Liberia Teacher Training Program

Study of Primary School Teacher Supply and Demand

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Acronyms:

ALU	Association of Liberian Universities
CFL	Christian Foundation for Liberia
ECSEL	European Commission Support for Education in Liberia
EMIS	Education Management Information System
FHI	Family Health International
LTTP	Liberia Teacher Training Program
MER	Monitoring, Evaluation, & Research
MoE	Ministry of Education
NTAL	National Teacher Association of Liberia
UNICEF	United Nations Children Fund
USAID	United States Agency for International Development

Executive Summary

This report presents findings from a study conducted by the LTTP Monitoring, Evaluation, and Research team, in collaboration with the Ministry of Education's EMIS and M&E units. 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, both in government and government subsystems.

The study analyzed the Ministry's 2013 EMIS database, which includes information on teachers at almost all of the government and non-government (private, faith-based, and community) primary schools. We present findings on the pupil-teacher ratios (PTRs) and qualified-pupil teacher ratios (PQTRs), the counties and districts that have near the policy goal of 44 pupils per teacher, and the percentage of teachers who have the minimum qualification (i.e., at least a C-Certificate), the percentage of teachers who are female, and the percentage of teacher whose age or length of service are close to the level when they would be eligible to retire.

The study found that nationally Liberia has a sufficient number of teachers and even a sufficient number of qualified teachers (i.e., those with at least a C-Certificate) to achieve the current policy goal of 44 pupils per teacher. More specifically, for government schools, the national PTR is 24.8 and the national PQTR is 36.2, while for non-government schools, the national PTR is 21.6 and the national PQTR is 39.0. It may be worth considering establishing a more ambitious target for the ratio of pupils to teachers. For example, Annex C presents findings regarding how counties and districts measure up if the policy goal was 35 pupils per teacher (or qualified teacher).

Nevertheless, the overall national statistics on pupil-teacher ratios and pupil-qualified teacher ratios hide substantial variations across counties and districts, not to mention schools, in both the government and non-government subsystems. Such variations highlight the need to give attention to the policies and procedures for recruitment, deployment, and retention of teachers. Unless steps are taken, the Liberian children will continue to be exposed to quite different class sizes, which likely translate into significantly different opportunities to learn for those attending different schools, in different districts, in different counties.

The study's 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 2013 EMIS database includes at least some of "fictitious" or "duplicate" teachers. To the extent that this is the case this means that the 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 in 2013. Thus, 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 another policy goal – gender parity in the primary school teaching force. Nationally, 12.0% of government primary school teachers are female and 20.2% of non-government primary school teachers are female. Clearly, in neither subsystem is Liberia approaching the 50% figure signaling gender parity. Furthermore, we observed substantial variation among counties and districts in the percentage of teachers who are female. This means that while in some settings more progress has been made in achieving this goal, in other settings they are very far from achieving this policy goal.

This concern is reinforced by the large differences across counties and districts in the percentage of primary school teachers who do not have the minimum-specified qualification (i.e., at least a C-Certificate). The findings indicate that 3,409 teachers in government primary schools and 2,162 teachers in non-government primary schools need to have their qualifications upgraded or 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, there are very large differences across counties and across districts in the percentage of "unqualified" primary school teachers in government as well as non-government schools.

To address the challenges of equalizing the distribution of "qualified" teachers as well as the underrepresentation of female teachers Liberia may need to implement special packages of financial incentives, organize better living conditions, and/or improve working conditions to attract and hold "qualified" and/or female teachers in some settings. Consideration should also be given to assessing and addressing any qualifications or gender biases that influence hiring and deployment decisions in some contexts.

Additionally, 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 whose age or length of experience means that they will retire in the near future. However, the overall percentage of teachers who are at least 61 years old and/or who have at least 21 years of experience should be monitored and plans put in place for their replacement over the coming years. As discussed the problem is somewhat greater in some counties and districts than others, so this should be kept in mind.

Finally, the Ministry of Education along with its Liberian and international partners need to consider whether the current policy-specified minimum qualification (i.e., the C-Certificate, which is obtained after a relatively short period of formal professional education) is appropriate for Liberia in future decades. This study indicates that the current supply of teachers – and even the supply of qualified teachers – can be viewed as meeting the demand, that is, the number needed to reach the policy targeted pupil-teacher ratio. However, the study does not address whether the capabilities of the teaching force meet the demand for improved learning opportunities among the children attending 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.

Background to the Study

Recently, 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, needs 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 is argued 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; their distribution across counties, districts and schools; the proportion of female teachers; and the proportion of teachers nearing the age or length of career for retirement.

Objectives of the Study

The main purpose of this study is to inform discussions and decision making concerning the number of primary school teachers who possess the minimum qualifications (i.e., a C-Certificate) that are needed nationally, within specific counties, and within specific districts. To achieve the policy goal identified in the 2011 Education Reform Act (Republic of Liberia, 2011), there should be one qualified teacher for every forty-four 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 age.

More specifically, the study is designed to answer the following research questions:

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. In which counties and districts are the *pupil-teacher ratios* and the *pupil-qualified teacher ratios* in government and non-government primary schools:
    a. Above 42?
    b. Equal to 42-46?
    c. Below 46?

4. 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?

5. For all counties and districts, in government and non-government primary schools, what are the percentages of *female teachers*?

6. For all counties and districts, in government and non-government primary schools, what are the percentages of teachers who:
    a. Are at least *61 years old*?
    b. Have at least *21 years of teaching experience*?

Methodology

Because of the urgent need for this information and given the investment of the Ministry of Education and USAID, the study relied on data collected as part of the 2013 Annual School Census. These data, which have be compiled in the 2013 Education Management Information System (EMIS) database, included information on teachers representing a large majority of government and non-government (i.e., private, faith-based, and community) primary schools in Liberia.

According to the 2013 Education Statistics Bulletin (MOE, 2013, p. 142), principals from all but 202 (i.e., 6.6%) of the 3,051 schools who participated in the EMIS training returned questionnaires. While the missing data represent a limitation to this study, one should note that this report provides an almost complete portrait of the teaching force in Liberia.

To address the six 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 findings are displayed in charts and tables, some of which are presented in the body of the text and others appear in annexes.

Findings

Average, Lowest, and Highest Pupil-Teacher Ratios

Based on the 2011 Education Reform Act, the Liberia Education Administrative Regulations state 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).

In this section we examine the pupil-teacher ratios (PTRs) for government and non-government schools. Within the text we present tables and charts that show the overall county PTRs as well as the PTRs of the lowest and highest districts within each county (see Tables 1 and 2 and Chart 1). In Annex A we provide a more detailed breakdown of the statistics, looking at the ratios for each district as well as the ratios for the highest and lowest schools in each district (see Tables A1 and A2).

In Table 1 as well as Chart 1 we observe that the national average for the pupil-teacher ratio (PTR) in **government primary schools** is 24.8, which is well below (i.e., better than) the policy target of 44 pupils per teacher. However, the PTR varies across counties, with the lowest PTR being in Sinoe (17.5) and the highest PTR being in Grand Bassa (40.8). It is noteworthy that even in Grand Bassa the county average PTR is somewhat below (i.e., better than) the policy target. Furthermore, within each county the PTR varies across districts, as indicated by the lowest and highest district PTRs shown in Table 1. Nationally, the district with the lowest PTR (11.0) is located in River Cess County, while the district with the highest PTR (52.6) is located in Grand Bassa County. Thus, there are some districts that have PTRs higher (i.e., worse) than the policy target.

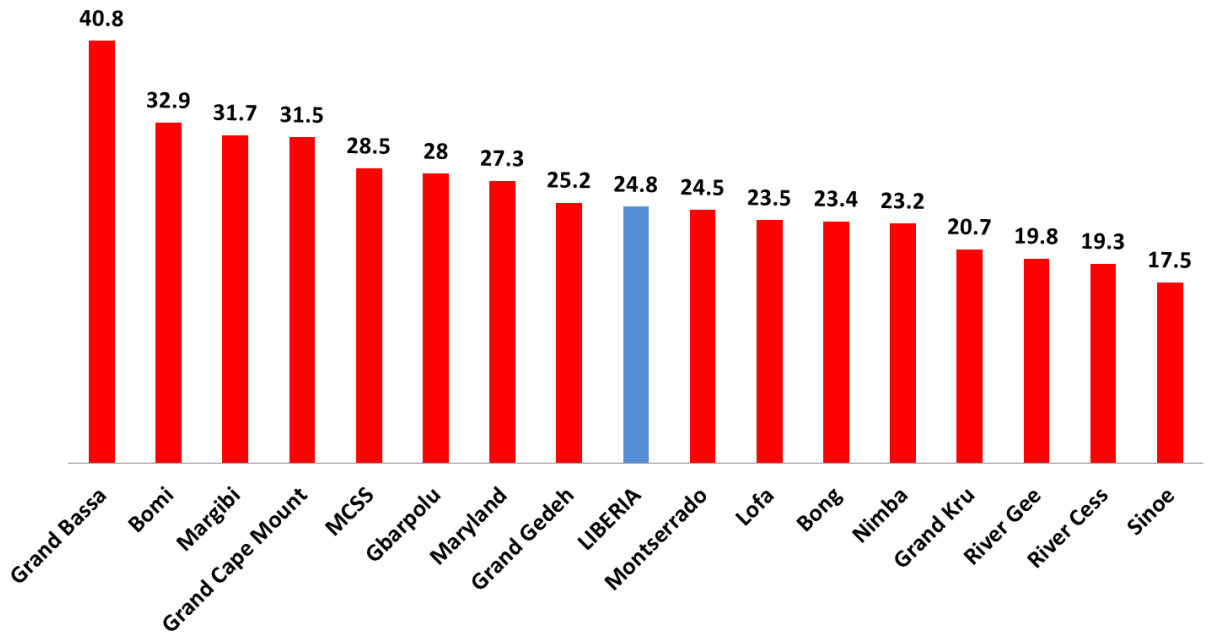
Finally, as presented in Table A1 in Annex A, one can see that there is substantial variation in the pupil-teacher ratios across government primary schools within every district. The school with the lowest PTR (1.0) is located in Todee District in Montserrado County and the school with the highest

PTR (322.0) is located in District No. 2 in Grand Bassa County. Thus, there are a number of schools that have PTRs higher (i.e., worse) than the policy target.

Table 1: Pupil-Teacher Ratios in *Government* Primary Schools by County

County	Pupil-Teacher Ratio (PTR)	Lowest District PTR	Highest District PTR
Bomi	32.9	27.9	37.8
Bong	23.4	19.7	30.6
Gbarpolu	28.0	14.6	44.8
Grand Bassa	40.8	21.5	52.6
Grand Cape Mount	31.5	16.6	43.5
Grand Gedeh	25.2	20.8	31.0
Grand Kru	20.7	18.2	28.1
Lofa	23.5	18.0	34.0
Margibi	31.7	30.5	33.2
Maryland	27.3	13.4	39.8
MCSS	28.5	28.5	28.5
Montserrado	24.5	17.9	39.9
Nimba	23.2	16.1	30.1
River Cess	19.3	11.0	24.0
River Gee	19.8	16.9	25.8
Sinoe	17.5	13.7	24.5
LIBERIA	**24.8**	**11.0**	**52.6**

CHART 1: Pupil-Teacher Ratios in Government Primary Schools by County



In Table 2 we observe that the national average for the pupil-qualified teacher ratio (PTR) in **non-government** primary schools is 21.6, which is slightly lower (i.e., better) than the average for government schools (24.8) and substantially better than the policy target of 44 pupils per teacher. We also note that the PTR varies across counties, with the lowest PTR in River Cess (10.6) and the highest PTR in Margibi (33.2). Thus, even in the county with the highest PTR in non-government schools, the figure is below (i.e., better than) the policy target.

Furthermore, within each county the PTR varies across districts, as indicated by the lowest and highest district PTRs shown in Table 2. Nationally, the district with the lowest PTR (4.0) is located in Nimba County, while the district with the highest PTR (47.1) is located in Grand Bassa County. Thus, there are a few districts that have PTRs above (i.e., worse) than the policy target.

Finally, as presented in Table A2 in Annex A, one can see that there is substantial variation in the pupil-teacher ratios across non-government primary schools within every district. The school with the lowest PTR (1.4) and the school with the highest PTR (334.8) are both located in Kakata District in Margibi County. Thus, even in districts with relatively good PTRs, there are schools with PTRs above (i.e., worse than) the policy target.

Table 2: Pupil-Teacher Ratios in *Non-government* Primary Schools by County

County/District	Pupil-Teacher Ratio (PTR)	Lowest District PTR	Highest District PTR
Bomi	17.1	6.0	19.1
Bong	18.6	14.8	24.7
Gbarpolu	25.6	20.3	39.3
Grand Bassa	29.5	6.0	47.1
Grand Cape Mount	17.8	11.3	25.0
Grand Gedeh	28.0	14.3	38.3
Grand Kru	14.5	9.0	30.3
Lofa	19.5	9.6	25.9
Margibi	33.2	28.8	35.8
Maryland	23.8	19.8	33.1
Montserrado	18.9	10.5	23.0
Nimba	21.6	4.4	30.5
River Cess	10.6	9.3	16.5
River Gee	27.2	18.2	38.6
Sinoe	19.8	9.0	20.3
LIBERIA	**21.6**	**4.4**	**47.1**

Average, Lowest, and Highest Pupil-Qualified Teacher Ratios

As mentioned above, Liberia's Education Reform Act of 2011 sets the policy goal for the pupil-teacher ratio (PTR) in government primary schools to be 44. Importantly, however, the 2011 Education Reform Act also specifies that the minimum formal education qualification for teachers in government primary schools should be a C-Certificate. In combination this policy on teacher qualifications and the policy of having a pupil-teacher ratio of 44 indicate that the overall policy goal for the pupil-qualified teacher ratio (PQTR) in government primary schools is 44. That is, the policy goal is to have 44 pupils for each teacher who has at least the minimum qualifications (a C-Certificate).

In this section we examine the pupil-qualified teacher ratios (PQTRs) for government and non-government schools. Within the text we present tables that show the overall county PQTRs as well as the PQTRs of the lowest and highest districts within each county (see Tables 3 and 4 and Chart 2). In Annex A we provide a more detailed breakdown of the statistics, looking at the ratios for each district as well as the ratios for the highest and lowest schools in each district (see Tables A3 and A4).

In Table 3 we observe that the national average for the pupil-qualified teacher ratio (PQTR) in government primary schools is 36.2, which is somewhat lower (i.e., better) than the policy target of 44 pupils per qualified teacher. This is a noteworthy accomplishment for Liberia.

