districts had less than 3% of their government primary school teachers who were at least 60 years old (Gbarma District in Gbarpolu County and Vahun District in Lofa County). Nine districts had 20% or more of their government primary school teachers who were at least 60 years old: Bokomu District in Gbarpolu County; Buah, Dorbor, and Trehn Districts in Grand Kru County; Barrobo II-Nyonken District in Maryland County; Chedepo, Gbaepo, and Tiempo Districts in River Gee County; and Lower Kpanyan District in Sinoe County. Additionally, there were thirteen districts that had no (0.0%) government primary school teachers with 21 or more years of experience: Buah and Sass Town Districts in Grand Kru County; Vahun District in

Lofa County; Harper 1 and Karleway 1 Districts in Maryland County; Careysburg District in Montserrado County; Central Rivercess 2 and Yarnee Districts in Rivercess County; Sarbo District in River Gee County; and Central Kpanyan, Jaedae, and Sankwen Districts in Sinoe County.

In non-government primary schools at the national level, 3.5% of the teachers are 60+ years old and 1.5% have 21+ years of experience (see Table 10). These figures are both lower than those for government primary schools (see Table 9). This suggests that the non-governmental sector will need to replace less of its teaching force due to retirement in the next few years than in government schools, though the figures in both government and non-government schools are relatively low.

At the county level, Gbarpolu has the highest proportion of teachers nearing retirement based on age criterion (18.6%), while Grand Kru has the highest proportion of non-government teachers nearing retirement based on the years of experience criterion (5.2%). Moreover, Rivercess is the county with the lowest proportion of teachers nearing retirement based on age criterion (0.0%), while Sinoe is the county with the lowest proportion of non-government teachers nearing retirement based on the years of experience criterion (0.0%).

The non-governmental sector will need to replace less of its teaching force due to retirement in the next few years than in government schools, though the figures in both government and non-government schools are relatively low.

Table 9: Percent of teachers in government primary schools approaching retirement

County	% of primary school teachers who are 60+ Years Old	% of primary school teachers with 21 or more years of experience	Total number of primary school teachers
Bomi	7.6	2.6	340
Bong	10.2	3.4	1,163
Gbarpolu	11.5	3.2	347
Grand Bassa	6.9	2.3	577
Grand Cape Mount	11.4	3.6	446
Grand Gedeh	7.2	3.1	581
Grand Kru	17.1	8.1	456
Lofa	6.4	2.4	1,496
Margibi	5.1	0.9	546
Maryland	13.2	6.1	593
Montserrado	5.3	2.0	1,452
Nimba	7.8	1.8	2,274
Rivercess	6.1	1.6	374
River Gee	19.1	7.4	418
Sinoe	11.7	3.7	642
LIBERIA	8.8	3.0	11,705

There is even greater variation among districts in terms of the proportions of non-government primary school teachers nearing retirement. As shown in Table E2 in Annex E, with the exception of five counties (Gbarpolu, Grand Bassa, Grand Cape Mount, Margibi, and Montserrado), all counties had at least one district in which there were no (0.0%) non-government primary school teachers who were

60+ years old. In contrast, there were five districts that had 30% or more of their non-government primary school teachers who were 60+ years old: Belle and Gbarma Districts in Bhardopolu County, Yarwin-Mensonoh District in Nimba County, and Webbo District in River Gee County. Additionally, while all counties had at least one district that had no (0.0%) non-government primary school teachers with 21+ years of experience, four districts had at least 10% of their non-government primary school teachers with 21+ years of experience: District 3 in Grand Bassa, Grand Cess District in Grand Kru County, as well as Tiempo and Webbo Districts in River Gee County.

Table 10: Percent of teachers in non-government primary schools approaching retirement

County	% of primary school teachers who are over 60	% of primary school teachers with 21 or more years of experience	Total number of primary school teachers
Bomi	3.0	1.2	167
Bong	4.1	1.6	365
Gbarpolu	18.6	2.3	43
Grand Bassa	4.5	4.3	508
Grand Cape Mount	11.9	2.4	126
Grand Gedeh	2.8	0.7	142
Grand Kru	15.5	5.2	58
Lofa	2.9	0.4	240
Margibi	4.5	3.9	961
Maryland	4.7	2.8	215
Montserrado	2.3	0.8	5,423
Nimba	5.3	1.1	855
Rivercess	0.0	2.2	46
River Gee	10.4	4.7	106
Sinoe	10.6	0.0	123
LIBERIA	3.5	1.5	9,378

Chart 4 presents the percentages of government primary school teachers who are nearing retirement based on the two criteria: age and experience. In all counties the percentage nearing retirement based on the age criterion is higher than the percentage nearing retirement based on the experience criterion. The difference between these percentages is greatest in River Gee County (19.1% minus 7.4%).

Chart 5 presents the percentages of non-government primary school teachers who are nearing retirement based on the two criteria: age and experience. In all counties the percentage nearing retirement based on the age criterion is higher than the percentage nearing retirement based on the experience criterion. The difference between these percentages is greatest in Gbarplu County (18.6% minus 2.2%).

Chart 4: Comparison of the proportion of government primary school teachers who are nearing 60+ years old and 21+ years of experience by county

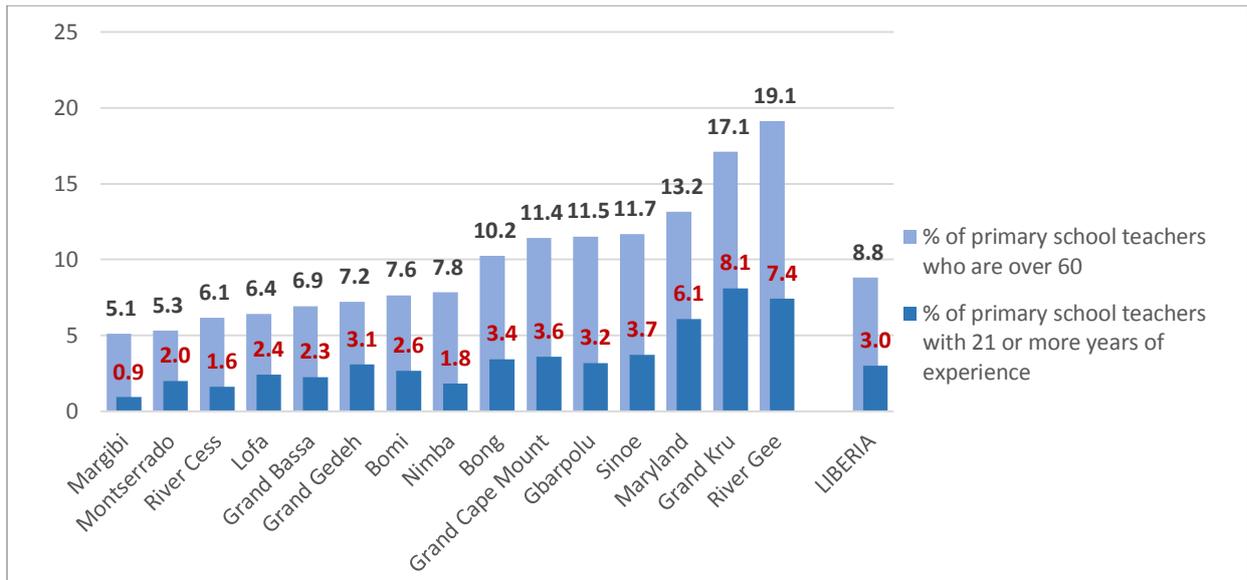
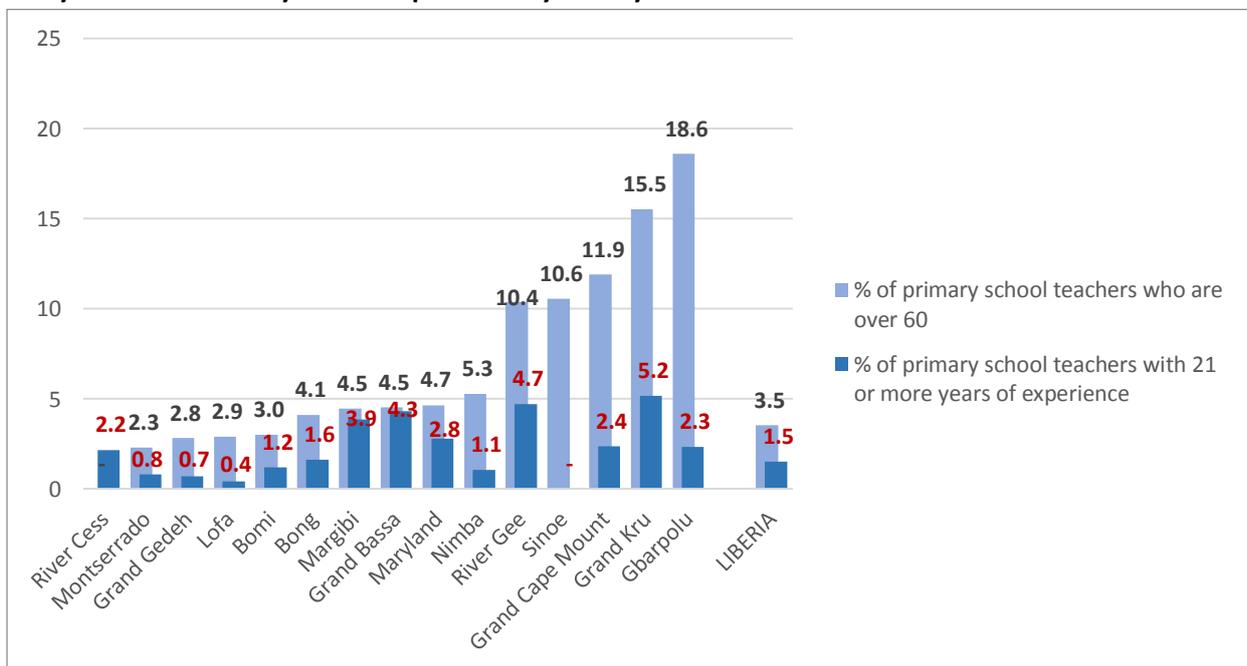


Chart 5: Comparison of the proportion of non-government primary school teachers who are nearing 60+ years old and 21+ years of experience by county



Conclusions

The USAID-LTTP Monitoring, Evaluation, and Research (MER) team – together with EMIS and Monitoring and Evaluation Units of the Department of the Planning, Research, and Development at the Ministry of Education – conducted this study in early 2015. The evidence generated from this study aims to provide an updated insight into recruitment and retention of primary school teachers, in both government and non-government subsystems. This study replicates a previous analysis of 2013 EMIS data (Goyee et al., 2014) and presents an updated perspective on teacher supply and demand based on a methodical analysis of the 2014 EMIS database.

