Leh Wi Lan

Sierra Leone Secondary Grade Learning Assessment 2018

Sierra Leone Secondary Grade Learning Assessment 2018

Technical Report - December 2018

Acknowledgements

This report owes its deepest debt to the principals, teachers, and pupils for their time and patience in participating in this second national secondary grade learning assessment.

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Photo credits: Sourovi De and Zara Durrani.

The design and analysis of this survey went through several consultation workshops to solicit feedback and guidance from secondary school English and maths teachers on draft assessment items and contextualise them to life in Sierra Leone; to develop benchmarks and performance bands with curriculum and assessment specialists; and to iteratively validate preliminary findings. Gratitude is due to all who participated in these workshops: especially Michaela Denison-George (Chief Examiner – English, West Africa Examination Council (WAEC)/Lecturer at Institute for Public Administration and Management); Michael Bundor (Principal, Prince of Wales Academy, Freetown); Dr Margaret Dabo and Gloria Palmer (English curriculum specialists/Department of Education, Forah Bay College). Special thanks also to the numerous English and maths teachers from across the country who participated in the review of assessment items – their lively discussions helped enhance the quality of the assessment manifold.

About the annual secondary grade learning assessment (SGLA)

Leh wi Lan/Sierra Leone Secondary Education Improvement Programme (SSEIP) is a five-year (2016-2021) UKaid-funded programme aimed at improving English and mathematics learning achievement in all secondary schools of Sierra Leone, especially for girls. The second annual secondary grade learning assessment (SGLA) was designed and implemented by Leh wi Lan's monitoring, evidence and research workstream in close collaboration with the Sierra Leone Ministry of Basic and Senior Secondary Education (MBSSE). Any views and opinions expressed do not necessarily reflect those of UK Department for International Development (DFID) or MBSSE.

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Note: This report is based on data collected in May-June 2018.

Preface: Message from the Minister's desk

Education is of paramount importance for Sierra Leone's development. On the 20th of August 2018, Sierra Leone saw a historic moment with the launch of the Free Quality School Education Programme (FQSEP) by H.E. Rtd. Brigadier Julius Maada Bio. By focussing on 'quality' in the FQSEP, this ambitious programme proposes to go beyond simply filling classrooms through increased enrolment. It aims to gear Sierra Leonean schools towards delivering sustained learning for all pupils.

Ultimately, the FQSEP will succeed if children in all parts of Sierra Leone are learning useful skills, whether they are girls, boys, poor or rich. Our hopes as a nation can only be achieved with a well-educated citizenry with the skills and competencies needed for Sierra Leone to grow.

This document, Sierra Leone Secondary Grade Learning Assessment 2018, is a landmark document in secondary education in Sierra Leone. Once again, following the baseline assessment in 2017, we have an assessment of what pupils in junior secondary and senior secondary schools across the country can do in English and mathematics; before they attempt the Basic Education Certificate Examination and the West African Senior Secondary Certificate Examination.

Further, we are able to state what pupils in our schools know and the areas in which improvements should be made. This document is a key step on that journey. It also gives us pointers on the effectiveness of the new lesson plans and school support officers that we recently rolled out in secondary schools across the country.

While there are successes to celebrate, there are also deep challenges that my officials in the Ministry are working round the clock to address. Addressing these challenges will help our children learn better and do well in public exams, and eventually contribute to nation-building.

I do thank the United Kingdom Department for International Development for their support with the Secondary Grade Learning Assessment, and look forward to further fruitful collaboration.

Secondary Grade Learning Assessment will continue, in order to help evaluating learning in our educational institutions and to check the academic progress of the pupils. The public will be able to see the results of what we have achieved and the strategic direction of support Free Quality School Education in Sierra Leone.

This is a unique moment in the history of Education in Sierra Leone.

Alpha Osman Timbo

Minister of Basic and Senior Secondary Education

Executive summary

The Free Quality School Education Programme

On the 20th of August, Sierra Leone saw a historic moment with the launch of the Free *Quality* School Education Programme (FQSEP). By focussing on 'quality' in the FQSEP, this ambitious programme proposes to go beyond simply filling classrooms through increased enrolment. It aims to gear Sierra Leonean schools towards delivering *sustained learning for all pupils*. It will be a success if children in all parts of Sierra Leone learn useful skills, whether they are girls, boys, poor or rich.

In 2017, the first Secondary Grade Learning Assessment (SGLA) measured English and mathematics skills of JSS2 and SSS2 students in Sierra Leonean schools. The results showed that most pupils only show basic English and maths skills, even though they have completed eight (JSS2) to 11 (SSS2) years of formal education and have passed various exams like the NPSE and BECE. This is possible because the exams mostly test memory but the SGLA tests skills. Girls, poorer pupils and pupils in remote schools tended to do worse. The plan is to track these learning levels annually for progress.