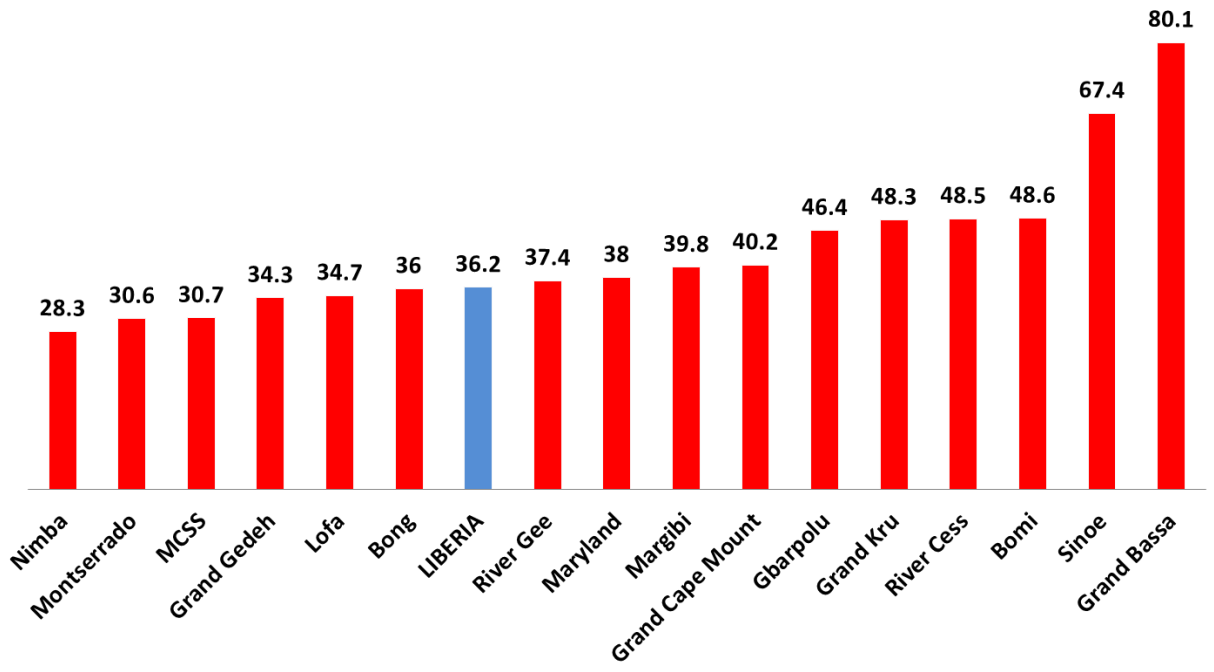
However, the PQTR varies across counties, with the lowest PQTR being in Nimba (28.3) and the highest PQTR being in Grand Bassa (80.1). Thus, not all counties have PQTRs at or below the policy target of 44. Furthermore, within each county the PQTR varies across districts, as indicated by the lowest and highest district PQTRs shown in Table 3. Nationally, the district with the lowest PQTR (19.2) is located in Nimba County, while the district with the highest PQTR (465.0) is located in Sinoe County. Thus, there are a number of districts that have PQTRs above (i.e., worse than) the policy target.

Finally, Table A3 in Annex A shows a substantial variation in the pupil-qualified teacher ratio across government primary schools within every district. The school with the lowest PQTR (3.0) is located in Gbarzon District in Grand Gedeh County and the school with the highest PQTR (322.0) is located in District No. 2 in Grand Bassa County. Thus, even in districts that have relatively good pupil-qualified teacher ratios, there are schools that have PQTRs above (i.e., worse than) the policy target.

Table 3: Pupil-Qualified Teacher Ratios in *Government* Primary Schools by County

County	Pupil-Qualified Teacher Ratio	Lowest District PQTR	Highest District PQTR
Bomi	48.6	38.7	60.5
Bong	36.0	27.4	48.9
Gbarpolu	46.4	38.1	55.1
Grand Bassa	80.1	23.9	138.5
Grand Cape Mount	40.2	22.9	57.7
Grand Gedeh	34.3	30.0	40.6
Grand Kru	48.3	34.0	116.0
Lofa	34.7	31.3	37.8
Margibi	39.8	36.0	57.6
Maryland	38.0	30.1	47.7
MCSS	30.7	30.7	30.7
Montserrado	30.6	20.1	43.6
Nimba	28.3	19.2	38.0
River Cess	48.5	37.6	79.2
River Gee	37.4	29.2	97.1
Sinoe	67.4	29.1	465.0
LIBERIA	**36.2**	**19.2**	**465.0**

Chart 2: Pupil-Qualified Teacher Ratios in Government Primary Schools by County



In Table 4 one observes that the national average for the pupil-qualified teacher ratio (PQTR) in non-government primary schools is 39.0, which somewhat worse than the PQTR for government primary schools, but somewhat below (i.e., better than) the policy target of 44 pupils per qualified teacher. However, the PQTR varies across counties, with the lowest PQTR being in River Cess (24.8) and the

highest PQTR being in River Gee (139.9). Thus, some counties have PQTRs in non-government schools above (i.e., worse than) the policy target.

Furthermore, within each county the PQTR varies across districts, as indicated by the lowest and highest district PQTRs shown in Table 4. Nationally, the district with the lowest PQTR (6.0) is located in Bomi County, while the district with the highest PQTR (347.0) is located in River Gee County. Thus, some districts have PQTRs above (i.e., worse than) the policy target.

Finally, Table A4 in Annex A also indicates that there is substantial variation in the pupil-teacher ratios across non-government primary schools within every district. The school with the lowest PQTR (2.0) is located in Paynesville District in Montserrado County and the school with the highest PQTR (541.0) is located in Greater Monrovia District No. 2 also in Montserrado County. Thus, even in districts with relatively good PQTRs, there are schools that have PQTRs above (i.e., worse than) the policy target.

Table 4: Pupil-Qualified Teacher Ratios in *Non-government* Primary Schools by County

County	Pupil-Qualified Teacher Ratio	Lowest District PQTR	Highest District PQTR
Bomi	25.8	6.0	67.0
Bong	44.6	30.8	58.1
Gbarpolu	48.6	23.5	78.5
Grand Bassa	57.1	54.2	65.2
Grand Cape Mount	28.1	19.4	48.8
Grand Gedeh	53.0	34.4	63.8
Grand Kru	56.1	18.0	91.0
Lofa	47.9	14.9	294.0
Margibi	42.9	40.3	46.3
Maryland	42.8	27.4	51.0
Montserrado	35.1	27.3	40.0
Nimba	36.6	6.7	48.0
River Cess	24.8	16.5	39.5
River Gee	139.9	87.2	347.0
Sinoe	50.7	49.7	49.7
LIBERIA	**39.0**	**6.0**	**347.0**

Counties with Pupil-Teacher Ratios Near, Below, and Above Policy Guidelines

In this section we revisit the issue of whether there are sufficient teachers given the population of primary school pupils in 2013, specifically addressing the question of how **counties** measure up in terms of their pupil-teacher ratios being in line with the policy target specified in the 2011 Education Reform Act. First, we examine the findings for all teachers, regardless of whether they have the minimum expected qualifications, that is, whether the PTR is close to 44. (See Annex C for findings from a different analysis, using a more ambitious policy goal of PTR and PQTR of 35.)

Looking at Table 5 and focusing on the first and third set of columns, we observe that:

a. For **government** primary schools, all counties have an average PTR below 42.

b. For **non-government** primary schools, all counties have an average PTR below 42.

The picture is a little more complicated if we take into consideration if teachers have the minimum expected formal education qualification, that is, focusing on whether counties have PQTRs close to 44 (see also Annex C for findings from a different analysis, using a more ambitious policy goal of a PTQR of 35).

Looking again at Table 5, but now focusing on the second set of columns, we note that for **government schools**:

a. 10 (or 62.5%) of the counties have PQTRs lower than 42;

b. 0 counties have PQTRs between 42 and 46;

c. 6 (or 37.5%) of the counties have PQTRs higher than 46: Bomi*, Gbarpolu, Grand Bassa, Grand Kru, River Gee*, and *Sinoe*.

Now looking again at Table 5, but focusing on the fourth set of columns, we observe similar results for **non-government schools**:

a. 5 (or 33.3%) of the counties have PQTRs lower than 42: *Bomi, Grand Cape Mount,* Montserrado, Nimba, and *River Cess*;

b. 3 (or 20.0%) of the counties have PQTRs between 42 and 46: Bong, Margibi, *and Maryland*;

c. 7 (or 46.7%) of the counties have PQTRs higher than 46: *Gbarpolu, Grand Bassa, Grand Gedeh, Grand Kru, Lofa, River Gee*, and *Sinoe*.

Table 5: Counties with Pupil-Teacher Ratios (PTRs) and Pupil-Qualified Teacher Ratios (PQTRs) Below 42, Between 42 and 46, and Above 46

County	Government Schools						Non-Government Schools					
	PTR			PQTR			PTR			PQTR		
	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46
Bomi	X					X	X			X		
Bong	X			X			X				X	
Gbarpolu	X					X	X					X
Grand Bassa	X					X	X					X
Grand Cape Mount	X			X			X			X		
Grand Gedeh	X			X			X					X
Grand Kru	X					X	X					X
Lofa	X			X			X					X
Margibi	X			X			X				X	
Maryland	X			X			X				X	
MCSS	X			X								
Montserrado	X			X			X			X		
Nimba	X			X			X			X		
River Cess	X					X	X			X		
River Gee	X			X			X					X
Sinoe	X					X	X					X
Percent of Counties	**100**	**0.0**	**0.0**	**62.5**	**0.0**	**37.5**	**100**	**0.0**	**0.0**	**33.3**	**20.0**	**46.7**

Districts with Pupil-Teacher Ratios Near, Below, and Above Policy Guidelines

Continuing our discussion about whether there are sufficient teachers given the number of primary school pupils in 2013, we examine how **districts** measure up in terms of their pupil-teacher ratios being in line with the policy target specified in the 2011 Education Reform Act. First, we examine the findings for all teachers, regardless of whether they have the minimum expected qualifications, that is, whether the PTR is close to 44. (See Annex C for findings from a different analysis, using a more ambitious policy goal of PTR and PQTR of 35.)

Looking at the first and third set of columns in Table B1 in Annex B, one notes that:

a. for **government schools**, the vast majority (96.9%) of the districts have PTRs below 42 and

b. for **non-government schools**, the vast majority (95.8%) of the districts have PTRs below 42.

The picture is a little more complicated if we take into consideration whether teachers have the minimum expected formal education qualifications, that is, assessing whether districts have pupil-qualified teacher ratios (PQTRs) close to 44 (see also Annex C for findings from a different analysis, using a more ambitious policy goal of a PTQR of 35). Looking at the findings presented in the second and fourth columns in Table B1 in Annex B, one observes that:

a. for **government schools**, a majority (63.9%) of the districts have PQTRs less than 42, while 7.2% of the districts have PQTRs between 42 and 46, and 28.9% of the districts have PQTRs greater than 46.

b. for **non-government schools**, a slight majority (55.6%) of the districts have PQTRs less than 42, while 2.8% of the districts have PQTRs between 42 and 46 and a large minority (41.7%) of the districts have PQTRs greater than 46.

Percentage of Teachers without Minimum Qualifications by County and District

Another way of examining the demand for teachers is to identify the percentage of teachers who do not currently possess at least the minimum qualification specified by the 2011 Education Reform Act, that is, a C-Certificate. Table 6 (and Chart 3) present this information for *government primary schools* in each of the 15 counties plus the Monrovia Consolidated School System (MCSS). A more detailed breakdown of this information, for each district in all the counties, is provided in Table D1 in Annex D.

Table 6 shows that the average percent of teachers in government primary schools who do not have at least a C-Certificate qualification is 31.4% (see bottom of the right column in this table). While the policy target is 0%, Liberia has made substantial progress in recruiting and retaining qualified primary school teachers, given that in 2010 the percentage without at least C-Certificates was approximately 60% (ALU, 2012). As shown in Table 6, to reach the policy target (i.e., 100% of primary teachers having at least a C-Certificate) Liberia would have to upgrade the credentials of 3,409 (out of 10,892) government primary school teachers or replace them with individuals who have at least a C-certificate (see bottom of the left and middle columns in this table).

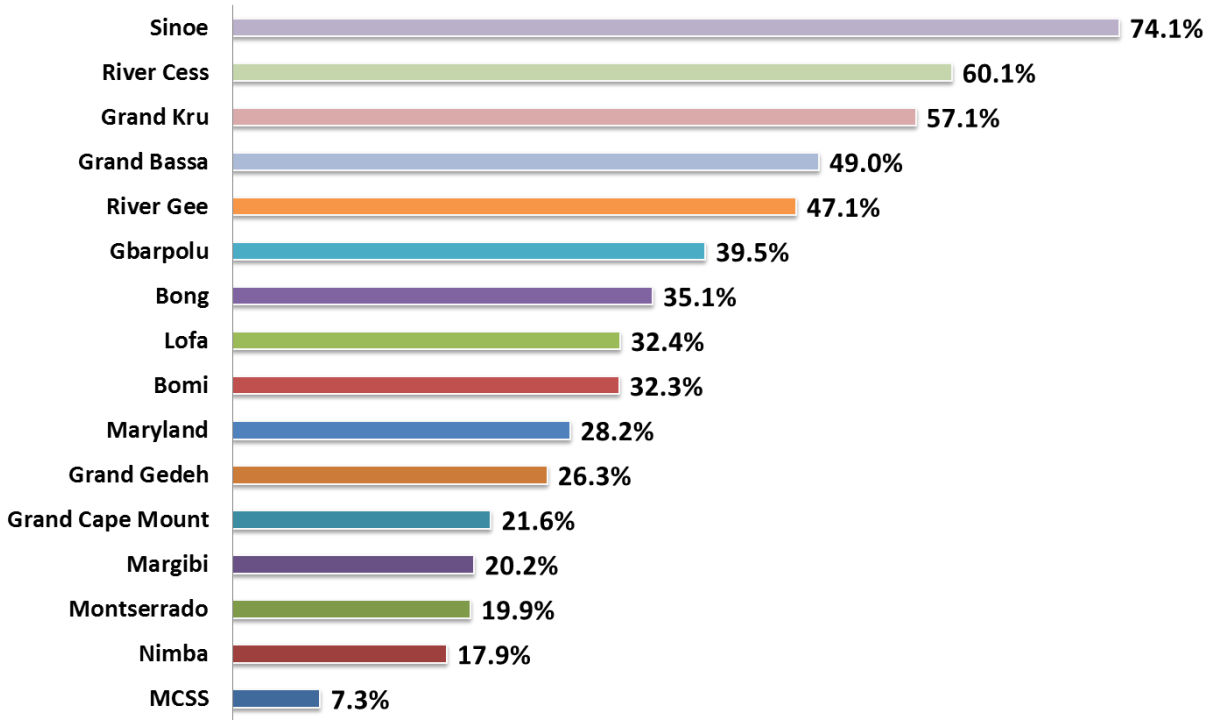
Table 6 (and Chart 3) also inform us that there is substantial variation across counties in the percentage of teachers who do not have the minimum qualification (see the right column in this table). Sinoe has the highest percentage (74.1%) and the Monrovia Consolidated School District has the lowest percentage (7.3%) of primary school teachers who do not have the minimum qualification (i.e., at least a C-Certificate). Similarly, counties vary in the number of teachers that need to have their credentials upgraded or need to be replaced by individuals with C-Certificates. Bong, Lofa, and Nimba have more than 400 teachers in this category, while MCSS has only 30 teachers without at least a C-Certificate (see left column of this table).