Drawing on the 2014 EMIS database allowed us to use data on teachers from a larger set of government and non-government primary schools in Liberia, though even the 2014 EMIS database does not include all primary schools in the country. Moreover, given the relatively limited overlap between the 2013 and 2014 datasets (78.9% of the government schools and 39.1% of the non-government schools), this report does not make comparisons in findings between the current study and the previous one (Goyee et al., 2014).

The report presents findings on the pupil-teacher ratios (PTRs) and qualified-pupil teacher ratios (PQTRs), focusing on the counties and districts that have sufficient number of teachers to meet or exceed the policy goal of 44 pupils per teacher. The report also includes the percentage of teachers who have the minimum teaching qualification (i.e., at least a C-Certificate), the percentage of teachers who are female, and the percentage of teachers who are nearing retirement based on their age or length of service.

We have found that, nationally, Liberia meets the current policy goal of 44 pupils per teacher and even the goal of 44 pupils per qualified teacher (i.e., those with at least a C-Certificate). Nationally, the PTR was 21.9 and the PQTR was 31.8 in government primary schools. In non-government primary schools, at national-level, the PTR was 18.1 and the PQTR was 31.5. Thus, it may be worth establishing a more ambitious target for the ratio of pupils to teachers.

National-level pupil-teacher ratios and pupil-qualified teacher ratios mask considerable variations across counties and districts, not to mention schools, in both the government and non-government subsystems. Such variations highlight the need to consider the policies and procedures that guide the recruitment, deployment, and retention of teachers. Unless steps are taken to address disparities, Liberian students will continue to experience quite different class sizes, which likely translate into significantly different opportunities to learn.

These findings concerning pupil-teacher ratios (PTRs) and pupil-qualified teacher ratios (PQTRs) should be interpreted with a degree of caution. First, as mentioned above, the 2014 database does not include all government and non-government primary schools, though it does include a larger number than were included in the 2013 EMIS database. Second, there is a general belief that the EMIS databases include at least some “ghost” or “duplicate” teachers. To the extent that this is true, PTRs and PQTRs may be calculated based on more teachers than were, in fact, working in primary school classrooms in various districts and counties in Liberia, meaning that the actual PTRs and PQTRs may be higher than presented in this report.

The findings also shed light on how much work remains to be done to achieve gender parity in the primary school teaching staff. Nationally, 12.7% of government primary school teachers were female and 20.7% of non-government primary school teachers were female. Clearly, in neither subsystem is

Liberia approaching the 50% figure indicating gender parity. Furthermore, we observed substantial variation among counties and districts in the percentage of female teachers in government and non-government primary schools. This means that while in some settings more progress has been made in achieving gender parity in the teaching force, in other settings counties and districts continue to be very far from achieving this policy goal.

Additionally, about one-third primary schools teachers do not have the minimum C-Certificate teaching qualification. The findings of this study indicate that more non-government primary school teachers (3,806 or 40.6%) than government primary school teachers (3,549 or 30.3%) need to have their qualifications upgraded or need to be replaced with “qualified” teachers, if Liberia is to achieve its policy goal of 100% of primary school teachers having at least a C-Certificate. Moreover, the percentage of “unqualified” primary school teachers varies greatly across counties and districts in both government and non-government schools.

To address the challenges of the distribution of “qualified” teachers adequate to the need across all the districts and the underrepresentation of female teachers, Liberia may need to implement special packages of financial incentives, provide training programs, organize better living conditions, and/or improve working conditions to attract and retain “qualified” and/or female teachers in certain settings. The Government of Liberia and its educational partners should also consider assessing and addressing any qualifications or gender biases that influence teachers’ hiring and deployment decisions in some contexts.

More positively, the findings from this study suggest that, unlike some countries, Liberia does not have a major problem in terms of the percentage of primary school teachers who are nearing retirement, that is, teachers who either are 61+ years old or have 21+ years of service. Nevertheless, the overall percentage of teachers nearing retirement should be monitored and plans developed for their replacement over the coming years, particularly in counties and districts where the percentages of older and more experienced primary school teachers are greater. In considering teacher supply, it is important to keep in mind that there is a pool of graduates of C-Certificate training programs who have not been fully absorbed into the education sector and who could potentially be recruited and deployed as qualified teachers (e.g., see Morris et al., 2014; Morris et al., 2015; Tuowal et al., 2014).

Finally, the Ministry of Education along with its Liberian and international partners need to consider whether the current policy-specified minimum qualification is appropriate for Liberia in future decades. A C-Certificate requires only a relatively short period of training and it may be worthwhile to consider expanding teachers’ professional training. This study indicates that the current supply of teachers – and even the supply of qualified teachers – can be viewed as meeting the demand in terms of the targets outlined in education policy. However, this study does not address whether the capabilities of the teaching force meet the demand for improved learning opportunities among the students in government and non-government primary schools. In addition to exploring ways to further upgrade the qualifications of primary school teachers, attention may also need to be given to institutionalizing continuous professional development for all teachers.

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Annex A: Pupil-Teacher Ratios (PTR) in Government and Non-Government Schools by County and District

Table A1: Pupil-Teacher Ratios (PTRs) in Government Primary Schools by County and District

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
Bomi	27.9	20.8	40.6
<i>Dewoin</i>	20.8	3.6	70.0
<i>Klay</i>	24.2	5.6	141.5
<i>Senjeh</i>	40.6	2.3	93.0
<i>Suehn Mecca</i>	24.7	1.0	57.0
Bong	21.0	15.8	33.4
<i>Fuamah</i>	22.4	5.0	56.9
<i>Gbarnga</i>	33.4	9.0	72.4
<i>Kokoya</i>	22.2	5.9	52.8
<i>Panta-Kpaai</i>	19.0	6.7	36.7
<i>Salala</i>	15.8	7.0	28.0
<i>Sanoyea</i>	18.9	1.5	64.0
<i>Suacoco</i>	19.4	9.3	55.5
<i>Zota</i>	19.8	4.5	54.8
Gbarpolu	23.3	17.7	30.8
<i>Belle</i>	22.9	7.7	48.0
<i>Bokomu</i>	21.4	6.0	63.0
<i>Bopulu</i>	19.7	5.0	52.0
<i>Gbarma</i>	30.0	1.5	160.0
<i>Guo Nwala</i>	17.7	4.5	45.5
<i>Kongba</i>	30.8	17.0	89.0
Grand Bassa	21.5	16.7	24.8
<i>District 1</i>	20.3	2.0	75.0
<i>District 2</i>	22.5	3.7	68.5
<i>District 3</i>	24.8	3.3	96.0
<i>District 4</i>	16.7	5.5	36.0
<i>District 5</i>	20.6	4.0	38.3
Grand Cape Mount	26.8	17.6	30.0
<i>Garwula</i>	30.0	10.0	68.2
<i>Gola Konneh</i>	29.5	9.0	118.0
<i>Porkpa</i>	25.0	7.7	60.0
<i>Tallah Tombey</i>	17.6	2.7	41.5
<i>Tewor</i>	25.8	8.3	160.0
Grand Gedeh	16.7	13.4	25.4
<i>Gbarzon</i>	17.2	5.2	51.5

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
<i>Konobo</i>	13.4	2.6	30.5
<i>Putu</i>	25.4	10.2	44.0
<i>Tchien</i>	15.5	3.2	126.0
Grand Kru	21.4	16.3	44.7
<i>Barclayville</i>	16.5	7.0	38.4
<i>Buah</i>	20.0	5.5	66.5
<i>Dorbor</i>	44.7	6.3	133.0
<i>Grand Cess</i>	16.3	7.5	29.2
<i>Jloh</i>	21.5	13.4	66.0
<i>Sass Town</i>	19.9	10.5	40.0
<i>Trehn</i>	19.7	6.0	56.0
<i>Wedabo</i>	24.5	10.0	72.0
Lofa	19.7	14.9	31.1
<i>Foya</i>	18.6	5.6	73.0
<i>Kolahun</i>	14.9	1.8	101.0
<i>Salayea</i>	31.1	10.8	54.0
<i>Vahun</i>	25.1	16.0	45.7
<i>Voinjama</i>	20.8	2.5	125.0
<i>Zorzor</i>	23.3	5.0	49.7
Margibi	27.4	19.3	37.9
<i>Gibi</i>	19.3	4.7	43.3
<i>Kakata</i>	24.8	7.2	104.0
<i>Marshall</i>	37.9	11.3	69.8
Maryland	23.2	11.7	30.5
<i>Barrobo I- Dougbe</i>	11.7	3.9	76.0
<i>Barrobo II- Nyonken</i>	20.8	9.2	56.3
<i>Harper 1</i>	16.3	3.5	31.0
<i>Harper 2</i>	30.2	9.5	53.8
<i>Karleway 1</i>	22.3	8.5	43.5
<i>Karleway 2</i>	25.6	11.5	74.0
<i>Plebo</i>	30.5	8.4	55.7
<i>Sodoken</i>	24.6	6.5	49.6
Montserrado	27.6	17.7	42.0
<i>Careysburg</i>	21.2	9.6	43.7
<i>Greater Monrovia 1</i>	35.7	35.5	36.1
<i>Greater Monrovia 2</i>	25.9	8.7	72.7
<i>Left Bank 1</i>	25.8	6.0	136.4
<i>Left Bank 2</i>	19.5	3.3	62.4
<i>MCSS</i>	35.9	21.5	425.3
<i>Paynesville</i>	42.0	6.9	131.3