About the second Secondary Grade Learning Assessment (SGLA)

The second SGLA (2018) was carried out in all five regions of Sierra Leone in the months of May and June 2018. Its objective is to provide MBSSE and other education sector stakeholders with robust nationally-, regionally- and district-level representative data on the status of learning and teaching in secondary grades, and track these annually for progress.

The learning assessment survey's design contained the following components:

- **Learning assessments** for JSS2 and SSS2 grades, in English and maths, administered to 5,600 pupils;
- **Teacher's questionnaire**, including topics like usage of lesson plans, administered to 2,800 teachers;
- **Principal's questionnaire** administered to 700 principals, covering topics like provision of supportive supervision for teachers; and
- **A school observation instrument** covering topics like duration of school breaks and empty classrooms.

This survey constitutes the second round of the learning assessment surveys and covers a range of indicators on pupil learning levels, teaching and supervision practices, girls' safety in school, and the schooling experience of pupils with disabilities. Specifically, this second SGLA report seeks to answer the following research questions:

- What are Sierra Leone's secondary grade pupils learning? How do their learning outcomes compare with results from the first SGLA in 2017?
- What are some of the conditions under which teaching and learning takes place in secondary schools?
- What classroom practices are being used by junior and senior secondary teachers?
- What are some of the school management and leadership practices employed by secondary school principals in Sierra Leone?

The purpose of this technical report is to present a comprehensive analysis of the data collected by the SGLA 2018 survey in order to provide as much detail on what is working well, and where there are areas for improvement in teaching and learning. This would, hopefully, support MBSSE and partners in developing policy responses.

More on Leh Wi Learn and the SGLA journey so far

- Overview of the role of Leh Wi Learn within Sierra Leone's education sector: Section 1.2 and 1.3.
- About the SLGA and the journey so far: Section 1.4.

Pupil learning outcomes in junior and senior secondary school grades

About the learning assessment design

The SGLA focuses on pupils' learning outcomes in JSS2 and SSS2, and is designed with reference to the curriculum in these grades. Some of the test questions are also referenced to primary grades 4-6 curriculum. The SGLA questions are referenced to the curriculum, but do not focus on curriculum content coverage per se. Rather, the focus is on assessing knowledge and skills acquired by pupils in these grades and their ability to apply these in "real life" both within and outside school.

Tests were administered on a one-on-one basis by enumerators to individual pupils. Each test comprised of around 40 questions covering both English language and maths, along with some background questions like pupil's age, main language spoken at home and household assets.

SGLA performance bands

Analysis of learning outcomes was based on grade-appropriate performance bands developed by the SGLA team with JSS and SSS curriculum specialists in English language and maths. Skills tested in the assessment are grouped into five categories or performance bands. These range from band "primary grade level" (basic skills, like naming some common objects in English like "hat" or "computer") up to skills expected from a pupil in SSS1 grade (relatively advanced skills that require inference and reasoning). To achieve a grade-appropriate performance band or level means that pupils in the particular band are more likely than not to be able to demonstrate the skills expected from a pupil in that particular grade.

The SGLA II reiterates findings from last year's baseline: pupil learning levels in secondary grades are generally low. There is a wide gulf between pupils' actual skills and competencies as demonstrated in this survey vis-à-vis national curriculum expectations for their grades. Moreover, results this year suggest a slight drop in English scores. Maths scores have remained largely unchanged compared to 2017.

More on the SGLA design and performance bands

- About the learning assessment: Section 2.1.
- Overview of performance bands in English and maths: Section 2.2.

Pupil learning outcomes in English

Results shows that 60 per cent of JSS2 pupils and over 40 per cent of SSS2 pupils are able to demonstrate English language skills expected from a primary-grade pupil, but very unlikely to demonstrate skills expected from any higher grades than primary level. In other words, these JSS2 and SSS2 pupils have fallen behind curriculum expectations by around two and five years respectively. Around 10 per cent of JSS2 pupils showed English language skills as expected from a JSS2 pupil and a small percentage (2 per cent) showed skills exceeding expectations. Though a larger proportion of SSS2 pupils (versus JSS2 pupils) appear in the higher performance bands, ultimately a majority of these pupils have fallen behind by up to four years – they are operating somewhere between JSS1 and SSS1. Almost no SSS2 pupil is able to show skills expected at the end of SSS1 in the SGLA.