Additionally, as presented in Table D1 in Annex D, one observes that there is substantial variation among districts with respect to the percentage of government primary school teachers who do not have at least a C-Certificate qualification. The district with the highest percentage of "unqualified" primary school teachers is Sankwen in Sinoe County (94.7%), while two districts (Harper II in Maryland and Greater Monrovia No. 1 in Montserrado County) do not have any government primary school teachers without C-Certificates (i.e., 0%).

Table 6: Number and Percent of *Government* Primary School Teachers WITHOUT at least a C-Certificate by County

County	Number of Teachers without at least a C-Certificate	Total Number of ALL Teachers	% Without at least C-Certificate
Bomi	90	279	32.3%
Bong	449	1,280	35.1%
Gbarpolu	141	357	39.5%
Grand Bassa	177	361	49.0%
Grand Cape Mount	84	389	21.6%
Grand Gedeh	134	509	26.3%
Grand Kru	278	487	57.1%
Lofa	429	1,324	32.4%
Margibi	89	440	20.2%
Maryland	122	432	28.2%
MCSS	30	411	7.3%
Montserrado	184	925	19.9%
Nimba	429	2,396	17.9%
River Cess	220	366	60.1%
River Gee	193	410	47.1%
Sinoe	360	486	74.1%
LIBERIA	**3,409**	**10,852**	**31.4%**

Chart 3: Percentage of Government Primary School Teachers without C-Certificates by County



It is also useful to note the percentage of teachers in non-government schools who do not have at least a C-Certificate. This not only sheds light on similarities and differences in the staffing of between the two subsystems, but also informs us regarding whether the non-government sector

may be attracting qualified personnel who might otherwise be employed in government schools. Table 7 presents this information on the percentage of teachers in *non-government primary schools* that do not possess a C-Certificate in each of the 15 counties. A more detailed breakdown of this information, for each district in all the counties, is provided in Table D2 in Annex D.

Table 7 shows us that the average percent of teachers in non-government primary schools who do not have at least a C-Certificate qualification is 44.7% (see bottom of right column in this table). It is worth noting that this is a higher percentage than we found for government primary school teachers (31.4%). As shown in Table 7, to reach the policy target (i.e., 100% of primary teachers having at least a C-Certificate) Liberia would have to upgrade the credentials of 2,162 (out of 4,836) non-government primary school teachers or replace them with individuals who have at least a C-certificate (see bottom of the left and middle columns in this table).

Table 7 also informs us that there is substantial variation across counties in this statistic. River Gee having the highest percentage (80.6%) and the Margibi having the lowest percentage (22.6%) of non-government primary school teachers who do not have the minimum qualification (i.e., at least a C-Certificate).

Additionally, as presented in Table D2 in Annex D, one observes that there is substantial variation among districts with respect to the percentage of non-government primary school teachers who do not have at least a C-Certificate qualification. The districts with the highest percentage of "unqualified" primary school teachers (in these cases, 100.0%) are Sanoyea in Bong County, Belle in Gbarpolu County, District No. 1 and District No. 2 in Grand Bassa County, Grand Cess in Grand Kru County, Chedepo in River Gee County, and Lower Kpanayan in Sinoe County. In contrast, in three districts (Suehn Mecca in Bomi County, Gbarma in Gbarpolu County, and Timbo in River Cess County) all non-government primary school teachers have at least a C-Certificate (i.e., 0% without at least a C-Certificate).

Table 7: Percent of *Non-government* Primary School Teachers without C-Certificates by County

County	Number of Teachers without at least a C-Certificate	TOTAL Number of Teachers	% without at least a C-Certificate
Bomi	36	106	34.0%
Bong	143	245	58.4%
Gbarpolu	18	38	47.4%
Grand Bassa	179	370	48.4%
Grand Cape Mount	36	98	36.7%
Grand Gedeh	17	36	47.2%
Grand Kru	43	58	74.1%
Lofa	73	123	59.3%
Margibi	104	460	22.6%
Maryland	76	171	44.4%
Montserrado	1179	2563	46.0%
Nimba	193	472	40.9%
River Cess	8	14	57.1%
River Gee	29	36	80.6%
Sinoe	28	46	60.9%
LIBERIA	**2162**	**4,836**	**44.7%**

Percentage of Female Teachers by County and District

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 Liberia Education Administrative Regulations (Ministry of Education, 2011, p. 38), "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."

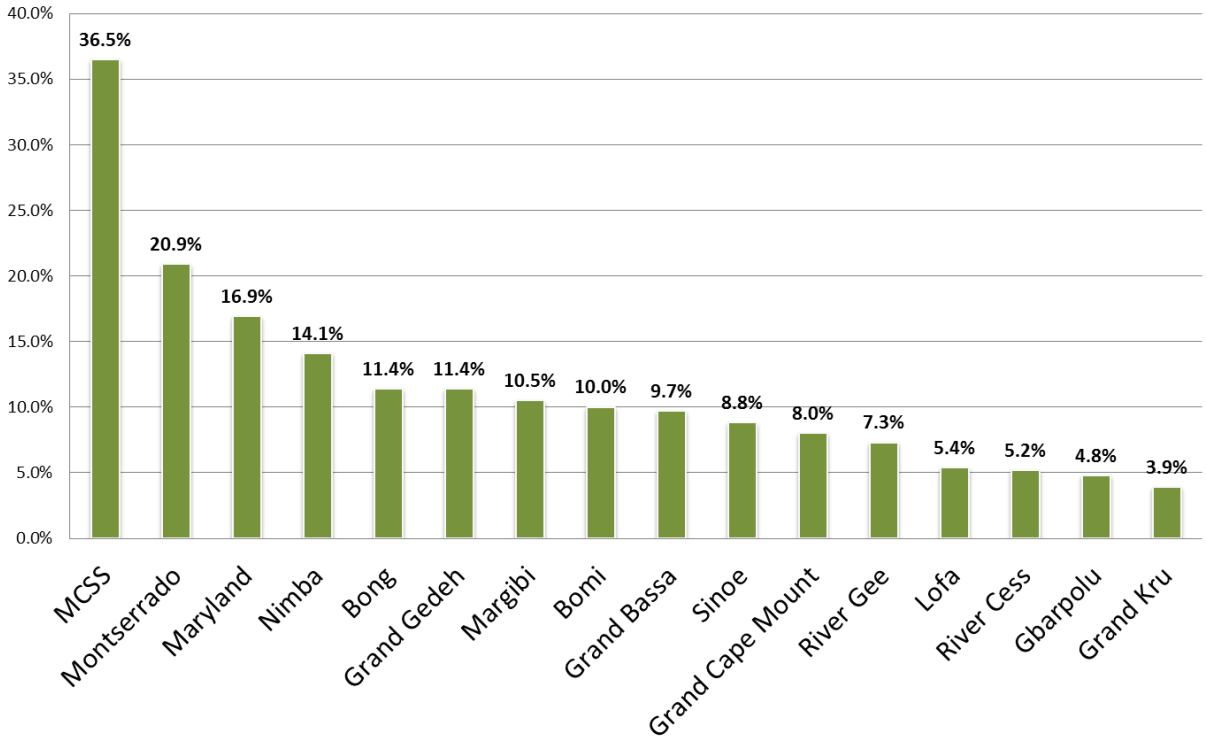
Table 8 (and Chart 4) present the percentage of female teachers in *government primary schools* in each of the 15 counties plus the Monrovia Consolidated School System (MCSS). A more detailed breakdown of this information, for each district in all the counties, is provided in Table E1 in Annex E. One can observe in Table 8 and Chart 4 that nationally the average percentage of female primary school teachers in government schools is 12.0%, though there is considerable variation among counties in the percentage of government primary school teachers who are female. While no county has achieved gender parity in its primary school teaching staff, MCSS has the highest proportion of female primary teachers in government schools (36.5%). In contrast, eight counties have less than 10% female primary teachers in government schools, with Grand Kru County having the lowest percentage (3.9%). This latter group of counties, obviously, would have to recruit substantial numbers of female teachers in government primary schools to even approach gender parity.

If we look at Table E1 in Annex E, we see that there is considerable variation among districts with respect to the percentage of government primary school teachers who are female. Two districts (Bokumu in Gbarpolu County and Central River Cess No. 1 in River Cess County) have no female teachers (i.e., 0%). In contrast, in addition to MCSS, there are three districts in which the percentage of female teachers in government primary schools is greater than 30%: Harper II in Maryland County as well as Paynesville (38.0%) and Greater Monrovia (42.9%) in Montserrado County.

Table 8: Percent of *Government* Primary School Teachers who are Female by County

County/District	% Female	Total Number of Teachers
Bomi	10.0%	279
Bong	11.4%	1280
Gbarpolu	4.8%	357
Grand Bassa	9.7%	361
Grand Cape Mount	8.0%	389
Grand Gedeh	11.4%	509
Grand Kru	3.9%	487
Lofa	5.4%	1324
Margibi	10.5%	440
Maryland	16.9%	432
MCSS	36.5%	411
Montserrado	20.9%	925
Nimba	14.1%	2396
River Cess	5.2%	366
River Gee	7.3%	410
Sinoe	8.8%	486
LIBERIA	**12.0%**	**10,852**

Chart 4: Percentage of Government Primary School Teachers who are Female by County



It is also useful to examine the percentage of female teachers in non-government schools. Once again, this information not only sheds light on similarities and differences in the staffing between the two subsystems, but also informs us regarding whether the non-government sector may be attracting female teachers who might otherwise be employed in government schools.

Table 9 presents information on the percentage of female teachers in *non-government primary schools* in each of the 15 counties. A more detailed breakdown of this information, for each district in all the counties, is provided in Table E2 in Annex E. One notes in Table 9 that nationally the average percentage of female primary school teachers in non-government schools is 20.2% (a figure that is somewhat higher than we observed for government schools). We also note that there is considerable variation among counties in the percentage of non-government primary school teachers who are female. While no county has achieved gender parity in its primary school teaching staff, Maryland County has the highest proportion of female primary teachers in non-government schools (28.7%). In contrast, six counties have less than 10% female primary teachers in non-government schools, with River Gee County having the lowest percentage (5.6%). It goes without saying that the latter set of counties would need to recruit substantial numbers of female teachers in non-government primary schools to even approach gender parity.

If one examines Table E2 in Annex E, one sees that there is considerable variation among districts with respect to the percentage of non-government primary school teachers who are female. Ten districts have no female teachers (i.e., 0%): Suehn Mecca in Bomi County, Panta-Kpai in Bong County, District No. 2 in Grand Bassa County, Tallah Tombey in Grand Cape Mount County, Foyah in Lofa County, Gibi in Margibi County, Monweh and Timbo in River Cess County, and Lower Kpanyan in Sinoe County. In contrast, in three districts the percentage of female teachers in non-government primary schools is greater than 30%: Sacepea No. 2 in Nimba County (30.5%), Left Bank No. 1 in Montserrado County (32.4%), and Gbarma in Gbarpolu County (50.0%).

Table 9: Percent of *Non-government* Primary School Teachers who are Female by County

County	% Female	Total Number of Teachers
Bomi	11.3%	106
Bong	17.1%	245
Gbarpolu	15.8%	38
Grand Bassa	9.7%	370
Grand Cape Mount	6.1%	98
Grand Gedeh	11.1%	36
Grand Kru	6.9%	58
Lofa	8.9%	123
Margibi	20.2%	460
Maryland	28.7%	171
Montserrado	23.9%	2563
Nimba	19.9%	472
River Cess	7.1%	14
River Gee	5.6%	36
Sinoe	10.9%	46
LIBERIA	**20.2%**	**4,836**

Percentage of Teachers Approaching Retirement

In examining the supply and demand of teachers one needs to monitor the percentage of teachers who are nearing a time when they would be eligible to retire. This information allows one to anticipate the number of teachers who will need to be replaced if they were to retire in the near future. According to government policy, teachers can retire at 65 years of age or after 25 years of employment. Table 10 (along with Charts 5A and 5B) provide relevant information in this regard, displaying the percentage of teachers in *government primary school*s in each county who either are: a) at least 61 years old or b) have at least 21 years of experience. A more detailed breakdown of this information, for each district in all the counties, is provided in Table F1 in Annex F.

Looking initially at the first column of figures in Table 10 (and the left/red bars in Chart 5), we see that on average 6.5% of government primary school teachers are sixty-one years or older, though there is some variation across counties. However, with the exception of three counties, the percentages are below 10%. Here we note that Gbarpolu has 10.1%, Grand Kru has 13.6%, and River Gee 15.9% of the government primary school teachers who are approaching retirement age.

Looking next at the first column of figures in Table F1 in Annex F, we note some degree of variation among districts in the percentage of government primary school teachers who are aged sixty-one years or older. For instance, three districts do not have any government primary school teachers (i.e., 0%) who are approaching retirement age: Karleway I in Maryland County, Greater Monrovia No. 1 in Montserrrado County, and Central Kpanyan in Sinoe County. In contrast, two districts have more than 20% of their government primary school teachers who are sixty-one years or older: Barrobo II-Dougbe (24.5%) and Chedpo in River Gee County (24.6%).

Now focusing on the second column of figures in Table 10 (and the right/blue bars in Chart 5), one observes that on average 4.7% of government primary school teachers have twenty-one years or

more of teaching experience, though there is some variation across counties. In fact, only two counties have more than 10% of their government primary school teaching staff who are approaching the experience levels that would qualify them for retirement: River Gee (10.2%) and Grand Kru (15.0%).