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
<i>Right Bank 1</i>	33.7	3.8	126.0
<i>Right Bank 2</i>	25.6	4.9	120.0
<i>Todee</i>	17.7	5.3	78.0
Nimba	21.2	14.9	29.1
<i>Bain-Garr</i>	29.1	7.0	154.0
<i>Buu-yao</i>	23.2	6.6	55.8
<i>Gbehlay-geh</i>	19.8	7.5	172.0
<i>Saclepea 1</i>	22.5	7.0	52.2
<i>Saclepea 2</i>	14.9	2.9	33.0
<i>Sanniqueleh-Mah</i>	25.5	4.3	52.7
<i>Tappita 1</i>	24.1	5.5	114.0
<i>Tappita 2</i>	20.3	7.2	46.7
<i>Tuah River</i>	20.6	9.0	39.5
<i>Yarpea-Mah</i>	19.4	9.2	93.0
<i>Yarwin-Mensonoh</i>	15.0	7.2	27.7
<i>Zoe-Geh</i>	19.6	5.5	75.5
Rivercess	18.4	13.7	20.4
<i>Central Rivercess 1</i>	17.9	5.5	57.5
<i>Central Rivercess 2</i>	13.7	9.3	26.0
<i>Monweh</i>	19.6	9.3	26.0
<i>Timbo</i>	20.4	9.3	86.0
<i>Yarnee</i>	17.0	9.3	86.0
River Gee	20.3	15.3	27.8
<i>Chedepo</i>	15.3	5.5	33.3
<i>Gbaepo</i>	17.9	6.3	44.1
<i>Potupo</i>	27.1	6.7	85.0
<i>Sarbo</i>	27.8	7.5	65.0
<i>Tiempo</i>	24.2	12.5	42.0
<i>Webbo</i>	17.8	3.0	56.0
Sinoe	14.2	9.3	17.4
<i>Butaw</i>	14.8	5.0	24.8
<i>Central Kpanyan</i>	12.8	3.0	26.3
<i>Greenville</i>	17.4	4.6	44.3
<i>Jaedae</i>	17.4	5.6	52.0
<i>Juarzon</i>	12.5	2.6	54.0
<i>Lower Kpanyan</i>	16.1	4.5	76.0
<i>Sankwen</i>	14.9	5.6	31.5
<i>Tarjuwon</i>	15.6	7.3	88.0
<i>Upper Kpanyan</i>	9.3	4.3	30.5
LIBERIA	21.9	9.3	44.7

Table A2: Pupil-Teacher Ratios (PTRs) in Non-Government Primary Schools by County and District

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
Bomi	20.8	7.0	22.7
<i>Dewoin</i>	13.8	13.8	13.8
<i>Klay</i>	17.8	3.0	31.6
<i>Senjeh</i>	22.7	4.6	66.5
<i>Suehn Mecca</i>	7.0	7.0	7.0
Bong	17.5	11.0	23.3
<i>Fuamah</i>	16.0	3.8	34.0
<i>Gbarnga</i>	23.3	6.5	84.5
<i>Panta-Kpaai</i>	12.4	10.7	15.7
<i>Salala</i>	12.1	7.5	30.0
<i>Sanoyea</i>	11.0	11.0	11.0
<i>Suacoco</i>	13.3	7.7	32.0
<i>Zota</i>	14.6	3.8	111.0
Gbarpolu	15.4	11.3	29.5
<i>Belle</i>	29.5	29.5	29.5
<i>Bopulu</i>	13.3	3.5	25.2
<i>Gbarma</i>	11.3	9.0	12.0
<i>Kongba</i>	22.9	14.4	44.0
Grand Bassa	23.8	18.9	37.8
<i>District 1</i>	19.0	4.5	65.5
<i>District 2</i>	18.9	11.0	26.0
<i>District 3</i>	37.8	4.3	137.3
<i>District 4</i>	24.2	12.5	48.0
<i>District 5</i>	21.0	2.0	49.6
Grand Cape Mount	23.1	13.3	31.9
<i>Garwula</i>	31.9	3.8	57.9
<i>Gola Konneh</i>	19.6	6.6	72.0
<i>Porkpa</i>	28.4	14.7	38.0
<i>Tallah Tombey</i>	13.3	3.8	48.0
<i>Tewor</i>	16.2	7.6	45.0
Grand Gedeh	22.1	11.2	26.2
<i>Gbarzon</i>	12.4	10.6	14.6
<i>Konobo</i>	17.1	7.8	37.0
<i>Putu</i>	11.2	9.8	15.0
<i>Tchien</i>	26.2	6.1	44.2
Grand Kru	11.0	5.3	16.8
<i>Barclayville</i>	11.5	10.2	16.8
<i>Buah</i>	5.3	5.3	5.3

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
<i>Grand Cess</i>	11.1	11.1	11.1
<i>Sass Town</i>	16.8	16.8	16.8
<i>Trehn</i>	10.5	9.7	11.3
<i>Wedabo</i>	10.9	10.9	10.9
Lofa	15.7	10.2	19.9
<i>Foya</i>	19.9	2.0	40.9
<i>Kolahun</i>	13.4	11.7	17.3
<i>Salayea</i>	10.2	8.2	11.8
<i>Voinjama</i>	18.5	6.2	25.7
<i>Zorzor</i>	10.4	14.8	29.1
Margibi	21.1	18.5	26.1
<i>Gibi</i>	26.1	9.6	39.0
<i>Kakata</i>	18.5	3.0	108.0
<i>Marshall</i>	22.8	1.7	89.7
Maryland	25.3	14.8	29.1
<i>Harper 1</i>	20.7	1.1	84.3
<i>Harper 2</i>	18.8	6.8	32.7
<i>Karleway 1</i>	14.8	14.8	14.8
<i>Pleebo</i>	29.1	6.7	63.9
<i>Sodoken</i>	28.1	15.3	54.2
Montserrat	16.6	12.3	19.2
<i>Careysburg</i>	12.3	3.6	26.2
<i>Greater Monrovia 1</i>	16.1	1.0	100.0
<i>Greater Monrovia 2</i>	18.4	2.3	153.0
<i>Left Bank 1</i>	19.2	3.0	54.3
<i>Left Bank 2</i>	17.8	3.6	38.8
<i>Paynesville</i>	15.3	0.5	76.0
<i>Right Bank 1</i>	16.4	2.2	45.0
<i>Right Bank 2</i>	13.3	2.0	186.0
<i>Todee</i>	18.7	6.0	71.7
Nimba	19.0	8.8	29.1
<i>Bain-Garr</i>	21.3	3.8	106.9
<i>Buu-yao</i>	27.9	5.6	101.3
<i>Gbehlay-geh</i>	19.5	11.5	25.0
<i>Saclepea 1</i>	12.9	2.7	27.8
<i>Saclepea 2</i>	29.1	14.3	70.4
<i>Sanniqueleh-Mah</i>	16.8	3.6	39.0
<i>Tappita 1</i>	19.4	1.0	85.0
<i>Tappita 2</i>	16.2	10.7	26.0
<i>Tuah River</i>	12.9	4.3	25.8

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
<i>Yarpea-Mah</i>	8.8	8.8	8.8
<i>Yarwin-Mensonoh</i>	14.7	10.8	26.5
<i>Zoe-Geh</i>	25.8	9.0	73.0
<i>Rivercess</i>	10.1	5.1	11.8
<i>Central Rivercess 1</i>	5.5	5.5	5.5
<i>Monweh</i>	11.8	5.8	19.3
<i>Timbo</i>	11.6	3.0	17.3
<i>Yarnee</i>	5.1	5.1	5.1
<i>River Gee</i>	16.9	12.0	30.8
<i>Chedepo</i>	19.3	14.4	23.3
<i>Gbaepo</i>	30.8	22.5	35.6
<i>Potupo</i>	14.2	0.7	31.0
<i>Tiempo</i>	12.0	7.1	21.5
<i>Webbo</i>	22.3	22.3	22.3
<i>Sinoe</i>	19.0	6.3	28.4
<i>Butaw</i>	18.4	18.4	18.4
<i>Greenville</i>	20.5	7.7	36.1
<i>Jaedae</i>	16.1	2.3	38.7
<i>Juarzon</i>	22.2	22.2	22.2
<i>Sankwen</i>	28.4	28.4	28.4
<i>Tarjuwon</i>	6.3	6.3	6.3
<i>Upper Kpanyan</i>	13.7	13.7	13.7
LIBERIA	18.1	5.1	37.8