Pupil learning outcomes in Maths

Results shows that almost 70 per cent of JSS2 pupils and 50 per cent of SSS2 pupils are able to demonstrate maths skills expected at primary-grade level but not any higher skills. They have fallen behind by two and five years respectively. Only 5 per cent of JSS2 pupils show maths skills as expected from a JSS2 pupil and a small percentage (1 per cent) showed skills exceeding expectations. Once again, though a larger proportion of SSS2 pupils (versus JSS2 pupils) appear in the higher performance bands, ultimately almost half of these SSS2 pupils have fallen behind by up to four years. In the SGLA test, only 4 per cent SSS2 pupils are able to show skills expected at the end of JSS3 and none show SSS1 level maths skills.

Shifts in pupil performance since SGLA I

There is a small but statistically significant drop in English scores between 2017 and 2018. This is true for both JSS2 and SSS2, but differences are larger for JSS2. For maths, there is a small improvement in lower bands, with more pupils now able to show at least P6-level skills in 2018, but the rest of the distribution is largely unchanged since SGLA I. While significant shifts are not expected within a single year and long-term trends cannot be inferred from just two years' data, the real drop in English scores needs to be thoroughly understood and further rounds of SGLA will confirm if this drop continues.

Differences in learning outcomes by pupil background

Across both grades, pupils from the richest household perform significantly better than pupils from the poorest 20 per cent of households. Similarly, in both subjects and across both grades, there appears to be a statistically significant negative relationship between test scores and remoteness (measured by the distance of the school from the district capital or headquarter town). Boys' generally scored higher than girls across both grades and subjects and this gap appears to widen as pupils move to higher grades from JSS2 to SSS2.

More on the pupil learning outcomes in English and maths

- Overview of learning outcomes in English and maths: Section 2.3.
- Overview of learning outcomes by pupil background: Section 2.4.

Teaching practices in secondary schools

The SGLA II survey presents evidence on the current state of classroom practices in junior and senior secondary schools in Sierra Leone on a sample of teachers.

Quantity of instructional time and teacher absenteeism

Teachers, on average, taught for 12 of the 25-30 prescribed school hours in a standard week, which amounts to approximately two and a half hours of teaching per day (or less than half of the standard school day). These results are consistent with SGLA I findings. Moreover, during the school observations, one in four classes having pupils in them had no teachers.

According to teachers, the main reason for being absent from school was own or family illness; however, principals seemed to link teachers' absence from school to low levels of teacher salary and remuneration. The other common reason for teachers' absenteeism was social or religious obligations requiring them to be away from school. Explaining their own absence from schools, principals particularly spoke of attending meetings or events outside of school, as well as own or family health issues. Nearly all principals reported taking some corrective measures against teacher absenteeism. The most commonly cited action was to discuss the issue with teachers, ruling attendance (time) book at opening time and following up absences.

Pupil-teacher ratios

SGLA II found that PTR is relatively small and manageable, and similar across JS and SS schools. On average, there are 19 pupils to each teacher in JSS schools and 22 pupils to each teachers in SSS schools. The corresponding figures on PTR from the baseline survey were higher but only slightly, with 21 and 26 pupils per teacher in JSS and SSS respectively.

Use of MBSSE lesson plans

Almost all secondary school teachers used some form of teaching guide to help plan and prepare for their teaching, with a substantial proportion of teachers reporting the use of MBSSE lesson plans. In SGLA II the proportion of teachers making use of MBSSE lesson plans is higher than it was in 2017 (80 per cent overall, against a figure of 56 per cent overall in 2017). Other important teaching guides were textbooks and lesson notes.

A vast majority of teachers had positive feedback on MBSSE lesson plans and their ability to use them. They considered the lesson plans to be well structured and helpful for pupils to learn better. Teachers can generally understand the use and purpose of lesson plans to facilitate learning. However, it appears that teachers might be facing difficulties on two fronts.

- They seem to be struggling to incorporate all the prescribed activities in the lesson plans within the duration of one period.
- Teachers also appear to be concerned that some of the lesson plan content (especially examples used to explain concepts) do not relate well to the context and lived reality that pupils are familiar with.

These results are consistent with the findings from SGLA I. Both these issues are potential area for consideration and further revision for lesson plan developers.

Teachers' understanding of lesson plan content

In SGLA II, a short assessment of teachers' own understanding of the lesson plan content was included. Teachers were asked to match grade-specific learning objectives, picked directly from the lesson plans, to their corresponding JSS grades, as a quick test to assess their understanding of the lesson plan content. Only 40 per cent teachers could correctly match learning objectives to the appropriate JSS grades. Teachers were also asked to the name the five standard parts of a lesson plan, in any order they wish: Opening; Introduction to the New Material ("I Do"); Guided Practice ("We Do"); Independent Practice ("You Do"); and Closing. Only 35 per cent of teachers could correctly name all five parts of the lesson plan.

More on teaching practices, teaching aids and teaching guides including MBSSE lesson plans

- Overview of teaching hours, absenteeism and pupil-teacher ratios: Section 3.1.
- About teaching guides and MBSSE lesson plans, including teachers' feedback on their use and functionality: Section 3.2.
- Teachers' understanding of lesson plan content: Section 3.3.