Focusing next on the second column of figures in Table F1 in Annex F, we see some degree of variation among districts in the percentage of government primary school teachers who have twenty-one or more years of teaching experience. For example, there are 13 districts that do not have any government primary school teachers (i.e., 0%) who are approaching the level of experience that would qualify them for retirement. They are: Kongba in Gbarpolu County, District No. 3 and District No. 5 in Grand Bassa County, Porkpa in Grand Cape Mount County, Gbarzon and Konobo in Grand Gedeh County, Vohun in Lofa County, Gibi in Margibi County, Harper I and Karloway I in Maryland County, Greater Monrovia No. 1 in Montserrado County, Central Kpanyan and Juarzon in Sinoe County. In contrast, there are seven districts that have at least fifteen percent of their government primary school teachers who have at least twenty-one years of teaching experience: Tallah Tombey in Grand Cape Mounty County (15.0%), Barclayville (26.6%) and Trehn (19.8%) in Grand Kru County, Sdoken in Maryland County (16.1%), Chedepo (18.5%) and Gbaepo (16.7%) in River Gee County, and Lower Kapanyan in Sinoe County.

Table 10: Percent of Teachers in Government Primary Schools Approaching Retirement

County	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Bomi	3.9%	5.0%	279
Bong	8.7%	5.4%	1280
Gbarpolu	10.1%	3.6%	357
Grand Bassa	6.6%	2.5%	361
Grand Cape Mount	7.7%	5.1%	389
Grand Gedeh	5.7%	2.0%	509
Grand Kru	13.6%	15.0%	487
Lofa	4.8%	4.7%	1324
Margibi	4.8%	1.8%	440
Maryland	8.8%	5.8%	432
MCSS	2.7%	6.6%	411
Montserrado	4.5%	3.5%	925
Nimba	4.7%	3.0%	2396
River Cess	4.6%	3.6%	366
River Gee	15.9%	10.2%	410
Sinoe	6.8%	4.7%	486
LIBERIA	**6.5%**	**4.7%**	**10,852**

Chart 5A: Percentages of Government Primary School Teachers Who are 61+ Years Old

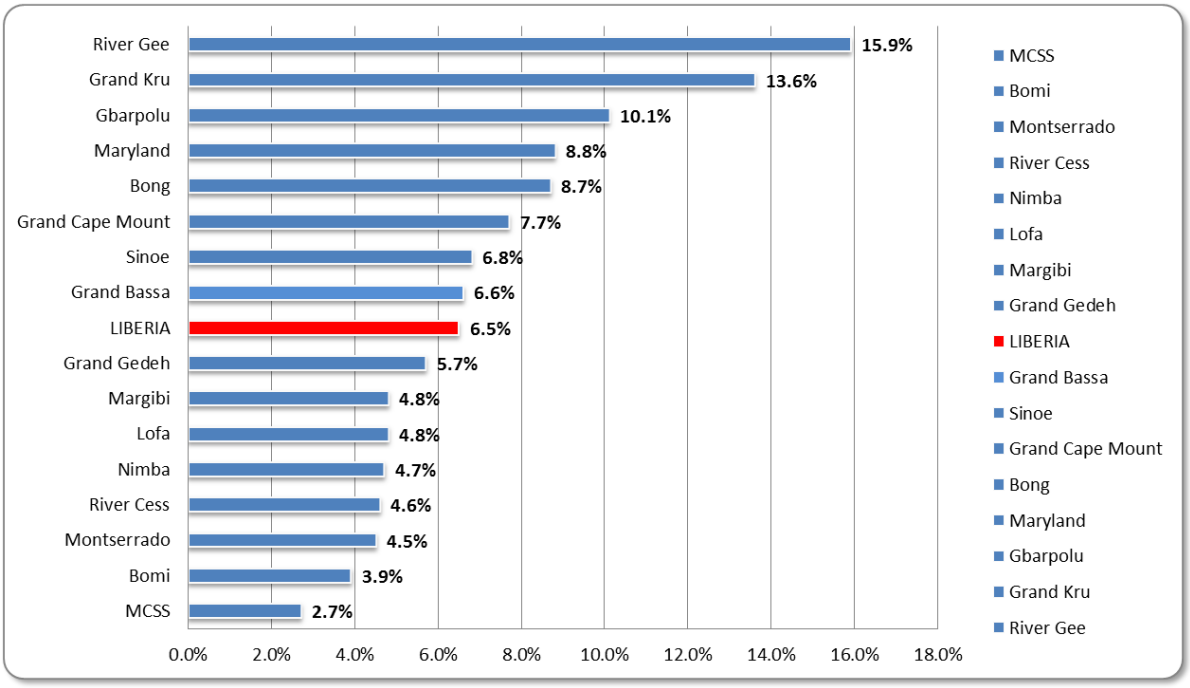
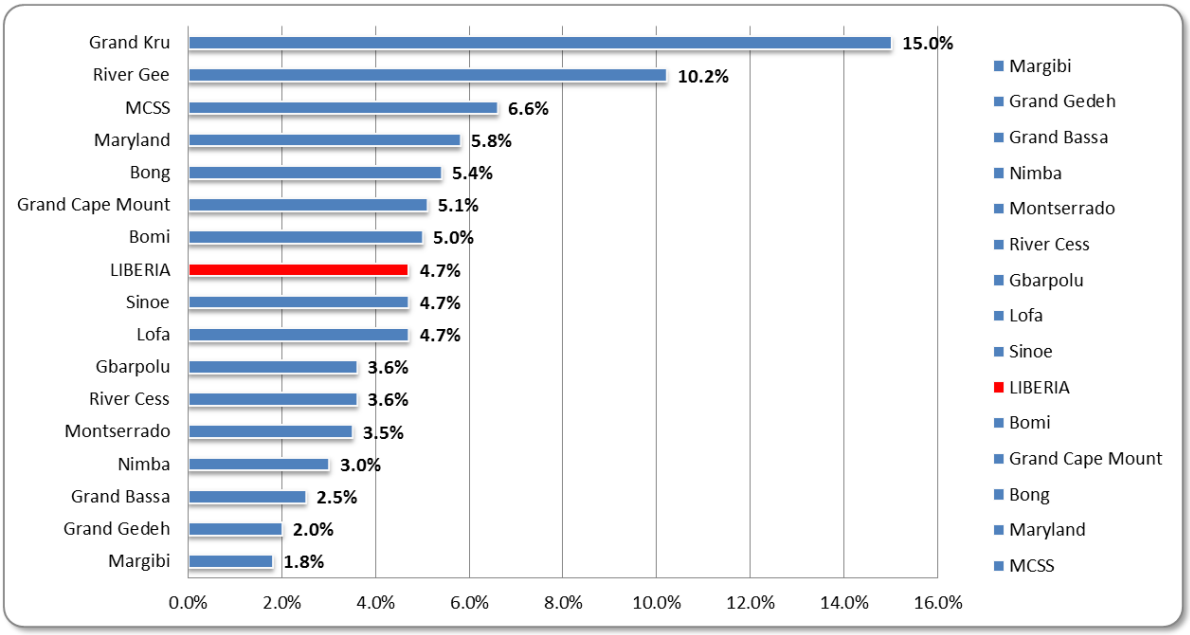


Chart 5B: Percentages of Government Primary School Teachers with 21+ Years of Experience



It is also useful to investigate the age and experience profiles of teachers in *non-government primary schools*. This not only allows us to compare the characteristics of staff in the two subsystems. It also informs us regarding whether the non-government sector may in the future have an increasing need for additional teachers, thus attracting individuals who might otherwise seek employment as teachers in government primary schools. Table 11 provides relevant information in this regard, displaying the percentage of teachers in *non-government primary school*s in each county who either

are a) at least 61 years old or b) have at least 21 years of experience. A more detailed breakdown of this information, for each district in all the counties, is provided in Table F2 in Annex F.

Looking initially at the first column of figures in Table 11, we see that on average 3.7% of non-government primary school teachers are sixty-one years or older, though there is some variation across counties. Note that none of the counties have more than 10% of their non-government primary school teachers close to retirement age. The lowest percentage occurs in Grand Gedeh (0.0%) and the highest percentage can be seen in Sinoe (8.7%).

Looking next on the first column of figures in Table F2 in Annex F, we see some degree of variation among districts in the percentage of non-government primary school teachers who are aged sixty-one years or older. For example, there are 25 districts that do not have any non-government primary school teachers (i.e., 0%) who are approaching retirement age. This includes one or more districts in all counties except Margibi and Montserrado.

Now focusing on the second column of figures in Table 11, one observes that on average 4.8% of non-government primary school teachers have twenty-one years or more of teaching experience, though there is some variation among counties. Only two counties have approximately 10% or a higher percent of their government primary school teaching staff who are approaching the experience level that would qualify them for retirement: Bomi (9.4%) and Margibi (15.0%). And two counties do not have any non-government primary school teachers (i.e., 0%) with years of experience approaching levels that would qualify them for retirement: River Cess and River Gee.

Focusing next on the second column of figures in Table F2 in Annex F, we see some degree of variation among districts in the percentage of non-government primary school teachers who have twenty-one or more years of teaching experience. For example, there are thirty-five districts that do not have any government primary school teachers (i.e., 0%) who are approaching the level of experience that would qualify them for retirement. These include one or more districts in all counties. In contrast, there are five districts that have at least fifteen percent of their non-government primary school teachers who have at least twenty-one years of teaching experience: District No. 3 in Grand Bassa County (27.1%), Konobo in Grand Gedeh County 50%), Sass Town in Grand Kru County (25.0%), Marshall in Margibi County (25.6%), and Harper I in Maryland County (33.3%).

Table 11: Percent of Teachers in Non-government Primary Schools Approaching Retirement

County	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Bomi	8.5%	9.4%	106
Bong	4.5%	4.1%	245
Gbarpolu	7.9%	2.6%	38
Grand Bassa	5.1%	6.5%	370
Grand Cape Mount	8.2%	7.1%	98
Grand Gedeh	0.0%	5.6%	36
Grand Kru	6.9%	6.9%	58
Lofa	4.1%	5.7%	123
Margibi	3.3%	14.3%	460
Maryland	3.5%	4.7%	171
Montserrado	2.5%	2.6%	2563
Nimba	5.3%	5.1%	472
River Cess	7.1%	0.0%	14
River Gee	8.3%	0.0%	36
Sinoe	8.7%	4.3%	46
LIBERIA	**3.7%**	**4.8%**	**4836**

Conclusions

This report presents findings from a study conducted by the LTTP Monitoring, Evaluation, and Research team, in collaboration with the Ministry of Education's EMIS and M&E units. 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, both in government and government subsystems.

The study analyzed the Ministry's 2013 EMIS database, which includes information on teachers at almost all of the government and non-government (private, faith-based, and community) primary schools. We present findings on the pupil-teacher ratios (PTRs) and qualified-pupil teacher ratios (PQTRs), the counties and districts that have near the policy goal of 44 pupils per teacher, and the percentage of teachers who have the minimum qualification (i.e., at least a C-Certificate), the percentage of teachers who are female, and the percentage of teachers whose age or length of service are close to the level when they would be eligible to retire.

The study found that nationally Liberia has a sufficient number of teachers and even a sufficient number of qualified teachers (i.e., those with at least a C-Certificate) to achieve the current policy goal of 44 pupils per teacher. More specifically, for government schools, the national PTR is 24.8 and the national PQTR is 36.2, while for non-government schools, the national PTR is 21.6 and the national PQTR is 39.0. It may be worth considering establishing a more ambitious target for the ratio of pupils to teachers. For example, Annex C presents findings regarding how counties and districts measure up if the policy goal was 35 pupils per teacher (or qualified teacher).

Nevertheless, the overall national statistics on pupil-teacher ratios and pupil-qualified teacher ratios hide substantial variations across counties and districts, not to mention schools, in both the

government and non-government subsystems. Such variations highlight the need to give attention to the policies and procedures for recruitment, deployment, and retention of teachers. Unless steps are taken, the Liberian children will continue to be exposed to quite different class sizes, which likely translate into significantly different opportunities to learn for those attending different schools, in different districts, in different counties.

The study's findings concerning PTRs and PQTRs should be interpreted with a degree of caution. There is a general belief that the 2013 EMIS database includes at least some of "fictitious" or "duplicate" teachers. To the extent that this is the case this means that the 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 in 2013. Thus, 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 another policy goal – gender parity in the primary school teaching force. Nationally, 12.0% of government primary school teachers are female and 20.2% of non-government primary school teachers are female. Clearly, in neither subsystem is Liberia approaching the 50% figure signaling gender parity. Furthermore, we observed substantial variation among counties and districts in the percentage of teachers who are female. This means that while in some settings more progress has been made in achieving this goal, other settings are very far from achieving this policy goal.

This concern is reinforced by the large differences across counties and districts in the percentage of primary school teachers who do not have the minimum-specified qualification (i.e., at least a C-Certificate). The findings indicate that 3,409 teachers in government primary schools and 2,162 teachers in non-government primary schools need to have their qualifications upgraded or 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, there are very large differences across counties and across districts in the percentage of "unqualified" primary school teachers in government as well as non-government schools.

To address the challenges of equalizing the distribution of "qualified" teachers as well as the underrepresentation of female teachers Liberia may need to implement special packages of financial incentives, organize better living conditions, and/or improve working conditions to attract and retain "qualified" and/or female teachers in some settings. Consideration should also be given to assessing and addressing any qualifications or gender biases that influence hiring and deployment decisions in some contexts.

Additionally, the findings from this study suggest that, unlike some countries, Liberia does not a major problem in terms of the percentage of primary school teachers whose age or length of experience means that they will retire in the near future. However, the overall percentage of teachers who are at least 61 years old and/or who have at least 21 years of experience should be monitored and plans put in place for their replacement over the coming years. As discussed the problem is somewhat greater in some counties and districts than others, so this should be kept in mind.