Annex B: Pupil-Qualified Teacher Ratios (PQTRs) in Government and Non-Government Schools by County and District

Table B1: Pupil-Qualified Teacher Ratios (PQTRs) in Government Primary Schools by County and District

County/District	Pupil-Qualified-Teacher Ratio (PQTR)	Lowest District or School PQTR	Highest District or School PQTR
Bomi	43.9		
<i>Dewoin</i>	32.4	6.0	78.0
<i>Klay</i>	37.0	11.0	160.0
<i>Senjeh</i>	65.4	3.5	208.0
<i>Suehn Mecca</i>	40.2	16.0	108.0
Bong	29.5		
<i>Fuamah</i>	32.2	8.3	65.0
<i>Gbarnga</i>	36.2	9.0	81.5
<i>Kokoya</i>	28.4	11.0	70.3
<i>Panta-Kpaai</i>	26.2	9.4	71.0
<i>Salala</i>	19.7	7.0	56.0
<i>Sanoyea</i>	45.3	3.0	188.0
<i>Suacoco</i>	29.4	12.0	117.0
<i>Zota</i>	28.8	5.5	73.0
Gbarpolu	36.4		
<i>Belle</i>	58.3	13.5	161.5
<i>Bokomu</i>	44.2	9.0	80.0
<i>Bopulu</i>	28.1	5.0	104.0
<i>Gbarma</i>	35.1	1.5	160.0
<i>Guo Nwala</i>	28.7	9.0	65.0
<i>Kongba</i>	51.4	27.0	86.0
Grand Bassa	38.6		
<i>District 1</i>	35.6	13.0	49.0
<i>District 2</i>	60.2	13.3	137.0
<i>District 3</i>	58.0	8.5	160.0
<i>District 4</i>	26.8	8.3	56.0
<i>District 5</i>	26.0	4.0	57.0
Grand Cape Mount	34.7		
<i>Garwula</i>	36.6	11.5	143.0
<i>Gola Konneh</i>	35.3	9.0	118.0
<i>Porkpa</i>	38.9	10.5	120.0
<i>Tallah Tombey</i>	21.8	8.0	55.3
<i>Tewor</i>	33.8	10.9	160.0
Grand Gedeh	25.3		
<i>Gbarzon</i>	19.0	5.2	51.5
<i>Konobo</i>	25.0	3.3	111.7

County/District	Pupil-Qualified-Teacher Ratio (PQTR)	Lowest District or School PQTR	Highest District or School PQTR
<i>Putu</i>	36.5	11.5	132.0
<i>Tchien</i>	28.8	6.3	126.0
Grand Kru	50.0		
<i>Barclayville</i>	37.6	11.0	70.0
<i>Buah</i>	66.6	25.8	61.0
<i>Dorbor</i>	77.7	11.0	500.0
<i>Grand Cess</i>	34.0	13.2	87.7
<i>Jloh</i>	116.7	29.8	94.0
<i>Sass Town</i>	56.2	10.5	80.0
<i>Trehn</i>	46.3	17.0	200.0
<i>Wedabo</i>	38.2	15.4	82.0
Lofa	29.6		
<i>Foya</i>	32.0	9.3	106.5
<i>Kolahun</i>	27.5	6.1	184.0
<i>Salayea</i>	32.6	10.8	60.7
<i>Vahun</i>	28.4	16.0	56.0
<i>Voinjama</i>	29.9	9.8	159.0
<i>Zorzor</i>	28.4	6.3	63.0
Margibi	35.2		
<i>Gibi</i>	38.6	10.3	89.0
<i>Kakata</i>	28.5	7.8	104.0
<i>Marshall</i>	42.7	11.3	87.3
Maryland	36.5		
<i>Barrobo I- Dougbe</i>	20.8	4.4	76.0
<i>Barrobo II- Nyonken</i>	33.5	11.9	84.5
<i>Harper 1</i>	24.1	3.5	122.0
<i>Harper 2</i>	40.2	19.0	68.0
<i>Karleway 1</i>	37.0	8.5	117.0
<i>Karleway 2</i>	60.3	12.5	105.0
<i>Pleebo</i>	43.6	11.2	95.5
<i>Sodoken</i>	36.3	7.8	49.6
Montserrado	31.9		
<i>Careysburg</i>	24.1	9.6	306.0
<i>Greater Monrovia 1</i>	46.6	37.7	67.0
<i>Greater Monrovia 2</i>	31.3	8.7	72.7
<i>Left Bank 1</i>	28.8	6.0	136.4
<i>Left Bank 2</i>	20.9	5.8	62.4
<i>MCSS</i>	41.7	21.5	62.5
<i>Paynesville</i>	43.3	8.0	131.3
<i>Right Bank 1</i>	40.1	6.3	168.3
<i>Right Bank 2</i>	29.4	5.4	120.0
<i>Todee</i>	22.7	5.7	78.0

County/District	Pupil-Qualified-Teacher Ratio (PQTR)	Lowest District or School PQTR	Highest District or School PQTR
Nimba	24.6		
<i>Bain-Garr</i>	32.2	8.8	154.0
<i>Buu-yao</i>	26.7	8.2	83.0
<i>Gbehlay-geh</i>	21.7	7.5	172.0
<i>Saclepea 1</i>	27.3	7.0	107.0
<i>Saclepea 2</i>	17.1	3.5	35.3
<i>Sanniquelleh-Mah</i>	28.7	4.3	57.7
<i>Tappita 1</i>	27.3	6.6	161.0
<i>Tappita 2</i>	22.3	7.3	46.7
<i>Tuah River</i>	23.2	12.3	121.0
<i>Yarpea-Mah</i>	22.8	9.2	93.0
<i>Yarwin-Mensonoh</i>	18.4	7.2	35.0
<i>Zoe-Geh</i>	26.1	6.3	151.0
River Cess	42.2		
<i>Central Rivercess 1</i>	38.6	11.0	139.0
<i>Central Rivercess 2</i>	79.8	22.5	27.3
<i>Monweh</i>	40.2	12.3	111.0
<i>Timbo</i>	48.3	12.0	142.0
<i>Yarnee</i>	34.5	12.3	61.0
River Gee	41.1		
<i>Chedepo</i>	33.2	16.5	100.0
<i>Gbaepo</i>	32.2	17.3	89.0
<i>Potupo</i>	47.3	15.0	110.0
<i>Sarbo</i>	50.1	15.0	126.0
<i>Tiempo</i>	99.6	26.0	39.0
<i>Webbo</i>	38.5	6.0	115.0
Sinoe	51.0		
<i>Butaw</i>	51.9	5.0	49.7
<i>Central Kpanyan</i>	113.9	13.0	84.0
<i>Greenville</i>	26.9	8.0	66.5
<i>Jaedae</i>	83.1	15.0	129.0
<i>Juarzon</i>	57.3	6.0	62.0
<i>Lower Kpanyan</i>	67.1	7.0	81.0
<i>Sankwen</i>	298.0	30.0	54.0
<i>Tarjuwon</i>	59.8	9.0	100.0
<i>Upper Kpanyan</i>	26.7	7.5	52.0
LIBERIA	31.8	1.5	500

Table B2: Pupil-Qualified Teacher Ratios (PQTRs) in Non-Government Primary Schools by County and District

County/District	Pupil-Qualified-Teacher Ratio (PQTR) Non-Gov.	Lowest District or School PQTR	Highest District or School PQTR
Bomi	29.2		
<i>Dewoin</i>	17.3	17.3	17.3
<i>Klay</i>	22.9	3.0	99.0
<i>Senjeh</i>	33.6	6.6	133.0
<i>Suehn Mecca</i>	7.0	7.0	7.0
Bong	32.2		
<i>Fuamah</i>	24.5	5.0	40.0
<i>Gbarnga</i>	34.7	14.2	84.5
<i>Panta-Kpaai</i>	34.2	23.2	96.0
<i>Salala</i>	35.2	9.3	101.0
<i>Sanoyea</i>		0.0	0.0
<i>Suacoco</i>	20.5	9.8	32.0
<i>Zota</i>	35.5	6.3	111.0
Gbarpolu	36.9		
<i>Belle</i>			0.0
<i>Bopulu</i>	26.7	7.0	75.5
<i>Gbarma</i>	45.0	9.0	9.0
<i>Kongba</i>	80.0	72.0	88.0
Grand Bassa	42.2		
<i>District 1</i>	92.0	5.0	20.7
<i>District 2</i>	75.7	36.3	36.3
<i>District 3</i>	69.0	9.3	137.3
<i>District 4</i>	47.1	23.5	92.0
<i>District 5</i>	34.2	4.1	124.0
Grand Cape Mount	40.5		
<i>Garwula</i>	48.4	22.0	58.0
<i>Gola Konneh</i>	58.8	11.8	53.0
<i>Porkpa</i>	48.7	14.7	95.0
<i>Tallah Tombey</i>	22.2	4.8	96.0
<i>Tewor</i>	29.9	16.7	45.0
Grand Gedeh	33.8		
<i>Gbarzon</i>	35.0	24.3	28.3
<i>Konobo</i>	44.0	20.7	61.7
<i>Putu</i>	19.1	13.8	49.0
<i>Tchien</i>	34.1	8.1	61.0
Grand Kru	30.4		
<i>Barclayville</i>	17.3	13.6	51.0
<i>Buah</i>	21.0	21.0	21.0
<i>Grand Cess</i>			0.0
<i>Sass Town</i>	22.3	22.3	22.3

County/District	Pupil-Qualified-Teacher Ratio (PQTR) Non-Gov.	Lowest District or School PQTR	Highest District or School PQTR
<i>Trehn</i>	34.0	22.7	68.0
<i>Wedabo</i>	32.7	32.7	32.7
Lofa	36.3		
<i>Foya</i>	84.4	33.8	286.0
<i>Kolahun</i>	75.7	29.3	29.3
<i>Salayea</i>	23.8	16.3	31.3
<i>Voinjama</i>	28.2	6.2	115.0
<i>Zorzor</i>	21.4	6.7	27.8
Margibi	31.6		
<i>Gibi</i>	34.5	9.6	39.0
<i>Kakata</i>	28.2	6.4	152.0
<i>Marshall</i>	34.0	4.8	101.0
Maryland	44.2		
<i>Harper 1</i>	49.6	10.2	84.3
<i>Harper 2</i>	25.8	10.3	41.0
<i>Karleway 1</i>	22.3	22.3	22.3
<i>Pleebo</i>	61.7	20.0	143.8
<i>Sodoken</i>	38.3	21.7	54.8
Montserrado	28.7		
<i>Careysburg</i>	25.7	8.5	48.0
<i>Greater Monrovia 1</i>	28.8	1.5	297.0
<i>Greater Monrovia 2</i>	29.6	3.2	278.0
<i>Left Bank 1</i>	34.2	7.9	233.0
<i>Left Bank 2</i>	30.4	3.6	237.0
<i>Paynesville</i>	27.8	4.4	234.0
<i>Right Bank 1</i>	28.7	3.7	125.0
<i>Right Bank 2</i>	19.1	3.3	186.0
<i>Todee</i>	30.6	8.8	71.7
Nimba	34.5		
<i>Bain-Garr</i>	36.2	8.8	109.5
<i>Buu-yao</i>	47.1	7.8	74.5
<i>Gbehlay-geh</i>	58.4	33.3	146.0
<i>Saclepea 1</i>	28.3	6.4	61.0
<i>Saclepea 2</i>	36.2	14.3	80.0
<i>Sanniquelleh-Mah</i>	25.7	4.5	90.0
<i>Tappita 1</i>	58.2	3.0	110.0
<i>Tappita 2</i>	46.1	26.0	100.0
<i>Tuah River</i>	58.8	10.8	80.0
<i>Yarpea-Mah</i>			0.0
<i>Yarwin-Mensonoh</i>	18.4	10.8	12.8
<i>Zoe-Geh</i>	34.4	14.4	144.0
River Cess	25.8		

County/District	Pupil-Qualified-Teacher Ratio (PQTR) Non-Gov.	Lowest District or School PQTR	Highest District or School PQTR
<i>Central Rivercess 1</i>	5.5	5.5	5.5
<i>Monweh</i>	47.0	16.5	23.0
<i>Timbo</i>	26.6	3.0	72.0
<i>Yarnee</i>	36.0	36.0	36.0
<i>River Gee</i>	45.9		
<i>Chedepo</i>	69.6	46.6	46.6
<i>Gbaepo</i>	169.5	90.0	249.0
<i>Potupo</i>	31.0	0.8	62.0
<i>Tiempo</i>	55.2	12.5	86.0
<i>Webbo</i>	29.7	29.7	29.7
<i>Sinoe</i>	47.8		
<i>Butaw</i>	36.8	36.8	36.8
<i>Greenville</i>	55.6	10.8	123.5
<i>Jaedae</i>	121.0	58.0	58.0
<i>Juarzon</i>	33.3	33.3	33.3
<i>Sankwen</i>	28.4	28.4	28.4
<i>Tarjuwon</i>	14.7	14.7	14.7
<i>Upper Kpanyan</i>	32.0	32.0	32.0
LIBERIA	31.5	0.8	297.0

Annex C: Percentage of Teachers without C-Certificates by County and District

Table C1: Percent of Government Primary School Teachers without C-Certificate by County and District

County/District	Teachers without C-Certificates	Total number of Teachers	% of Teachers without C-Certificates
Bomi	124	340	36.5
<i>Dewoin</i>	21	59	35.6
<i>Klay</i>	43	124	34.7
<i>Senjeh</i>	33	87	37.9
<i>Suehn Mecca</i>	27	70	38.6
Bong	326	1,163	28.0
<i>Fuamah</i>	24	79	30.4
<i>Gbarnga</i>	7	139	5.0
<i>Kokoya</i>	23	106	21.7
<i>Panta-Kpaai</i>	69	254	27.2
<i>Salala</i>	25	130	19.2
<i>Sanoyea</i>	67	115	58.3
<i>Suacoco</i>	65	193	33.7
<i>Zota</i>	46	147	31.3
Gbarpolu	119	347	34.3
<i>Belle</i>	29	56	51.8
<i>Bokomu</i>	16	31	51.6
<i>Bopulu</i>	30	100	30.0
<i>Gbarma</i>	10	70	14.3
<i>Guo Nwala</i>	20	55	36.4
<i>Kongba</i>	14	35	40.0
Grand Bassa	254	577	44.0
<i>District 1</i>	37	86	43.0
<i>District 2</i>	77	123	62.6
<i>District 3</i>	83	145	57.2
<i>District 4</i>	26	69	37.7
<i>District 5</i>	31	154	20.1
Grand Cape Mount	99	446	22.2
<i>Garwula</i>	21	117	17.9
<i>Gola Konneh</i>	13	79	16.5
<i>Porkpa</i>	28	87	32.2
<i>Tallah Tombey</i>	7	36	19.4
<i>Tewor</i>	30	127	23.6
Grand Gedeh	191	581	32.9
<i>Gbarzon</i>	15	172	8.7

County/District	Teachers without C-Certificates	Total number of Teachers	% of Teachers without C-Certificates
<i>Konobo</i>	34	73	46.6
<i>Putu</i>	18	59	30.5
<i>Tchien</i>	124	277	44.8
Grand Kru	261	456	57.2
<i>Barclayville</i>	45	80	56.3
<i>Buah</i>	42	60	70.0
<i>Dorbor</i>	14	33	42.4
<i>Grand Cess</i>	24	46	52.2
<i>Jloh</i>	31	38	81.6
<i>Sass Town</i>	20	31	64.5
<i>Trehn</i>	66	115	57.4
<i>Wedabo</i>	19	53	35.8
Lofa	497	1,496	33.2
<i>Foya</i>	126	302	41.7
<i>Kolahun</i>	218	475	45.9
<i>Salayea</i>	5	104	4.8
<i>Vahun</i>	4	35	11.4
<i>Voinjama</i>	96	314	30.6
<i>Zorzor</i>	48	266	18.0
Margibi	119	546	21.8
<i>Gibi</i>	72	144	50.0
<i>Kakata</i>	30	233	12.9
<i>Marshall</i>	17	169	10.1
Maryland	217	593	36.6
<i>Barrobo I- Dougbe</i>	35	80	43.8
<i>Barrobo II- Nyonken</i>	22	58	37.9
<i>Harper 1</i>	21	65	32.3
<i>Harper 2</i>	24	97	24.7
<i>Karleway 1</i>	19	48	39.6
<i>Karleway 2</i>	42	73	57.5
<i>Pleebo</i>	22	73	30.1
<i>Sodoken</i>	32	99	32.3
Montserrado	172	1,452	11.8
<i>Careysburg</i>	15	123	12.2
<i>Greater Monrovia 1</i>	7	30	23.3
<i>Greater Monrovia 2</i>	12	75	16.0
<i>Left Bank 1</i>	4	97	4.1
<i>Left Bank 2</i>	13	202	6.4
<i>MCSS</i>	40	326	12.3
<i>Paynesville</i>	2	95	2.1

County/District	Teachers without C-Certificates	Total number of Teachers	% of Teachers without C-Certificates
<i>Right Bank 1</i>	17	138	12.3
<i>Right Bank 2</i>	18	156	11.5
<i>Todee</i>	44	210	21.0
Nimba	292	2,274	12.8
<i>Bain-Garr</i>	14	148	9.5
<i>Buu-yao</i>	31	256	12.1
<i>Gbehlay-geh</i>	23	264	8.7
<i>Saclepea 1</i>	38	223	17.0
<i>Saclepea 2</i>	21	174	12.1
<i>Sanniquelleh-Mah</i>	19	174	10.9
<i>Tappita 1</i>	19	165	11.5
<i>Tappita 2</i>	13	161	8.1
<i>Tuah River</i>	25	235	10.6
<i>Yarpea-Mah</i>	13	88	14.8
<i>Yarwin-Mensonoh</i>	26	146	17.8
<i>Zoe-Geh</i>	50	240	20.8
Rivercess	210	374	56.1
<i>Central Rivercess 1</i>	53	99	53.5
<i>Central Rivercess 2</i>	29	35	82.9
<i>Monweh</i>	42	84	50.0
<i>Timbo</i>	56	97	57.7
<i>Yarnee</i>	30	59	50.8
River Gee	208	418	49.8
<i>Chedepo</i>	41	78	52.6
<i>Gbaepo</i>	43	97	44.3
<i>Potupo</i>	29	68	42.6
<i>Sarbo</i>	16	36	44.4
<i>Tiempo</i>	22	33	66.7
<i>Webbo</i>	57	106	53.8
Sinoe	460	642	71.7
<i>Butaw</i>	20	28	71.4
<i>Central Kpanyan</i>	71	80	88.8
<i>Greenville</i>	26	79	32.9
<i>Jaedae</i>	53	67	79.1
<i>Juarzon</i>	78	101	77.2
<i>Lower Kpanyan</i>	60	79	75.9
<i>Sankwen</i>	38	40	95.0
<i>Tarjuwon</i>	47	65	72.3
<i>Upper Kpanyan</i>	67	103	65.0
LIBERIA	3,549	11,705	30.3