Finally, the Ministry of Education along with its Liberian and international partners need to consider whether the current policy-specified minimum qualification (i.e., the C-Certificate, which is obtained after a relatively short period of formal professional education) is appropriate for Liberia in future decades. This study indicates that the current supply of teachers – and even the supply of qualified teachers – can be viewed as meeting the demand, that is, the number needed to reach the policy targeted pupil-teacher ratio. However, the study doesn't address whether the capabilities of the teaching force meet the demand for improved learning opportunities among the children attending 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 (PQTR) and Pupil-Qualified Teacher Ratios in Government and Non-Government Schools by County and District

Table A1: Pupil-Teacher Ratios 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	**32.9**	**27.9**	**37.8**
Dewoin	29.4	8.7	148.5
Klay	34.4	11.0	117.0
Senjeh	37.8	5.5	72.0
Suehn Mecca	27.9	10.5	58.8
Bong	**23.4**	**19.7**	**30.6**
Fuamah	23.0	5.0	108.0
Gbarnga	25.6	9.1	49.1
Kokoya	30.6	10.6	95.7
Panta-Kpaai	20.8	9.7	58.0
Salala	21.5	5.5	58.4
Sanoyea	19.7	3.0	81.0
Suakoko	21.7	4.0	44.0
Zota	26.1	8.0	60.4
Gbarpolu	**28.0**	**14.6**	**44.8**
Belle	23.1	8.2	55.3
Bokomu	14.6	6.5	39.7
Bopulu	25.5	6.0	132.3
Gbarma	44.8	17.3	145.5
Guo Nwala	23.3	6.0	139.0
Kongba	28.0	13.0	105.0
Grand Bassa	**40.8**	**21.5**	**52.6**
District No.1	35.7	11.3	84.0
District No.2	40.6	8.0	322.0
District No.3	52.6	15.0	130.0
District No.4	29.5	14.3	54.5
District No.5	21.5	11.0	40.0
Grand Cape Mount	**31.5**	**16.6**	**43.5**
Garwula	33.5	10.8	114.5
Gola Konneh	28.1	8.0	64.0
Porkpa	43.5	6.3	174.0
Tallah Tombey	16.6	7.0	29.1
Tewor	30.2	11.8	110.0
Grand Gedeh	**25.2**	**20.8**	**31.0**
Gbarzon	29.5	3.0	155.0
Konobo	20.8	6.7	39.3

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
Putu	31.0	8.2	111.0
Tchien	23.5	3.9	197.2
Grand Kru	**20.7**	**18.2**	**28.1**
Barclayville	20.3	4.0	36.7
Buah	18.2	6.5	33.4
Dorbor	28.1	12.7	47.8
Grand Cess	20.7	11.1	33.1
Jloh	23.2	15.0	43.5
Sass Town	18.7	7.3	57.3
Trehn	19.5	8.5	38.2
Wedabo	19.9	7.8	60.0
Lofa	**23.5**	**18.0**	**34.0**
Foyah	20.2	8.9	44.5
Kolahun	18.0	4.6	45.8
Salayea	34.0	12.0	118.8
Vahun	27.3	10.3	51.5
Voinjama	25.2	5.6	88.0
Zorzor	28.9	7.3	53.3
Margibi	**31.7**	**30.5**	**33.2**
Gibi	31.6	14.9	88.0
Kakata	33.2	8.9	196.0
Marshall	30.5	7.4	89.5
Maryland	**27.3**	**13.4**	**39.8**
Barrobo I- Dougbe	13.4	1.8	33.7
Barrobo II- Nyonken	21.7	4.5	40.3
Harper I	29.9	8.4	59.0
Harper II	39.8	21.7	54.6
Karleway 1	27.9	11.5	79.0
Karleway II	32.3	14.3	70.5
Pleebo	28.1	14.3	51.6
Sodoken	23.8	9.5	43.3
MCSS	**28.5**	**28.5**	**28.5**
MCSS	28.5	12.2	40.1
Montserrado	**24.5**	**17.9**	**39.9**
Cayersburg	19.5	5.0	45.2
Greater Monrovia No.1	35.4	17.4	43.8
Greater Monrovia No.2	24.4	6.8	41.1
Left Bank No.1	17.9	17.9	17.9
Left Bank No.2	22.4	6.6	53.5
Paynessville	39.9	26.7	88.4

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
Right Bank No.1	25.7	5.3	45.4
Right Bank No.2	26.3	3.5	56.7
Todee	19.8	1.0	95.5
Nimba	**23.2**	**16.1**	**30.1**
Bain-Garr	30.1	4.0	67.3
Buu-yao	26.4	5.3	58.3
Gbehlay-geh	18.6	6.4	37.5
Saclepea No.1	22.7	8.5	51.0
Saclepea No.2	19.6	3.3	37.0
Sanniquelleh-Mah	29.4	7.8	139.0
Tappita No.1	20.0	4.4	59.0
Tappita No.2	25.2	10.3	60.8
Tuah River	23.6	7.6	99.0
Yarpea-Mah	20.6	6.9	43.8
Yarwin-Mensonoh	16.1	8.0	28.5
Zoe-Geh	23.9	4.5	90.7
River Cess	**19.3**	**11.0**	**24.0**
Central Rivercess Dist.1	24.0	8.0	61.5
Central Rivercess Dist.2	11.0	4.0	19.0
Monweh	20.3	10.0	77.0
Timbo	22.2	8.6	90.3
Yarnee	14.2	8.3	28.7
River Gee	**19.8**	**16.9**	**25.8**
Chedepo	18.9	8.8	31.8
Gbaepo	21.9	9.3	50.0
Putopu	21.7	5.0	36.9
Sarbo	25.8	11.2	46.5
Tiempo	17.0	7.0	83.0
Webbo	16.9	6.0	35.0
Sinoe	**17.5**	**13.7**	**24.5**
Central Kpanyan	19.1	4.0	64.7
Greenville	18.1	4.4	38.9
Juarzon	15.1	2.0	71.0
Lower Kpanyan	18.7	7.3	37.5
Sankwen	24.5	9.0	89.0
Tarjuwon	20.0	7.7	310.0
Upper Kpanyan	13.7	4.4	77.0
LIBERIA	**24.8**	**1.0**	**322.0**

Table A2: Pupil-Teacher Ratios 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	**17.1**	**6.0**	**19.1**
Klay	19.1	19.0	19.2
Senjeh	17.1	5.0	52.3
Suehn Mecca	6.0	6.0	6.0
Bong	**18.6**	**14.8**	**24.7**
Fuamah	17.8	14.0	19.8
Gbarnga	20.7	6.6	33.8
Panta-Kpaai	16.5	16.5	16.5
Salala	14.8	10.4	26.2
Sanoyea	24.3	24.3	24.3
Suakoko	16.0	2.4	41.0
Zota	24.7	10.7	66.0
Gbarpolu	**25.6**	**20.3**	**39.3**
Belle	28.8	28.8	28.8
Bopulu	20.3	14.0	39.0
Gbarma	23.5	23.5	23.5
Kongba	39.3	31.2	52.7
Grand Bassa	29.5	6.0	47.1
District No.1	21.9	18.5	25.0
District No.2	6.0	6.0	6.0
District No.3	47.1	14.2	110.0
District No.4	29.6	8.2	146.0
District No.5	25.9	5.6	68.5
Grand Cape Mount	**17.8**	**11.3**	**25.0**
Garwula	25.0	5.5	54.0
Gola Konneh	11.9	10.3	14.7
Porkpa	24.4	20.2	50.0
Tallah Tombey	11.3	6.0	18.0
Tewor	14.8	9.8	42.0
Grand Gedeh	**28.0**	**14.3**	**38.3**
Gbarzon	14.3	2.3	21.8
Konobo	17.3	17.3	17.3
Tchien	38.3	17.0	44.8
Grand Kru	**14.5**	**9.0**	**30.3**
Barclayville	9.3	6.3	11.7
Grand Cess	16.0	16.0	16.0
Sass Town	14.6	14.6	14.6
Trehn	9.0	8.3	10.5
Wedabo	30.3	30.3	30.3
Lofa	**19.5**	**9.6**	**25.9**

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
Foyah	15.2	11.2	19.4
Kolahun	24.5	17.8	27.9
Salayea	9.6	7.3	13.6
Voinjama	25.9	6.8	50.0
Zorzor	17.2	12.5	35.8
Margibi	**33.2**	**28.8**	**35.8**
Gibi	28.8	22.5	41.5
Kakata	30.6	1.4	334.8
Marshall	35.8	8.3	69.3
Maryland	**23.8**	**19.8**	**33.1**
Harper I	22.8	22.8	22.8
Karleway 1	27.4	19.2	48.0
Pleebo	19.8	7.1	43.0
Sodoken	33.1	15.6	59.0
Montserrado	**18.9**	**10.5**	**23.0**
Cayersburg	10.5	2.8	65.5
Greater Monrovia No.1	17.4	2.7	114.3
Greater Monrovia No.2	22.0	4.0	270.5
Left Bank No.1	23.0	8.7	52.4
Left Bank No.2	16.9	7.5	24.4
Paynessville	17.5	2.0	61.2
Right Bank No.1	15.3	3.9	41.2
Right Bank No.2	16.2	2.7	75.6
Todee	19.0	5.3	54.0
Nimba	**21.6**	**4.4**	**30.5**
Bain-Garr	2.0	9.2	192.3
Buu-yao	22.8	17.6	27.4
Gbehlay-geh	205.1	10.8	41.0
Saclepea No.1	16.7	10.4	27.4
Saclepea No.2	30.5	9.3	58.6
Sanniquelleh-Mah	16.6	5.1	36.3
Tappita No.1	24.4	11.2	67.4
Tuah River	19.9	19.9	19.9
Yarpea-Mah	11.0	11.0	11.0
Yarwin-Mensonoh	4.4	4.4	4.4
Zoe-Geh	19.5	12.0	36.5
River Cess	**10.6**	**9.3**	**16.5**
Monweh	9.9	5.8	22.0
Timbo	16.5	16.5	16.5
Yarnee	9.3	9.3	9.3
River Gee	**27.2**	**18.2**	**38.6**

County/District	Pupil-Teacher Ratio (PTR)	Lowest District or School PTR	Highest District or School PTR
Chedepo	18.2	18.2	18.2
Gbaepo	38.6	19.5	53.8
Putopu	24.9	21.7	29.3
Sinoe	**19.8**	**9.0**	**20.3**
Greenville	20.3	10.1	26.8
Lower Kpanyan	9.0	9.0	9.0
LIBERIA	**21.6**	**1.4**	**334.8**

Table A3: Pupil-Qualified Teacher Ratios in *Government* Primary Schools by County and District

County/District	PQTR	Min PQTR	Max PQTR
Bomi	**48.6**	**38.7**	**60.5**
Dewoin	38.7	10.4	148.5
Klay	48.4	13.0	120
Senjeh	60.5	24.2	134
Suehn Mecca	43.3	14.0	85
Bong	**36.0**	**27.4**	**48.9**
Fuamah	45.3	9.0	108.0
Gbarnga	30.0	9.1	54.0
Kokoya	47.6	16.5	91.0
Panta-Kpaai	35.8	12.3	177.0
Salala	27.4	8.4	146.0
Sanoyea	48.9	5.9	137.0
Suakoko	32.1	4.0	176.0
Zota	38.5	13.4	85.0
Gbarpolu	**46.4**	**38.1**	**55.1**
Belle	55.1	17.0	182.5
Bokomu	38.5	13.0	119.0
Bopulu	38.1	6.0	142.0
Gbarma	53.8	17.5	145.5
Guo Nwala	40.7	7.0	117.7
Kongba	52.1	18.6	155.0
Grand Bassa	**80.1**	**23.9**	**138.5**
District No.1	56.6	24.5	98.0
District No.2	93.9	16.0	322.0
District No.3	138.5	30.0	272.0
District No.4	55.3	28.7	109.0
District No.5	23.9	13.8	40.0
Grand Cape Mount	**40.2**	**22.9**	**57.7**
Garwula	41.5	10.8	145.0
Gola Konneh	33.2	8.0	64.0
Porkpa	57.7	6.3	175.0
Tallah Tombey	22.9	14.0	38.0
Tewor	39.8	13.0	125.0
Grand Gedeh	**34.3**	**30.0**	**40.6**
Gbarzon	30.0	3.0	155.0
Konobo	40.6	8.0	94.2
Putu	38.2	9.3	113.0
Tchien	34.9	3.9	197.2
Grand Kru	**48.3**	**34.0**	**116.0**
Barclayville	43.3	18.7	65.0
Buah	34.0	6.5	74.0

County/District	PQTR	Min PQTR	Max PQTR
Dorbor	76.5	19.5	95.5
Grand Cess	53.5	27.0	118.0
Jloh	116.0	22.5	38.0
Sass Town	57.8	15.4	75.0
Trehn	44.3	13.1	167.0
Wedabo	36.4	15.5	53.7
Lofa	**34.7**	**31.3**	**37.8**
Foyah	37.2	11.3	87.0
Kolahun	31.3	7.4	179.0
Salayea	37.8	12.0	118.8
Vahun	32.3	10.3	103.0
Voinjama	37.2	10.7	242.0
Zorzor	33.7	11.0	60.5
Margibi	**39.8**	**36.0**	**57.6**
Gibi	57.6	18.6	176.0
Kakata	36.9	8.9	196.0
Marshall	36.0	8.7	89.5
Maryland	**38.0**	**30.1**	**47.7**
Barrobo I- Dougbe	31.5	5.5	66.0
Barrobo II- Nyonken	35.4	9.0	125.0
Harper I	39.5	8.4	193.3
Harper II	39.8	21.7	54.6
Karleway 1	36.9	16.0	79.0
Karleway II	47.7	14.3	163.5
Pleebo	39.0	16.2	129.0
Sodoken	30.1	11.4	86.0
MCSS	**30.7**	**30.7**	**30.7**
MCSS	30.7	17.3	44.8
Montserrado	**30.6**	**20.1**	**43.6**
Cayersburg	26.1	10.9	113.0
Greater Monrovia No.1	35.4	17.4	43.8
Greater Monrovia No.2	26.7	8.5	46.5
Left Bank No.1	20.1	20.1	20.1
Left Bank No.2	26.2	7.6	65.8
Paynessville	43.6	29.1	88.4
Right Bank No.1	27.3	5.3	49.0
Right Bank No.2	32.4	4.4	91.0
Todee	42.2	2.0	126.0
Nimba	**28.3**	**19.2**	**38.0**
Bain-Garr	33.0	4.0	67.3
Buu-yao	31.2	6.7	135.7
Gbehlay-geh	19.2	6.4	37.5

County/District	PQTR	Min PQTR	Max PQTR
Saclepea No.1	26.1	9.2	89.3
Saclepea No.2	24.9	3.3	58.0
Sanniquelleh-Mah	38.0	13.0	208.5
Tappita No.1	24.9	8.8	104.0
Tappita No.2	28.4	10.6	121.5
Tuah River	29.1	7.6	128.0
Yarpea-Mah	25.3	8.6	58.0
Yarwin-Mensonoh	34.1	12.8	77.0
Zoe-Geh	34.5	11.0	156.0
River Cess	**48.5**	**37.6**	**79.2**
Central Rivercess Dis.1	60.7	18.3	202.0
Central Rivercess Dis.2	79.2	18.0	40.0
Monweh	41.8	19.0	77.0
Timbo	46.7	16.5	135.5
Yarnee	37.6	12.3	78.0
River Gee	**37.4**	**29.2**	**97.1**
Chedepo	36.1	20.5	73.0
Gbaepo	29.2	9.3	75.0
Putopu	33.6	5.0	71.0
Sarbo	50.4	13.4	93.0
Tiempo	97.1	12.3	32.5
Webbo	33.2	10.0	87.0
Sinoe	**67.4**	**29.1**	**465.0**
Central Kpanyan	133.8	23.0	97.0
Greenville	29.1	5.5	62.8
Juarzon	119.4	18.5	38.5
Lower Kpanyan	110.2	38.0	94.0
Sankwen	465.0	74.0	130.0
Tarjuwon	102.0	17.5	75.0
Upper Kpanyan	42.7	10.0	231.0
LIBERIA	**36.2**	**3.0**	**322.0**