Table C2: Percent of Non-Government Primary School Teachers without C-Certificate by County and District

County/District	Teachers without C-Certificates	Total number of Teachers	% of Teachers without C-Certificates
Bomi	48	167	28.7
<i>Dewoin</i>	1	5	20.0
<i>Klay</i>	11	49	22.4
<i>Senjeh</i>	36	111	32.4
<i>Suehn Mecca</i>	0	2	0.0
Bong	166	365	45.5
<i>Fuamah</i>	8	23	34.8
<i>Gbarnga</i>	51	155	32.9
<i>Panta-Kpaai</i>	21	33	63.6
<i>Salala</i>	48	73	65.8
<i>Sanoyea</i>	4	4	100.0
<i>Suacoco</i>	15	43	34.9
<i>Zota</i>	19	34	55.9
Gbarpolu	24	43	55.8
<i>Belle</i>	2	2	100.0
<i>Bopulu</i>	14	30	46.7
<i>Gbarma</i>	3	4	75.0
<i>Kongba</i>	5	7	71.4
Grand Bassa	219	508	43.1
<i>District 1</i>	23	29	79.3
<i>District 2</i>	9	12	75.0
<i>District 3</i>	38	84	45.2
<i>District 4</i>	16	33	48.5
<i>District 5</i>	133	350	38.0
Grand Cape Mount	53	126	42.1
<i>Garwula</i>	15	47	31.9
<i>Gola Konneh</i>	12	18	66.7
<i>Porkpa</i>	5	12	41.7
<i>Tallah Tombey</i>	10	25	40.0
<i>Tewor</i>	11	24	45.8
Grand Gedeh	49	142	34.5
<i>Gbarzon</i>	11	17	64.7
<i>Konobo</i>	11	18	61.1
<i>Putu</i>	5	12	41.7
<i>Tchien</i>	22	95	23.2
Grand Kru	37	58	63.8

County/District	Teachers without C-Certificates	Total number of Teachers	% of Teachers without C-Certificates
<i>Barclayville</i>	5	15	33.3
<i>Buah</i>	3	4	75.0
<i>Grand Cess</i>	13	13	100.0
<i>Sass Town</i>	1	4	25.0
<i>Trehn</i>	9	13	69.2
<i>Wedabo</i>	6	9	66.7
Lofa	136	240	56.7
<i>Foya</i>	55	72	76.4
<i>Kolahun</i>	14	17	82.4
<i>Salayea</i>	8	14	57.1
<i>Voinjama</i>	23	67	34.3
<i>Zorzor</i>	36	70	51.4
Margibi	289	961	30.1
<i>Gibi</i>	9	37	24.3
<i>Kakata</i>	143	418	34.2
<i>Marshall</i>	137	506	27.1
Maryland	92	215	42.8
<i>Harper 1</i>	21	36	58.3
<i>Harper 2</i>	10	37	27.0
<i>Karleway 1</i>	2	6	33.3
<i>Pleebo</i>	46	87	52.9
<i>Sodoken</i>	13	49	26.5
Montserrado	2,147	5,423	39.6
<i>Careysburg</i>	53	102	52.0
<i>Greater Monrovia 1</i>	730	1686	43.3
<i>Greater Monrovia 2</i>	435	1193	36.5
<i>Left Bank 1</i>	183	460	39.8
<i>Left Bank 2</i>	102	274	37.2
<i>Paynesville</i>	431	1046	41.2
<i>Right Bank 1</i>	134	343	39.1
<i>Right Bank 2</i>	62	273	22.7
<i>Todee</i>	17	46	37.0
Nimba	378	855	44.2
<i>Bain-Garr</i>	128	310	41.3
<i>Buu-yao</i>	11	27	40.7
<i>Gbehlay-geh</i>	9	15	60.0
<i>Saclepea 1</i>	76	140	54.3
<i>Saclepea 2</i>	6	41	14.6
<i>Sanniqueleh-Mah</i>	56	161	34.8
<i>Tappita 1</i>	36	54	66.7

County/District	Teachers without C-Certificates	Total number of Teachers	% of Teachers without C-Certificates
<i>Tappita 2</i>	11	20	55.0
<i>Tuah River</i>	31	41	75.6
<i>Yarpea-Mah</i>	4	4	100.0
<i>Yarwin-Mensonoh</i>	2	10	20.0
<i>Zoe-Geh</i>	8	32	25.0
<i>Rivercess</i>	28	46	60.9
<i>Central Rivercess 1</i>	0	4	0.0
<i>Monweh</i>	9	12	75.0
<i>Timbo</i>	13	23	56.5
<i>Yarnee</i>	6	7	85.7
<i>River Gee</i>	66	106	62.3
<i>Chedepo</i>	13	18	72.2
<i>Gbaepo</i>	9	11	81.8
<i>Potupo</i>	25	46	54.3
<i>Tiempo</i>	18	23	78.3
<i>Webbo</i>	1	8	12.5
<i>Sinoe</i>	74	123	60.2
<i>Butaw</i>	5	10	50.0
<i>Greenville</i>	46	73	63.0
<i>Jaedae</i>	13	15	86.7
<i>Juarzon</i>	2	6	33.3
<i>Sankwen</i>	0	5	0.0
<i>Tarjuwon</i>	4	7	57.1
<i>Upper Kpanyan</i>	4	7	57.1
LIBERIA	3,806	9,378	40.6

Annex D: Percentage of Teachers Who Are Female by County and District

Table D1: Percent of Government Primary School Teachers who are Female by County and District

County/District	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
Bomi	39	340	11.5
<i>Dewoin</i>	3	59	5.1
<i>Klay</i>	16	124	12.9
<i>Senjeh</i>	12	87	13.8
<i>Suehn Mecca</i>	8	70	11.4
Bong	127	1,163	10.9
<i>Fuamah</i>	7	79	8.9
<i>Gbarnga</i>	30	139	21.6
<i>Kokoya</i>	4	106	3.8
<i>Panta-Kpaai</i>	12	254	4.7
<i>Salala</i>	28	130	21.5
<i>Sanoyea</i>	8	115	7.0
<i>Suacoco</i>	24	193	12.4
<i>Zota</i>	14	147	9.5
Gbarpolu	21	347	6.1
<i>Belle</i>	3	56	5.4
<i>Bokomu</i>	0	31	0.0
<i>Bopulu</i>	7	100	7.0
<i>Gbarma</i>	7	70	10.0
<i>Guo Nwala</i>	3	55	5.5
<i>Kongba</i>	1	35	2.9
Grand Bassa	67	577	11.6
<i>District 1</i>	8	86	9.3
<i>District 2</i>	3	123	2.4
<i>District 3</i>	4	145	2.8
<i>District 4</i>	3	69	4.3
<i>District 5</i>	49	154	31.8
Grand Cape Mount	31	446	7.0
<i>Garwula</i>	9	117	7.7
<i>Gola Konneh</i>	5	79	6.3
<i>Porkpa</i>	4	87	4.6
<i>Tallah Tombey</i>	5	36	13.9
<i>Tewor</i>	8	127	6.3
Grand Gedeh	95	581	16.4

County/District	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
<i>Gbarzon</i>	21	172	12.2
<i>Konobo</i>	6	73	8.2
<i>Putu</i>	9	59	15.3
<i>Tchien</i>	59	277	21.3
Grand Kru	24	456	5.3
<i>Barclayville</i>	2	80	2.5
<i>Buah</i>	6	60	10.0
<i>Dorbor</i>	0	33	0.0
<i>Grand Cess</i>	0	46	0.0
<i>Jloh</i>	6	38	15.8
<i>Sass Town</i>	3	31	9.7
<i>Trehn</i>	6	115	5.2
<i>Wedabo</i>	1	53	1.9
Lofa	109	1,496	7.3
<i>Foya</i>	14	302	4.6
<i>Kolahun</i>	33	475	6.9
<i>Salayea</i>	12	104	11.5
<i>Vahun</i>	4	35	11.4
<i>Voinjama</i>	23	314	7.3
<i>Zorzor</i>	23	266	8.6
Margibi	87	546	15.9
<i>Gibi</i>	10	144	6.9
<i>Kakata</i>	53	233	22.7
<i>Marshall</i>	24	169	14.2
Maryland	87	593	14.7
<i>Barrobo I- Dougbe</i>	6	80	7.5
<i>Barrobo II- Nyonken</i>	8	58	13.8
<i>Harper 1</i>	16	65	24.6
<i>Harper 2</i>	24	97	24.7
<i>Karleway 1</i>	2	48	4.2
<i>Karleway 2</i>	7	73	9.6
<i>Pleebo</i>	16	73	21.9
<i>Sodoken</i>	8	99	8.1
Montserrado	335	1,452	23.1
<i>Careysburg</i>	14	123	11.4
<i>Greater Monrovia 1</i>	9	30	30.0
<i>Greater Monrovia 2</i>	19	75	25.3
<i>Left Bank 1</i>	36	97	37.1
<i>Left Bank 2</i>	51	202	25.2
<i>MCSS</i>	114	326	35.0

County/District	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
<i>Paynesville</i>	20	95	21.1
<i>Right Bank 1</i>	26	138	18.8
<i>Right Bank 2</i>	26	156	16.7
<i>Todee</i>	20	210	9.5
Nimba	342	2,274	15.0
<i>Bain-Garr</i>	37	148	25.0
<i>Buu-yao</i>	31	256	12.1
<i>Gbehlay-geh</i>	39	264	14.8
<i>Saclepea 1</i>	44	223	19.7
<i>Saclepea 2</i>	23	174	13.2
<i>Sanniqueleh-Mah</i>	35	174	20.1
<i>Tappita 1</i>	25	165	15.2
<i>Tappita 2</i>	23	161	14.3
<i>Tuah River</i>	32	235	13.6
<i>Yarpea-Mah</i>	6	88	6.8
<i>Yarwin-Mensonoh</i>	5	146	3.4
<i>Zoe-Geh</i>	42	240	17.5
Rivercess	19	374	5.1
<i>Central Rivercess 1</i>	5	99	5.1
<i>Central Rivercess 2</i>	2	35	5.7
<i>Monweh</i>	3	84	3.6
<i>Timbo</i>	8	97	8.2
<i>Yarnee</i>	1	59	1.7
River Gee	45	418	10.8
<i>Chedepo</i>	6	78	7.7
<i>Gbaepo</i>	16	97	16.5
<i>Potupo</i>	7	68	10.3
<i>Sarbo</i>	4	36	11.1
<i>Tiempo</i>	3	33	9.1
<i>Webbo</i>	9	106	8.5
Sinoe	63	642	9.8
<i>Butaw</i>	2	28	7.1
<i>Central Kpanyan</i>	8	80	10.0
<i>Greenville</i>	18	79	22.8
<i>Jaedae</i>	5	67	7.5
<i>Juarzon</i>	5	101	5.0
<i>Lower Kpanyan</i>	4	79	5.1
<i>Sankwen</i>	2	40	5.0
<i>Tarjuwon</i>	2	65	3.1
<i>Upper Kpanyan</i>	17	103	16.5

County/District	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
LIBERIA	1,491	11,705	12.7

Table D2: Percent of Non-Government Primary School Teachers who are Female by County and District

County/District	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
Bomi	17	167	10.2
<i>Dewoin</i>	2	5	40.0
<i>Klay</i>	1	49	2.0
<i>Senjeh</i>	13	111	11.7
<i>Suehn Mecca</i>	1	2	50.0
Bong	57	365	15.6
<i>Fuamah</i>	6	23	26.1
<i>Gbarnga</i>	23	155	14.8
<i>Panta-Kpaai</i>	2	33	6.1
<i>Salala</i>	12	73	16.4
<i>Sanoyea</i>	1	4	25.0
<i>Suacoco</i>	7	43	16.3
<i>Zota</i>	6	34	17.6
Gbarpolu	3	43	7.0
<i>Belle</i>	0	2	0.0
<i>Bopulu</i>	2	30	6.7
<i>Gbarma</i>	1	4	25.0
<i>Kongba</i>	0	7	0.0
Grand Bassa	72	508	14.2
<i>District 1</i>	4	29	13.8
<i>District 2</i>	3	12	25.0
<i>District 3</i>	8	84	9.5
<i>District 4</i>	1	33	3.0
<i>District 5</i>	56	350	16.0
Grand Cape Mount	15	126	11.9
<i>Garwula</i>	5	47	10.6
<i>Gola Konneh</i>	0	18	0.0
<i>Porkpa</i>	1	12	8.3
<i>Tallah Tombey</i>	8	25	32.0
<i>Tewor</i>	1	24	4.2
Grand Gedeh	20	142	14.1
<i>Gbarzon</i>	2	17	11.8

County/District	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
<i>Konobo</i>	1	18	5.6
<i>Putu</i>	0	12	0.0
<i>Tchien</i>	17	95	17.9
Grand Kru	5	58	8.6
<i>Barclayville</i>	0	15	0.0
<i>Buah</i>	1	4	25.0
<i>Grand Cess</i>	3	13	23.1
<i>Sass Town</i>	0	4	0.0
<i>Trehn</i>	1	13	7.7
<i>Wedabo</i>	0	9	0.0
Lofa	22	240	9.2
<i>Foya</i>	1	72	1.4
<i>Kolahun</i>	4	17	23.5
<i>Salayea</i>	3	14	21.4
<i>Voinjama</i>	5	67	7.5
<i>Zorzor</i>	9	70	12.9
Margibi	207	961	21.5
<i>Gibi</i>	7	37	18.9
<i>Kakata</i>	96	418	23.0
<i>Marshall</i>	104	506	20.6
Maryland	57	215	26.5
<i>Harper 1</i>	11	36	30.6
<i>Harper 2</i>	8	37	21.6
<i>Karleway 1</i>	2	6	33.3
<i>Pleebo</i>	23	87	26.4
<i>Sodoken</i>	13	49	26.5
Montserrado	1,264	5,423	23.3
<i>Careysburg</i>	11	102	10.8
<i>Greater Monrovia 1</i>	387	1686	23.0
<i>Greater Monrovia 2</i>	278	1193	23.3
<i>Left Bank 1</i>	128	460	27.8
<i>Left Bank 2</i>	64	274	23.4
<i>Paynesville</i>	225	1046	21.5
<i>Right Bank 1</i>	95	343	27.7
<i>Right Bank 2</i>	71	273	26.0
<i>Todee</i>	5	46	10.9
Nimba	166	855	19.4
<i>Bain-Garr</i>	64	310	20.6
<i>Buu-yao</i>	1	27	3.7
<i>Gbehlay-geh</i>	3	15	20.0

County/District	Number of female primary school teachers	Total number of primary school teachers	% primary school teachers who are female
<i>Saclepea 1</i>	40	140	28.6
<i>Saclepea 2</i>	4	41	9.8
<i>Sanniqueleh-Mah</i>	34	161	21.1
<i>Tappita 1</i>	9	54	16.7
<i>Tappita 2</i>	1	20	5.0
<i>Tuah River</i>	4	41	9.8
<i>Yarpea-Mah</i>	0	4	0.0
<i>Yarwin-Mensonoh</i>	1	10	10.0
<i>Zoe-Geh</i>	5	32	15.6
Rivercess	2	46	4.3
<i>Central Rivercess 1</i>	0	4	0.0
<i>Monweh</i>	0	12	0.0
<i>Timbo</i>	1	23	4.3
<i>Yarnee</i>	1	7	14.3
River Gee	17	106	16.0
<i>Chedepo</i>	3	18	16.7
<i>Gbaepo</i>	1	11	9.1
<i>Potupo</i>	10	46	21.7
<i>Tiempo</i>	1	23	4.3
<i>Webbo</i>	2	8	25.0
Sinoe	14	123	11.4
<i>Butaw</i>	1	10	10.0
<i>Greenville</i>	6	73	8.2
<i>Jaedae</i>	4	15	26.7
<i>Juarzon</i>	1	6	16.7
<i>Sankwen</i>	0	5	0.0
<i>Tarjuwon</i>	0	7	0.0
<i>Upper Kpanyan</i>	2	7	28.6
LIBERIA	1,938	9,378	20.7

Annex E: Percentage of Teachers Approaching Retirement by County and District

Table E1: Percent of Government Primary School Teachers approaching Retirement by County and District³

County/District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Bomi	7.6	2.6	340
<i>Dewoin</i>	3.4	6.8	59
<i>Klay</i>	8.9	3.2	124
<i>Senjeh</i>	10.3	1.1	87
<i>Suehn Mecca</i>	5.7	0.0	70
Bong	10.2	3.4	1163
<i>Fuamah</i>	8.9	5.1	79
<i>Gbarnga</i>	5.8	7.9	139
<i>Kokoya</i>	11.3	0.9	106
<i>Panta-Kpaai</i>	9.8	3.1	254
<i>Salala</i>	8.5	3.1	130
<i>Sanoyea</i>	10.4	2.6	115
<i>Suacoco</i>	9.3	1.6	193
<i>Zota</i>	17.7	4.1	147
Gbarpolu	11.5	3.2	347
<i>Belle</i>	12.5	7.1	56
<i>Bokomu</i>	25.8	9.7	31
<i>Bopulu</i>	12.0	2.0	100
<i>Gbarma</i>	2.9	1.4	70
<i>Guo Nwala</i>	14.5	1.8	55
<i>Kongba</i>	8.6	0.0	35
Grand Bassa	6.9	2.3	577
<i>District 1</i>	8.1	1.2	86
<i>District 2</i>	8.1	0.0	123
<i>District 3</i>	6.9	0.7	145
<i>District 4</i>	8.7	2.9	69
<i>District 5</i>	4.5	5.8	154
Grand Cape Mount	11.4	3.6	446
<i>Garwula</i>	13.7	6.0	117
<i>Gola Konneh</i>	8.9	3.8	79
<i>Porkpa</i>	14.9	1.1	87
<i>Tallah Tombey</i>	5.6	5.6	36
<i>Tewor</i>	10.2	2.4	127

³ Of the government primary school teachers that were recorded by the Education Statistics of 2014 1.4% (i.e., 168) did not state their year of birth while 2.1% (i.e., 242) did not state how many years of experience they had.