Table A4: Pupil-Qualified Teacher Ratios in *Non-government* Primary Schools by County & District

County/District	Pupil-Qualified Teacher Ratio	Lowest District or School PQTR	Highest District or School PQTR
Bomi	**25.8**	**6.0**	**67.0**
Klay	67.0	19.0	19.0
Senjeh	25.2	8.6	104.5
Suehn Mecca	6.0	6.0	6.0
Bong	**44.6**	**30.8**	**58.1**
Fuamah	30.8	14.0	93.0
Gbarnga	39.1	18.4	93.0
Panta-Kpaai	33.0	33.0	33.0
Salala	58.1	26.2	114.0
Sanoyea	NA	NA	NA
Suakoko	49.1	7.7	74.0
Zota	47.6	10.7	95.0
Gbarpolu	**48.6**	**23.5**	**78.5**
Belle	NA	NA	NA
Bopulu	33.3	17.1	78.0
Gbarma	23.5	23.5	23.5
Kongba	78.5	52.7	156.0
Grand Bassa	**57.1**	**54.2**	**65.2**
District No.1	NA	NA	NA
District No.2	NA	NA	NA
District No.3	57.9	23.7	110.0
District No.4	65.2	16.2	64.3
District No.5	54.2	12.4	227.0
Grand Cape Mount	**28.1**	**19.4**	**48.8**
Garwula	32.6	21.0	54.3
Gola Konneh	19.4	13.3	44.0
Porkpa	48.8	46.5	50.5
Tallah Tombey	21.5	12.0	31.5
Tewor	23.7	13.0	35.0
Grand Gedeh	**53.0**	**34.4**	**63.8**
Gbarzon	34.4	9.0	21.8
Konobo	34.5	34.5	34.5
Tchien	63.8	25.5	312.0
Grand Kru	**56.1**	**18.0**	**91.0**
Barclayville	83.5	50.0	117.0
Grand Cess	NA	NA	NA
Sass Town	29.3	29.3	29.3
Trehn	18.0	14.0	22.0
Wedabo	91.0	91.0	91.0
Lofa	**47.9**	**14.9**	**294.0**

Foyah	47.2	15.7	67.0
Kolahun	294.0	71.0	71.0
Salayea	14.9	13.2	17.0
Voinjama	50.6	12.6	74.0
Zorzor	48.1	37.5	59.7
Margibi	**42.9**	**40.3**	**46.3**
Gibi	43.3	30.0	83.0
Kakata	46.3	8.2	334.8
Marshall	40.3	10.2	83.2
Maryland	**42.8**	**27.4**	**51.0**
Harper I	30.3	30.3	30.3
Karleway 1	27.4	19.2	48.0
Pleebo	51.0	7.1	167.0
Sodoken	39.4	25.6	59.0
Montserrado	**35.1**	**27.3**	**40.0**
Cayersburg	27.3	7.6	131.0
Greater Monrovia No.1	33.3	4.0	508.0
Greater Monrovia No.2	40.0	6.3	541.0
Left Bank No.1	35.7	16.4	93.0
Left Bank No.2	28.4	19.0	40.9
Paynessville	34.5	2.0	367.0
Right Bank No.1	29.4	5.2	72.5
Right Bank No.2	29.5	2.9	75.6
Todee	31.7	9.7	54.0
Nimba	**36.6**	**6.7**	**48.0**
Bain-Garr	3.2	14.5	192.3
Buu-yao	36.5	24.6	27.4
Gbehlay-geh	410.3	19.4	104.0
Saclepea No.1	34.0	12.5	192.0
Saclepea No.2	40.6	22.5	73.0
Sanniquelleh-Mah	28.0	5.1	145.0
Tappita No.1	36.1	21.3	112.3
Tuah River	34.8	34.8	34.8
Yarpea-Mah	44.0	44.0	44.0
Yarwin-Mensonoh	6.7	6.7	6.7
Zoe-Geh	48.0	24.7	73.0
River Cess	**24.8**	**16.5**	**39.5**
Monweh	39.5	17.5	17.5
Timbo	16.5	16.5	16.5
Yarnee	18.5	18.5	18.5
River Gee	**139.9**	**87.2**	**347.0**
Chedepo	NA	NA	NA
Gbaepo	347.0	269.0	269.0

Putopu	87.2	58.5	152.0
Sinoe	**50.7**	**49.7**	**49.7**
Greenville	49.7	17.8	161.0
Lower Kpanyan	NA	NA	NA
LIBERIA	39.0	2.0	541.0

NA*=Given that there are no qualified teachers in any of the non-government primary schools in the particular District, it is not possible to calculate a pupil-qualified teacher ratio.*

Appendix B: Classification of Districts by Pupil-Teacher Ratios Using the Current Policy Target (PTR and PQTR Equal to 44)

Table B1: Districts with Pupil-Teacher Ratios (PTRs) and Pupil-Qualified Teacher Ratios (PQTRs) Below 42, Between 42 and 46, and Above 46

County/District	Government Schools						Non-Government Schools					
	PTR			PQTR			PTR			PQTRs		
	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46
Bomi												
Dewoin	X			X								
Klay	X					X	X					X
Senjeh	X					X	X			X		
Suehn Mecca	X				X		X			X		
Bong												
Fuamah	X				X		X			X		
Gbarnga	X			X			X			X		
Kokoya	X					X						
Panta-Kpaai	X			X			X			X		
Salala	X			X			X					X
Sanoyea	X					X	X					X
Suakoko	X			X			X					X
Zota	X			X			X					X
Gbarpolu												
Belle	X					X	X					X
Bokomu	X			X								
Bopulu	X			X			X			X		
Gbarma		X				X	X			X		
Guo Nwala	X			X								
Kongba	X					X	X					X
Grand Bassa												
District No.1	X					X	X					X
District No.2	X					X	X					X
District No.3			X			X			X			X
District No.4	X					X	X					X
District No.5	X			X			X					X
Grand Cape Mount												
Garwula	X			X			X			X		
Gola Konneh	X			X			X			X		
Porkpa		X				X	X					X
Tallah Tombey	X			X			X			X		
Tewor	X			X			X			X		
Grand Gedeh												
Gbarzon	X			X			X			X		
Konobo	X			X			X			X		
Putu	X			X								
Tchien	X			X			X					X

County/District	Government Schools						Non-Government Schools					
	PTR			PQTR			PTR			PQTRs		
	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46
Grand Kru												
Barclayville	X				X		X					X
Buah	X			X								
Dorbor	X					X						
Grand Cess	X					X	X					X
Jloh	X					X						
Sass Town	X					X	X			X		
Trehn	X				X		X			X		
Wedabo	X			X			X					X
Lofa												
Foyah	X			X			X					X
Kolahun	X			X			X					X
Salayea	X			X			X			X		
Vahun	X			X								
Voinjama	X			X			X					X
Zorzor	X			X			X					X
Margibi												
Gibi	X					X	X				X	
Kakata	X			X			X					X
Marshall	X			X			X			X		
Maryland												
Barrobo I- Dougbe	X			X								
Barrobo II- Nyonken	X			X								
Harper I	X			X			X			X		
Harper II	X			X								
Karleway I	X			X			X			X		
Karleway II	X					X						
Pleebo	X			X			X					X
Sodoken	X			X			X			X		
MCSS												
MCSS	X			X								
Montserrado												
Cayersburg	X			X			X			X		
Greater Monrovia No.1	X			X			X			X		
Greater Monrovia No.2	X			X			X			X		
Left Bank No.1	X			X			X			X		
Left Bank No.2	X			X			X			X		
Paynessville	X				X		X			X		
Right Bank No.1	X			X			X			X		
Right Bank No.2	X			X			X			X		
Todee	X				X		X			X		
Nimba												
Bain-Garr	X			X			X			X		
Buu-yao	X			X			X			X		

County/District	Government Schools						Non-Government Schools					
	PTR			PQTR			PTR			PQTRs		
	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46
Gbehlay-geh	X			X					X			X
Saclepea No.1	X			X			X			X		
Saclepea No.2	X			X			X			X		
Sanniquelleh-Mah	X			X			X			X		
Tappita No.1	X			X			X			X		
Tappita No.2	X			X								
Tuah River	X			X			X			X		
Yarpea-Mah	X			X			X				X	
Yarwin-Mensonoh	X			X			X			X		
Zoe-Geh	X			X			X					X
River Cess												
Central Rivercess Dis.1	X					X						
Central Rivercess Dis.2	X					X						
Monweh	X			X			X			X		
Timbo	X					X	X			X		
Yarnee	X			X			X			X		
River Gee												
Chedepo	X			X			X					X
Gbaepo	X			X					X			X
Putopu	X			X			X					X
Sarbo	X					X						
Tiempo	X					X						
Webbo	X			X								
Sinoe												
Central Kpanyan	X					X						
Greenville	X			X			X					X
Juarzon	X					X						
Lower Kpanyan	X					X	X					X
Sankwen	X					X						
Tarjuwon	X					X						
Upper Kpanyan	X				X							
Percent of Districts	96.9	2.0	1.0	63.9	7.2	28.9	95.8	0.0	4.2	55.6	2.8	41.7

Appendix C: Classification of Districts by Pupil-Teacher Ratios Using More Ambitious Policy Target (PTR and PQTR Equal to 35)

As discussed in the body of this report, the 2011 Education Act stipulated as a policy goal that the pupil teacher ratio in government and non-government primary schools should be 44. Nevertheless, it may be worthwhile to examine the 2013 EMIS data to see how counties and districts are classified in relation to achieving a more ambitious policy target, that is, an average pupil-teacher ratio of 35.

How do **counties** measure up in terms of their pupil-teacher ratios being in line with this more ambitious policy target? First, we examine the findings for all teachers, regardless of whether they have the minimum expected qualifications, that is, whether the PTR is close to 35. Looking at Table C1 (below) and focusing on the first and third set of columns, we observe that:

a. For government primary schools, all except one county have PTRs below 33, with Grand Bassa having a PTR above 37.

b. For non-government primary schools, all except one county have PTRs below 33, with Margibi having a PTR between 33 and 37.

The picture is a little more complicated if we take into consideration if teachers have the minimum expected formal education qualification (i.e., focusing on whether counties have PQTRs close to 35). Looking again at Table C1 (below), but now focusing on the second set of columns, we note that for **government schools**:

a. 3 (or 18.8%) of the counties have PQTRs lower than 33: *MCSS, Montserrado*, and *Nimba*;

b. 3 (or 18.8%) of the counties have PQTRs between 33 and 37): *Bong, Grand Gedeh*, and *Lofa*;

c. 10 (or 62.5%) of the counties have PQTRs higher 37: *Bomi, Gbarpolu, Grand Bassa, Grand Cape Mount, Grand Kru, Margibi, Maryland, River Cess, River Gee*, and *Sinoe*.

Now looking again at Table C1, but focusing on the fourth set of columns, we observe similar results for **non-government schools**:

a. 3 (or 20.0%) of the counties have PQTRs lower than 33:*, Bomi, Grand Cape Mount,* and *River Cess*;

b. 2 (or 13.3%) of the counties have PQTRs between 33 and 37): *Montserrado and Nimba*;

10 (or 66.7%) of the counties have PQTRs higher than 37: *Bong, Gbarpolu, Grand Bassa, Grand Gedeh, Grand Kru, Lofa, Margibi, Maryland, River Gee*, and *Sinoe*.

Table C1: Counties with PTRs and PQTRs Below 33, Between 33 and 37, and Above 37

County	Government Schools						Non-Government Schools					
	PTR			PQTR			PTR			PQTR		
	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46
Bomi	X					X	X			X		
Bong	X				X		X					X
Gbarpolu	X					X	X					X
Grand Bassa			X			X	X					X
Grand Cape Mount	X					X	X			X		
Grand Gedeh	X				X		X					X
Grand Kru	X					X	X					X
Lofa	X				X		X					X
Margibi	X					X		X				X
Maryland	X					X	X					X
MCSS	X			X								
Montserrado	X			X			X				X	
Nimba	X			X			X				X	
River Cess	X					X	X			X		
River Gee	X					X	X					X
Sinoe	X					X	X					X
Percent of Counties	**93.8**	**0.0**	**6.2**	**18.8**	**18.8**	**62.5**	**93.8**	**6.2**	**0.0**	**20.0**	**13.3**	**66.7**

How do **districts** measure up in terms of their pupil-teacher ratios being in line with this more ambitious policy target? First, we examine findings for all teachers, regardless of whether they have the minimum expected qualifications, that is, whether districts have PTRs close to 35? Looking at the first and third set of columns in Table C2 (below), one notes that:

a. for *government schools*, the vast majority (86.6%) of the districts have PTRs below 33 and

b. for *non-government schools*, the vast majority (90.3%) of the districts have PTRs below 33.

The picture is a little more complicated if we take into consideration whether teachers have the minimum expected formal education qualifications, that is, assessing whether districts have pupil-qualified teacher ratios (PQTRs) close to 35. Looking at the findings presented in the second and fourth columns, respectively, in Table C1 (below), one observes that:

a. for *government schools*, only a slight majority (54.6%) of the districts have PQTRs greater than 37, while 27.8% of the districts have PQTRs below 33 and 18.5% of the districts have PQTRs between 33 and 37.

b. for *non-government schools*, only a slight majority (52.8%) of the districts have PQTRs greater than 37, while 32.0% of the districts have PQTRs below 33 and 15.3% of the districts have PQTRs between 33 and 37.

Table C2: Districts with Pupil-Teacher Ratios (PTRs) and Pupil-Qualified Teacher Ratios (PQTRs) Below 33, Between 33 and 37, and Above 37

County/District	Government Schools						Non-Government Schools					
	PTR			PQTR			PTR			PQTRs		
	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46
Bomi												
Dewoin	X					X						
Klay		X				X	X					X
Senjeh			X			X	X			X		
Suehn Mecca	X					X	X			X		
Bong												
Fuamah	X					X	X			X		
Gbarnga	X			X			X					X
Kokoya	X					X						
Panta-Kpaai	X				X		X				X	
Salala	X			X			X					X
Sanoyea	X					X	X					X
Suakoko	X			X			X					X
Zota	X					X	X					X
Gbarpolu												
Belle	X					X	X					X
Bokomu	X					X						
Bopulu	X					X	X				X	
Gbarma			X			X	X			X		
Guo Nwala	X					X						
Kongba	X					X			X			X
Grand Bassa												
District No.1		X				X	X					X
District No.2			X			X	X					X
District No.3			X			X			X			X
District No.4	X					X	X					X
District No.5	X			X			X					X
Grand Cape Mount												
Garwula		X				X	X			X		
Gola Konneh	X				X		X			X		
Porkpa			X			X	X					X
Tallah Tombey	X			X			X			X		
Tewor	X					X	X			X		
Grand Gedeh												
Gbarzon	X			X			X				X	
Konobo	X					X	X				X	
Putu	X					X						
Tchien	X				X				X			X
Grand Kru												

County/District	Government Schools						Non-Government Schools					
	PTR			PQTR			PTR			PQTRs		
	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46
Barclayville	X					X	X					X
Buah	X				X							
Dorbor	X					X						
Grand Cess	X					X	X					X
Jloh	X					X						
Sass Town	X					X	X			X		
Trehn	X					X	X			X		
Wedabo	X				X		X					X
Lofa												
Foyah	X					X	X					X
Kolahun	X			X			X					X
Salayea		X				X	X			X		
Vahun	X			X								
Voinjama	X						X					X
Zorzor					X		X					X
Margibi												
Gibi	X					X	X					X
Kakata		X			X		X					X
Marshall	X				X			X				X
Maryland												
Barrobo I- Dougbe	X			X								
Barrobo II- Nyonken	X				X							
Harper I	X					X	X			X		
Harper II			X			X						
Karleway I	X				X		X			X		
Karleway II	X					X						
Pleebo	X					X	X					X
Sodoken	X			X				X				X
MCSS												
MCSS	X			X								
Montserrado												
Cayersburg	X			X			X			X		
Greater Monrovia No.1		X			X		X				X	
Greater Monrovia No.2	X			X			X					X
Left Bank No.1	X			X			X				X	
Left Bank No.2	X			X			X			X		
Paynessville			X			X	X				X	
Right Bank No.1	X			X			X			X		
Right Bank No.2	X			X			X			X		
Todee	X					X	X			X		
Nimba												

County/District	Government Schools						Non-Government Schools					
	PTR			PQTR			PTR			PQTRs		
	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46	<42	42-46	>46
Bain-Garr	X				X		X			X		
Buu-yao	X			X			X				X	
Gbehlay-geh	X			X					X			X
Saclepea No.1	X			X			X				X	
Saclepea No.2	X			X			X					X
Sanniquelleh-Mah	X					X	X			X		
Tappita No.1	X			X			X				X	
Tappita No.2	X			X								
Tuah River	X			X			X				X	
Yarpea-Mah	X			X			X					X
Yarwin-Mensonoh	X				X		X			X		
Zoe-Geh	X				X		X					X
River Cess												
Central Rivercess Dis.1	X					X						
Central Rivercess Dis.2	X					X						
Monweh	X					X	X					X
Timbo	X					X	X			X		
Yarnee	X					X	X			X		
River Gee												
Chedepo	X				X		X					X
Gbaepo	X			X					X			X
Putopu	X				X		X					X
Sarbo	X					X						
Tiempo	X					X						
Webbo	X				X							
Sinoe												
Central Kpanyan	X					X						
Greenville	X			X			X					X
Juarzon	X					X						
Lower Kpanyan	X					X	X					X
Sankwen	X					X						
Tarjuwon	X					X						
Upper Kpanyan	X					X						
Percent of Districts	**86.6**	**6.2**	**7.2**	**27.8**	**18.5**	**54.6**	**90.3**	**2.8**	**6.9**	**32.0**	**15.3**	**52.8**

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

Table D1: Percent of *Government* Primary School Teachers without C-Certificates by County & District

County/District	% without at least a C-Certificate	Total Number of Teachers
Bomi	**32.3%**	**279**
Dewoin	23.9%	46
Klay	28.9%	83
Senjeh	37.5%	80
Suehn Mecca	35.7%	70
Bong	**35.1%**	**1280**
Fuamah	49.2%	65
Gbarnga	14.9%	168
Kokoya	35.7%	157
Panta-Kpaai	42.0%	250
Salala	21.5%	172
Sanoyea	59.6%	156
Suakoko	32.4%	185
Zota	32.3%	127
Gbarpolu	**39.5%**	**357**
Belle	58.1%	62
Bokomu	62.1%	29
Bopulu	33.0%	97
Gbarma	16.7%	72
Guo Nwala	42.9%	56
Kongba	46.3%	41
Grand Bassa	**49.0%**	**361**
District No.1	36.8%	57
District No.2	56.8%	81
District No.3	62.0%	137
District No.4	46.7%	45
District No.5	9.8%	41
Grand Cape Mount	**21.6%**	**389**
Garwula	19.3%	109
Gola Konneh	15.3%	72
Porkpa	24.6%	65
Tallah Tombey	27.5%	40
Tewor	24.3%	103
Grand Gedeh	**26.3%**	**509**
Gbarzon	1.6%	126
Konobo	48.8%	84
Putu	18.8%	48
Tchien	32.7%	251
Grand Kru	**57.1%**	**487**
Barclayville	53.2%	79
Buah	46.6%	58

County/District	% without at least a C-Certificate	Total Number of Teachers
Dorbor	63.3%	49
Grand Cess	61.4%	44
Jloh	80.0%	40
Sass Town	67.6%	37
Trehn	56.0%	116
Wedabo	45.3%	64
Lofa	**32.4%**	**1324**
Foyah	45.7%	254
Kolahun	42.5%	398
Salayea	10.0%	100
Vahun	15.4%	39
Voinjama	32.2%	292
Zorzor	14.1%	241
Margibi	**20.2%**	**440**
Gibi	45.1%	102
Kakata	10.1%	159
Marshall	15.1%	179
Maryland	**28.2%**	**432**
Barrobo I- Dougbe	57.4%	54
Barrobo II- Nyonken	38.8%	49
Harper I	24.4%	45
Harper II	0.0%	56
Karleway 1	24.3%	37
Karleway II	32.4%	68
Pleebo	27.9%	61
Sodoken	21.0%	62
MCSS	**7.3%**	**411**
MCSS	7.3%	411
Montserrado	**19.9%**	**925**
Cayersburg	25.2%	115
Greater Monrovia No. 1	0.0%	28
Greater Monrovia No.2	8.4%	107
Left Bank No.1	10.8%	37
Left Bank No.2	14.4%	139
Paynessville	8.5%	71
Right Bank No.1	6.1%	131
Right Bank No.2	18.8%	144
Todee	52.9%	153
Nimba	**17.9%**	**2396**
Bain-Garr	8.7%	149
Buu-yao	15.5%	265
Gbehlay-geh	3.2%	285
Saclepea No.1	13.0%	215
Saclepea No.2	21.2%	170
Sanniquelleh-Mah	22.6%	177
Tappita No.1	19.4%	227
Tappita No.2	11.5%	192
Tuah River	18.8%	260

County/District	% without at least a C-Certificate	Total Number of Teachers
Yarpea-Mah	18.8%	101
Yarwin-Mensonoh	52.9%	87
Zoe-Geh	30.6%	268
River Cess	**60.1%**	**366**
Central Rivercess Dis.1	60.4%	91
Central Rivercess Dis.2	86.0%	43
Monweh	51.3%	76
Timbo	52.4%	82
Yarnee	62.2%	74
River Gee	**47.1%**	**410**
Chedepo	47.7%	65
Gbaepo	25.0%	72
Putopu	35.4%	65
Sarbo	48.8%	41
Tiempo	82.5%	57
Webbo	49.1%	110
Sinoe	**74.1%**	**486**
Central Kpanyan	85.7%	63
Greenville	38.0%	79
Juarzon	87.4%	87
Lower Kpanyan	83.1%	59
Sankwen	94.7%	38
Tarjuwon	80.4%	51
Upper Kpanyan	67.9%	109
LIBERIA	**31.4%**	**10852**

Table D2: Percent of *Non-government* Primary School Teachers without C-Certificates by County and District

County and District	% without at least a C-Certificate	Total Number of Teachers
Bomi	**34.0%**	**106**
Klay	71.4%	7
Senjeh	32.0%	97
Suehn Mecca	0.0%	2
Bong	**58.4%**	**245**
Fuamah	42.1%	19
Gbarnga	47.1%	85
Panta-Kpaai	50.0%	2
Salala	74.6%	59
Sanoyea	100.0%	4
Suakoko	67.3%	49
Zota	48.1%	27
Gbarpolu	**47.4%**	**38**
Belle	100.0%	5
Bopulu	39.1%	23
Gbarma	0.0%	2
Kongba	50.0%	8
Grand Bassa	**48.4%**	**370**
District No.1	100.0%	9
District No.2	100.0%	1
District No.3	18.6%	59
District No.4	54.5%	33
District No.5	52.2%	268
Grand Cape Mount	**36.7%**	**98**
Garwula	23.3%	30
Gola Konneh	38.5%	13
Porkpa	50.0%	10
Tallah Tombey	47.6%	21
Tewor	37.5%	24
Grand Gedeh	**47.2%**	**36**
Gbarzon	58.3%	12
Konobo	50.0%	4
Tchien	40.0%	20
Grand Kru	**74.1%**	**58**
Barclayville	88.9%	18
Grand Cess	100.0%	11
Sass Town	50.0%	8
Trehn	50.0%	12
Wedabo	66.7%	9
Lofa	**59.3%**	**123**
Foyah	67.9%	28
Kolahun	91.7%	12
Salayea	35.7%	14
Voinjama	48.8%	41
Zorzor	64.3%	28
Margibi	**22.6%**	**460**

County and District	% without at least a C-Certificate	Total Number of Teachers
Gibi	33.3%	6
Kakata	33.9%	227
Marshall	11.0%	227
Maryland	**44.4%**	**171**
Harper I	25.0%	12
Karleway 1	0.0%	7
Pleebo	61.1%	108
Sodoken	15.9%	44
Montserrado	**46.0%**	**2563**
Cayersburg	61.4%	57
Greater Monrovia No.1	47.7%	661
Greater Monrovia No.2	45.0%	713
Left Bank No.1	35.6%	225
Left Bank No.2	40.6%	69
Paynessville	49.1%	554
Right Bank No.1	47.7%	132
Right Bank No.2	44.9%	107
Todee	40.0%	45
Nimba	**40.9%**	**472**
Bain-Garr	37.0%	173
Buu-yao	37.5%	16
Gbehlay-geh	50.0%	22
Saclepea No.1	50.8%	59
Saclepea No.2	25.0%	28
Sanniquelleh-Mah	40.9%	88
Tappita No.1	32.4%	34
Tuah River	42.9%	7
Yarpea-Mah	75.0%	4
Yarwin-Mensonoh	33.3%	9
Zoe-Geh	59.4%	32
River Cess	**57.1%**	**14**
Monweh	75.0%	8
Timbo	0.0%	2
Yarnee	50.0%	4
River Gee	**80.6%**	**36**
Chedepo	100.0%	6
Gbaepo	88.9%	9
Putopu	71.4%	21
Sinoe	**60.9%**	**46**
Greenville	59.1%	44
Lower Kpanyan	100.0%	2
LIBERIA	**44.7%**	**4836**

Appendix E: Percentage of Teachers Who Are Female by County and District

Table E1: Percent of *Government* Primary School Teachers who are Female by County and District

County/District	% Female	Total Number of Teachers
Bomi	**10.0%**	**279**
Dewoin	6.5%	46
Klay	10.8%	83
Senjeh	15.0%	80
Suehn Mecca	5.7%	70
Bong	**11.4%**	**1280**
Fuamah	9.2%	65
Gbarnga	22.6%	168
Kokoya	5.1%	157
Panta-Kpaai	9.2%	250
Salala	16.9%	172
Sanoyea	6.4%	156
Suakoko	11.9%	185
Zota	7.9%	127
Gbarpolu	**4.8%**	**357**
Belle	3.2%	62
Bokomu	0.0%	29
Bopulu	6.2%	97
Gbarma	9.7%	72
Guo Nwala	1.8%	56
Kongba	2.4%	41
Grand Bassa	**9.7%**	**361**
District No.1	12.3%	57
District No.2	7.4%	81
District No.3	7.3%	137
District No.4	6.7%	45
District No.5	22.0%	41
Grand Cape Mount	**8.0%**	**389**
Garwula	11.9%	109
Gola Konneh	4.2%	72
Porkpa	1.5%	65
Tallah Tombey	22.5%	40
Tewor	4.9%	103
Grand Gedeh	**11.4%**	**509**
Gbarzon	7.1%	126
Konobo	17.9%	84
Putu	6.3%	48
Tchien	12.4%	251
Grand Kru	**3.9%**	**487**
Barclayville	1.3%	79
Buah	3.4%	58
Dorbor	2.0%	49
Grand Cess	4.5%	44

County/District	% Female	Total Number of Teachers
Jloh	2.5%	40
Sass Town	8.1%	37
Trehn	4.3%	116
Wedabo	6.3%	64
Lofa	**5.4%**	**1324**
Foyah	5.5%	254
Kolahun	4.5%	398
Salayea	10.0%	100
Vahun	5.1%	39
Voinjama	4.8%	292
Zorzor	5.8%	241
Margibi	**10.5%**	**440**
Gibi	9.8%	102
Kakata	6.9%	159
Marshall	14.0%	179
Maryland	**16.9%**	**432**
Barrobo I- Dougbe	5.6%	54
Barrobo II- Nyonken	16.3%	49
Harper I	28.9%	45
Harper II	33.9%	56
Karleway 1	13.5%	37
Karleway II	8.8%	68
Pleebo	26.2%	61
Sodoken	4.8%	62
MCSS	**36.5%**	**411**
MCSS	36.5%	411
Montserrado	**20.9%**	**925**
Cayersburg	13.0%	115
Greater Monrovia No. 1	42.9%	28
Greater Monrovia No.2	24.3%	107
Left Bank No.1	16.2%	37
Left Bank No.2	20.9%	139
Paynessville	38.0%	71
Right Bank No.1	29.8%	131
Right Bank No.2	16.0%	144
Todee	10.5%	153
Nimba	**14.1%**	**2396**
Bain-Garr	20.8%	149
Buu-yao	10.6%	265
Gbehlay-geh	15.4%	285
Saclepea No.1	21.9%	215
Saclepea No.2	6.5%	170
Sanniquelleh-Mah	18.1%	177
Tappita No.1	16.3%	227
Tappita No.2	8.9%	192
Tuah River	10.8%	260
Yarpea-Mah	11.9%	101
Yarwin-Mensonoh	6.9%	87