County/District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Grand Gedeh	7.2	3.1	581
<i>Gbarzon</i>	5.8	1.7	172
<i>Konobo</i>	4.1	2.7	73
<i>Putu</i>	10.2	5.1	59
<i>Tchien</i>	8.3	3.6	277
Grand Kru	17.1	8.1	456
<i>Barclayville</i>	15.0	12.5	80
<i>Buah</i>	20.0	0.0	60
<i>Dorbor</i>	24.2	24.2	33
<i>Grand Cess</i>	15.2	8.7	46
<i>Jloh</i>	7.9	2.6	38
<i>Sass Town</i>	12.9	0.0	31
<i>Trehn</i>	24.3	11.3	115
<i>Wedabo</i>	7.5	1.9	53
Lofa	6.4	2.4	1496
<i>Foya</i>	3.3	1.3	302
<i>Kolahun</i>	3.8	0.2	475
<i>Salayea</i>	10.6	8.7	104
<i>Vahun</i>	2.9	0.0	35
<i>Voinjama</i>	7.3	2.2	314
<i>Zorzor</i>	12.4	5.6	266
Margibi	5.1	0.9	546
<i>Gibi</i>	6.9	1.4	144
<i>Kakata</i>	5.2	0.9	233
<i>Marshall</i>	3.6	0.6	169
Maryland	13.2	6.1	593
<i>Barrobo I- Dougbe</i>	13.8	2.5	80
<i>Barrobo II- Nyonken</i>	24.1	5.2	58
<i>Harper 1</i>	10.8	0.0	65
<i>Harper 2</i>	10.3	8.2	97
<i>Karleway 1</i>	4.2	0.0	48
<i>Karleway 2</i>	12.3	2.7	73
<i>Plebo</i>	12.3	6.8	73
<i>Sodoken</i>	16.2	16.2	99
Montserrado	5.3	2.0	1,452
<i>Careysburg</i>	2.4	0.0	123
<i>Greater Monrovia 1</i>	3.3	3.3	30
<i>Greater Monrovia 2</i>	9.3	6.7	75
<i>Left Bank 1</i>	7.2	3.1	97
<i>Left Bank 2</i>	5.0	1.5	202
<i>MCSS</i>	4.3	1.8	326
<i>Paynesville</i>	2.1	1.1	95

County/District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
<i>Right Bank 1</i>	2.9	1.4	138
<i>Right Bank 2</i>	10.3	3.8	156
<i>Todee</i>	6.2	1.0	210
<i>Nimba</i>	7.8	1.8	2,274
<i>Bain-Garr</i>	8.8	1.4	148
<i>Buu-yao</i>	4.3	2.0	256
<i>Gbehlay-geh</i>	4.9	0.0	264
<i>Saclepea 1</i>	10.8	1.8	223
<i>Saclepea 2</i>	9.2	3.4	174
<i>Sanniqueleh-Mah</i>	11.5	2.9	174
<i>Tappita 1</i>	10.9	3.0	165
<i>Tappita 2</i>	5.6	0.6	161
<i>Tuah River</i>	5.1	2.1	235
<i>Yarpea-Mah</i>	2.3	1.1	88
<i>Yarwin-Mensonoh</i>	16.4	3.4	146
<i>Zoe-Geh</i>	6.7	0.8	240
<i>Rivercess</i>	6.1	1.6	374
<i>Central Rivercess 1</i>	5.1	1.0	99
<i>Central Rivercess 2</i>	2.9	0.0	35
<i>Monweh</i>	3.6	1.2	84
<i>Timbo</i>	11.3	4.1	97
<i>Yarnee</i>	5.1	0.0	59
<i>River Gee</i>	19.1	7.4	418
<i>Chedepo</i>	28.2	11.5	78
<i>Gbaepo</i>	20.6	11.3	97
<i>Potupo</i>	17.6	5.9	68
<i>Sarbo</i>	19.4	0.0	36
<i>Tiempo</i>	24.2	9.1	33
<i>Webbo</i>	10.4	3.8	106
<i>Sinoe</i>	11.7	3.7	642
<i>Butaw</i>	10.7	3.6	28
<i>Central Kpanyan</i>	2.5	0.0	80
<i>Greenville</i>	16.5	5.1	79
<i>Jaedae</i>	4.5	0.0	67
<i>Juarzon</i>	8.9	5.9	101
<i>Lower Kpanyan</i>	27.8	5.1	79
<i>Sankwen</i>	10.0	0.0	40
<i>Tarjuwon</i>	9.2	4.6	65
<i>Upper Kpanyan</i>	12.6	5.8	103
LIBERIA	8.8	3.0	11,705

Table E2: Percent of Non-Government Primary School Teachers approaching Retirement by County and District⁴

County/District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Bomi	3.0	1.2	167
<i>Dewoin</i>	0.0	0.0	5
<i>Klay</i>	0.0	2.0	49
<i>Senjeh</i>	4.5	0.9	111
<i>Suehn Mecca</i>	0.0	0.0	2
Bong	4.1	1.6	365
<i>Fuamah</i>	4.3	4.3	23
<i>Gbarnga</i>	3.2	1.9	155
<i>Panta-Kpaai</i>	0.0	0.0	33
<i>Salala</i>	5.5	0.0	73
<i>Sanoyea</i>	0.0	0.0	4
<i>Suacoco</i>	2.3	0.0	43
<i>Zota</i>	11.8	5.9	34
Gbarpolu	18.6	2.3	43
<i>Belle</i>	50.0	0.0	2
<i>Bopulu</i>	13.3	3.3	30
<i>Gbarma</i>	50.0	0.0	4
<i>Kongba</i>	14.3	0.0	7
Grand Bassa	4.5	4.3	508
<i>District 1</i>	13.8	0.0	29
<i>District 2</i>	8.3	0.0	12
<i>District 3</i>	1.2	13.1	84
<i>District 4</i>	9.1	9.1	33
<i>District 5</i>	4.0	2.3	350
Grand Cape Mount	11.9	2.4	126
<i>Garwula</i>	6.4	0.0	47
<i>Gola Konneh</i>	22.2	5.6	18
<i>Porkpa</i>	16.7	0.0	12
<i>Tallah Tombey</i>	8.0	0.0	25
<i>Tewor</i>	16.7	8.3	24
Grand Gedeh	2.8	0.7	142
<i>Gbarzon</i>	0.0	5.9	17
<i>Konobo</i>	5.6	0.0	18
<i>Putu</i>	0.0	0.0	12
<i>Tchien</i>	3.2	0.0	95
Grand Kru	15.5	5.2	58
<i>Barclayville</i>	26.7	6.7	15

⁴ For non-government primary schools, 6.4% (i.e., 600) teachers did not state their year of birth, while 4.6% (i.e., 429) did not report how many years of experience they had.

<i>Buah</i>	0.0	0.0	4
<i>Grand Cess</i>	15.4	15.4	13
<i>Sass Town</i>	25.0	0.0	4
<i>Trehn</i>	15.4	0.0	13
<i>Wedabo</i>	0.0	0.0	9
Lofa	2.9	0.4	240
<i>Foya</i>	2.8	0.0	72
<i>Kolahun</i>	0.0	0.0	17
<i>Salayea</i>	0.0	0.0	14
<i>Voinjama</i>	1.5	1.5	67
<i>Zorzor</i>	5.7	0.0	70
Margibi	4.5	3.9	961
<i>Gibi</i>	8.1	0.0	37
<i>Kakata</i>	5.3	1.7	418
<i>Marshall</i>	3.6	5.9	506
Maryland	4.7	2.8	215
<i>Harper 1</i>	5.6	0.0	36
<i>Harper 2</i>	0.0	0.0	37
<i>Karleway 1</i>	0.0	0.0	6
<i>Pleebo</i>	4.6	4.6	87
<i>Sodoken</i>	8.2	4.1	49
Montserrat	2.3	0.8	5,423
<i>Careysburg</i>	3.9	0.0	102
<i>Greater Monrovia 1</i>	1.4	0.7	1686
<i>Greater Monrovia 2</i>	2.9	0.5	1193
<i>Left Bank 1</i>	3.0	0.4	460
<i>Left Bank 2</i>	1.8	0.4	274
<i>Paynesville</i>	2.5	0.9	1046
<i>Right Bank 1</i>	2.0	2.9	343
<i>Right Bank 2</i>	2.2	1.1	273
<i>Todee</i>	6.5	2.2	46
Nimba	5.3	1.1	855
<i>Bain-Garr</i>	3.9	0.0	310
<i>Buu-yao</i>	14.8	0.0	27
<i>Gbehlay-geh</i>	0.0	0.0	15
<i>Saclepea 1</i>	6.4	0.7	140
<i>Saclepea 2</i>	9.8	7.3	41
<i>Sanniqueleh-Mah</i>	3.7	1.2	161
<i>Tappita 1</i>	7.4	3.7	54
<i>Tappita 2</i>	0.0	0.0	20
<i>Tuah River</i>	0.0	0.0	41
<i>Yarpea-Mah</i>	0.0	0.0	4
<i>Yarwin-Mensonoh</i>	30.0	0.0	10
<i>Zoe-Geh</i>	9.4	3.1	32

Rivercess	0.0	2.2	46
<i>Central Rivercess 1</i>	0.0	0.0	4
<i>Monweh</i>	0.0	0.0	12
<i>Timbo</i>	0.0	4.3	23
<i>Yarnee</i>	0.0	0.0	7
River Gee	10.4	4.7	106
<i>Chedepo</i>	11.1	0.0	18
<i>Gbaepo</i>	0.0	0.0	11
<i>Potupo</i>	4.3	0.0	46
<i>Tiempo</i>	17.4	13.0	23
<i>Webbo</i>	37.5	25.0	8
Sinoe	10.6	0.0	123
<i>Butaw</i>	10.0	0.0	10
<i>Greenville</i>	12.3	0.0	73
<i>Jaedae</i>	0.0	0.0	15
<i>Juarzon</i>	0.0	0.0	6
<i>Sankwen</i>	20.0	0.0	5
<i>Tarjuwon</i>	0.0	0.0	7
<i>Upper Kpanyan</i>	28.6	0.0	7
LIBERIA	3.5	1.5	9,378