County/District	% Female	Total Number of Teachers
Zoe-Geh	17.2%	268
River Cess	**5.2%**	**366**
Central Rivercess Dist.1	0.0%	91
Central Rivercess Dist.2	11.6%	43
Monweh	2.6%	76
Timbo	8.5%	82
Yarnee	6.8%	74
River Gee	**7.3%**	**410**
Chedepo	4.6%	65
Gbaepo	11.1%	72
Putopu	6.2%	65
Sarbo	4.9%	41
Tiempo	3.5%	57
Webbo	10.0%	110
Sinoe	**8.8%**	**486**
Central Kpanyan	3.2%	63
Greenville	20.3%	79
Juarzon	4.6%	87
Lower Kpanyan	3.4%	59
Sankwen	10.5%	38
Tarjuwon	9.8%	51
Upper Kpanyan	9.2%	109
LIBERIA	**12.0%**	**10852**

Table E2: Percent of *Non-government* Primary School Teachers who are Female by County and District

County and District	% Female	Total Number of Teachers
Bomi	**11.3%**	**106**
Klay	28.6%	7
Senjeh	10.3%	97
Suehn Mecca	0.0%	2
Bong	**17.1%**	**245**
Fuamah	21.1%	19
Gbarnga	17.6%	85
Panta-Kpaai	0.0%	2
Salala	20.3%	59
Sanoyea	25.0%	4
Suakoko	12.2%	49
Zota	14.8%	27
Gbarpolu	**15.8%**	**38**
Belle	0.0%	5
Bopulu	17.4%	23
Gbarma	50.0%	2
Kongba	12.5%	8
Grand Bassa	**9.7%**	**370**
District No.1	22.2%	9
District No.2	0.0%	1
District No.3	8.5%	59
District No.4	9.1%	33
District No.5	9.7%	268
Grand Cape Mount	**6.1%**	**98**
Garwula	6.7%	30
Gola Konneh	15.4%	13
Porkpa	10.0%	10
Tallah Tombey	0.0%	21
Tewor	4.2%	24
Grand Gedeh	**11.1%**	**36**
Gbarzon	8.3%	12
Konobo	25.0%	4
Tchien	10.0%	20
Grand Kru	**6.9%**	**58**
Barclayville	5.6%	18
Grand Cess	9.1%	11
Sass Town	12.5%	8
Trehn	8.3%	12
Wedabo	0.0%	9
Lofa	**8.9%**	**123**
Foyah	0.0%	28
Kolahun	8.3%	12
Salayea	7.1%	14
Voinjama	12.2%	41
Zorzor	14.3%	28
Margibi	**20.2%**	**460**

County and District	% Female	Total Number of Teachers
Gibi	0.0%	6
Kakata	15.9%	227
Marshall	25.1%	227
Maryland	**28.7%**	**171**
Harper I	25.0%	12
Karleway 1	28.6%	7
Pleebo	29.6%	108
Sodoken	27.3%	44
Montserrado	**23.9%**	**2563**
Cayersburg	15.8%	57
Greater Monrovia No.1	26.8%	661
Greater Monrovia No.2	17.8%	713
Left Bank No.1	32.4%	225
Left Bank No.2	20.3%	69
Paynessville	26.9%	554
Right Bank No.1	19.7%	132
Right Bank No.2	29.9%	107
Todee	11.1%	45
Nimba	**19.9%**	**472**
Bain-Garr	17.9%	173
Buu-yao	12.5%	16
Gbehlay-geh	4.5%	22
Saclepea No.1	30.5%	59
Saclepea No.2	17.9%	28
Sanniquelleh-Mah	21.6%	88
Tappita No.1	20.6%	34
Tuah River	14.3%	7
Yarpea-Mah	25.0%	4
Yarwin-Mensonoh	11.1%	9
Zoe-Geh	25.0%	32
River Cess	**7.1%**	**14**
Monweh	0.0%	8
Timbo	0.0%	2
Yarnee	25.0%	4
River Gee	**5.6%**	**36**
Chedepo	0.0%	6
Gbaepo	0.0%	9
Putopu	9.5%	21
Sinoe	**10.9%**	**46**
Greenville	11.4%	44
Lower Kpanyan	0.0%	2
LIBERIA	**20.2%**	**4836**

Appendix F: Percentage of Teachers Approaching Retirement by County and District

Table F1: Percent of *Government* Primary School Teachers approaching Retirement by County and District

County/District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Bomi	**3.9%**	**5.0%**	**279**
Dewoin	2.2%	10.9%	46
Klay	3.6%	3.6%	83
Senjeh	3.8%	6.3%	80
Suehn Mecca	5.7%	1.4%	70
Bong	**8.7%**	**5.4%**	**1280**
Fuamah	15.4%	7.7%	65
Gbarnga	6.0%	6.5%	168
Kokoya	8.9%	3.8%	157
Panta-Kpaai	8.8%	6.4%	250
Salala	4.7%	5.2%	172
Sanoyea	12.8%	3.8%	156
Suakoko	6.5%	4.3%	185
Zota	11.8%	6.3%	127
Gbarpolu	**10.1%**	**3.6%**	**357**
Belle	14.5%	6.5%	62
Bokomu	13.8%	6.9%	29
Bopulu	10.3%	3.1%	97
Gbarma	5.6%	0.0%	72
Guo Nwala	14.3%	7.1%	56
Kongba	2.4%	0.0%	41
Grand Bassa	**6.6%**	**2.5%**	**361**
District No.1	5.3%	5.3%	57
District No.2	11.1%	4.9%	81
District No.3	6.6%	0.0%	137
District No.4	4.4%	4.4%	45
District No.5	2.4%	0.0%	41
Grand Cape Mount	**7.7%**	**5.1%**	**389**
Garwula	5.5%	6.4%	109
Gola Konneh	8.3%	4.2%	72
Porkpa	9.2%	0.0%	65
Tallah Tombey	7.5%	15.0%	40
Tewor	8.7%	3.9%	103
Grand Gedeh	**5.7%**	**2.0%**	**509**
Gbarzon	1.6%	0.0%	126
Konobo	4.8%	0.0%	84
Putu	4.2%	2.1%	48
Tchien	8.4%	3.6%	251
Grand Kru	**13.6%**	**15.0%**	**487**
Barclayville	17.7%	26.6%	79
Buah	17.2%	13.8%	58
Dorbor	10.2%	10.2%	49

County/District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Grand Cess	13.6%	9.1%	44
Jloh	5.0%	7.5%	40
Sass Town	13.5%	13.5%	37
Trehn	17.2%	19.8%	116
Wedabo	6.3%	6.3%	64
Lofa	**4.8%**	**4.7%**	**1324**
Foyah	4.3%	1.6%	254
Kolahun	3.3%	1.8%	398
Salayea	5.0%	10.0%	100
Vahun	2.6%	0.0%	39
Voinjama	3.8%	5.8%	292
Zorzor	9.1%	10.0%	241
Margibi	**4.8%**	**1.8%**	**440**
Gibi	11.8%	0.0%	102
Kakata	1.3%	1.3%	159
Marshall	3.9%	3.4%	179
Maryland	**8.8%**	**5.8%**	**432**
Barrobo I - Dougbe	3.7%	1.9%	54
Barrobo II - Nyonken	24.5%	10.2%	49
Harper I	2.2%	0.0%	45
Harper II	12.5%	3.6%	56
Karleway I	0.0%	0.0%	37
Karleway II	7.4%	4.4%	68
Pleebo	6.6%	6.6%	61
Sodoken	11.3%	16.1%	62
MCSS	**4.8%**	**1.8%**	**411**
MCSS	4.8%	1.8%	411
Montserrado	**4.5%**	**3.5%**	**925**
Cayersburg	2.6%	0.9%	115
Greater Monrovia No. 1	0.0%	0.0%	28
Greater Monrovia No.2	3.7%	8.4%	107
Left Bank No.1	10.8%	13.5%	37
Left Bank No.2	7.2%	6.5%	139
Paynessville	4.2%	4.2%	71
Right Bank No.1	4.6%	2.3%	131
Right Bank No.2	3.5%	0.7%	144
Todee	4.6%	0.7%	153
Nimba	**4.7%**	**3.0%**	**2396**
Bain-Garr	6.0%	6.7%	149
Buu-yao	1.9%	1.5%	265
Gbehlay-geh	4.2%	2.8%	285
Saclepea No.1	5.1%	4.7%	215
Saclepea No.2	7.6%	3.5%	170
Sanniquelleh-Mah	4.5%	5.1%	177
Tappita No.1	11.05%	4.4%	227
Tappita No.2	4.2%	2.6%	192
Tuah River	3.1%	1.5%	260
Yarpea-Mah	2.0%	2.0%	101

County/District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Yarwin-Mensonoh	8.0%	1.1%	87
Zoe-Geh	1.9%	1.5%	268
River Cess	**4.6%**	**3.6%**	**366**
Central Rivercess Dist. 1	3.3%	2.2%	91
Central Rivercess Dist. 2	2.3%	2.3%	43
Monweh	2.6%	2.6%	76
Timbo	11.0%	8.5%	82
Yarnee	2.7%	1.4%	74
River Gee	**15.9%**	**10.2%**	**410**
Chedepo	24.6%	18.5%	65
Gbaepo	16.7%	16.7%	72
Putopu	18.5%	3.1%	65
Sarbo	19.5%	7.3%	41
Tiempo	15.8%	3.5%	57
Webbo	7.3%	10.0%	110
Sinoe	**6.8%**	**4.7%**	**486**
Central Kpanyan	0.0%	0.0%	63
Greenville	6.3%	5.1%	79
Juarzon	2.3%	0.0%	87
Lower Kpanyan	18.6%	15.3%	59
Sankwen	2.6%	2.6%	38
Tarjuwon	7.8%	3.9%	51
Upper Kpanyan	9.2%	6.4%	109
LIBERIA	**6.5%**	**4.7%**	**10852**

Table F2: Percent of *Non-government* Primary School Teachers approaching Retirement by County and District

County and District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Bomi	**8.5%**	**9.4%**	**106**
Klay	0.0%	0.0%	7
Senjeh	9.3%	10.3%	97
Suehn Mecca	0.0%	0.0%	2
Bong	**4.5%**	**4.1%**	**245**
Fuamah	0.0%	0.0%	19
Gbarnga	5.9%	4.7%	85
Panta-Kpaai	0.0%	0.0%	2
Salala	3.4%	5.1%	59
Sanoyea	0.0%	0.0%	4
Suakoko	4.1%	4.1%	49
Zota	7.4%	3.7%	27
Gbarpolu	**7.9%**	**2.6%**	**38**
Belle	0.0%	0.0%	5
Bopulu	8.7%	4.3%	23
Gbarma	0.0%	0.0%	2
Kongba	12.5%	0.0%	8
Grand Bassa	**5.1%**	**6.5%**	**370**
District No.1	22.2%	0.0%	9
District No.2	0.0%	0.0%	1
District No.3	6.8%	27.1%	59
District No.4	6.1%	3.0%	33
District No.5	4.1%	2.6%	268
Grand Cape Mount	**8.2%**	**7.1%**	**98**
Garwula	3.3%	10.0%	30
Gola Konneh	23.1%	0.0%	13
Porkpa	0.0%	0.0%	10
Tallah Tombey	0.0%	4.8%	21
Tewor	16.7%	12.5%	24
Grand Gedeh	**0.0%**	**5.6%**	**36**
Gbarzon	0.0%	0.0%	12
Konobo	0.0%	50.0%	4
Tchien	0.0%	0.0%	20
Grand Kru	**6.9%**	**6.9%**	**58**
Barclayville	5.6%	0.0%	18
Grand Cess	9.1%	9.1%	11
Sass Town	12.5%	25.0%	8
Trehn	8.3%	8.3%	12
Wedabo	0.0%	0.0%	9
Lofa	**4.1%**	**5.7%**	**123**
Foyah	7.1%	0.0%	28
Kolahun	0.0%	0.0%	12
Salayea	0.0%	7.1%	14
Voinjama	2.4%	7.3%	41
Zorzor	7.1%	10.7%	28
Margibi	**3.3%**	**14.3%**	**460**

County and District	% 61+ Years Old	% with 21+ Years of Experience	Total Number of Teachers
Gibi	16.7%	0.0%	6
Kakata	4.8%	3.5%	227
Marshall	1.3%	25.6%	227
Maryland	**3.5%**	**4.7%**	**171**
Harper I	0.0%	33.3%	12
Karleway I	0.0%	0.0%	7
Pleebo	3.7%	3.7%	108
Sodoken	4.5%	0.0%	44
Montserrado	**2.5%**	**2.6%**	**2563**
Cayersburg	5.3%	3.5%	57
Greater Monrovia No.1	0.9%	2.7%	661
Greater Monrovia No.2	2.0%	1.8%	713
Left Bank No.1	4.9%	8.0%	225
Left Bank No.2	1.4%	0.0%	69
Paynessville	3.1%	1.3%	554
Right Bank No.1	3.8%	2.3%	132
Right Bank No.2	2.8%	3.7%	107
Todee	8.9%	4.4%	45
Nimba	**5.3%**	**5.1%**	**472**
Bain-Garr	3.5%	3.5%	173
Buu-yao	0.0%	0.0%	16
Gbehlay-geh	4.5%	0.0%	22
Saclepea No.1	6.8%	8.5%	59
Saclepea No.2	7.1%	14.3%	28
Sanniquelleh-Mah	6.8%	2.3%	88
Tappita No.1	2.9%	8.8%	34
Tuah River	0.0%	0.0%	7
Yarpea-Mah	0.0%	0.0%	4
Yarwin-Mensonoh	0.0%	0.0%	9
Zoe-Geh	15.6%	12.5%	32
River Cess	**7.1%**	**0.0%**	**14**
Monweh	12.5%	0.0%	8
Timbo	0.0%	0.0%	2
Yarnee	0.0%	0.0%	4
River Gee	**8.3%**	**0.0%**	**36**
Chedepo	0.0%	0.0%	6
Gbaepo	0.0%	0.0%	9
Putopu	14.3%	0.0%	21
Sinoe	**8.7%**	**4.3%**	**46**
Greenville	9.1%	4.5%	44
Lower Kpanyan	0.0%	0.0%	2
LIBERIA	**3.7%**	**4.8%**	**4836**