Provision of supportive supervision and pedagogical support

This survey explores the typical school environment, and management and leadership practices being employed in secondary schools to understand the supervision and pedagogical support provided to teachers by principals and external supervisors.

Staff and formal one-on-one meetings

Staff meetings appear to be well-established in the secondary school system in Sierra Leone, with almost all teachers and principals reporting they have had staff meetings in the previous term. Responses suggest staff meetings largely deal with day-to-day school issues and administration, but also increasingly focusing on pedagogy and learning. According to principals, the most common topics of discussion during these staff meetings were teacher absenteeism, school administration and teaching practices/pedagogy. Staff meetings are complemented by formal one-on-one meetings with their principal or head of department.

Lesson observations

Similarly, schools continued to have fairly regular systems of internal lesson observations, which may have a role in the development of teaching in schools. Teachers reported an average of five lessons observed during the previous term (January to April 2018). The observers were usually the principal or head of department. Over 90 per cent of principals and 80 per cent of teachers confirmed that some form of feedback was also provided after the lesson observation, mostly in terms of one-on-one discussion with the concerned teacher.

External supervision

The role of external supervisors, particularly SSOs, in visiting schools, observing lessons and discussing advice on lesson plans and teaching methods was also apparent in SGLA II. Nearly all principals reported at least one external supervision visit during the previous term, with an average of six visits between January and April 2018. SSOs were now the most frequently reported visitors (reported by 79 per cent of principals), which is a massive increase from 3 per cent principals reporting SSO visits in SGLA I. This may serve as initial school-level validation of the formal adoption of SSOs' roles and functions. MBSSE inspectors, school supervisors, and representatives from NGOs/missions were other common visitors in schools. Principals' also suggested that supervision visits had taken more of a teacher development focus (in SGLA I, visits were primarily to check teacher and pupil attendance and other school records). Over two-thirds of teachers in turn confirmed that external visitors had observed their lessons the previous term, with 82 per cent reporting the visitor had been an SSO.

In addition nearly all JSS and SSS schools have parent-teacher or community-teacher associations (PTA/CTA). The majority of these bodies are active, having met at least once in the previous term.

More on school leadership and provision of supportive supervision and pedagogical support

- About staff and one-on-one meetings: Section 4.2.
- Overview of lesson observations practices within schools: Section 4.3.
- Overview of external supervision practices in schools: Section 4.4.

Girls' safety in school

Physical safety in and on the way to school

More than 90 per cent of teachers reported that girls overall felt safe in school. However, less than 40 per cent reported that their school was well-fenced (to deter strangers from entering), and over a third of respondents reported that female pupils were subject to harassment on the way to and from school. Only 12 per cent of teachers felt that girls' toilets were far enough from the main school building such that female pupils did not feel safe using them, whilst almost half the teachers, believed that girls had a tendency of absenting themselves from school during menstruation.

Sexual harassment

From the results of SGLA II, it appears that teachers, the vast majority of whom are male, systematically underestimate or under-report the incidence of sexual harassment in their schools. Indeed, less than 5 per cent of teachers reported that girls in their school were subject to sexual harassment by male pupils or that girls experienced sexual harassment by male school staff – girls themselves reported a much higher incidence. Similarly, the incidence of sex-for-grades also seems to largely underestimated by teachers in secondary schools. However, mechanisms appear to exist whereby female pupils can report instances of sexual harassment in most schools, but the effectiveness of these mechanisms is not known.

More on girls' safety in schools

- Overview of girls' physical safety in and on the way to school: Section 5.1.
- About sexual harassment in schools: Section 5.2.

Schooling experience of pupils with disabilities

The SGLA II pupil interview included questions on whether pupils had any difficulty in seeing, hearing, remembering, communicating, walking or taking care of themselves. For the purpose of this analysis, all pupils answering yes to any of those questions are considered as having some form of disability. Around 60 per cent of pupils interviewed for SGLA II reported some form of disability with varying extents and degrees.

Background of pupils with disabilities

The most prevalent disability was remembering, followed by difficulties in walking. Difficulty in hearing and communicating was relatively less common, which possibly indicates that these are among the more severe barriers to access and learning, and hence school-aged children with hearing or communication problems are either in special schools or out of school altogether.

Provision of infrastructural and teaching support

Almost three quarters of the teachers reported that there was no provision of ramps, railings or any other infrastructural arrangements at their schools. Similarly, around two-thirds of teachers said there was no special support such as counselling provided to pupils with disabilities, nor was there a system for providing additional teaching outside regular classes. A majority of teachers did however report that they adapted their pedagogies to make the lesson delivery more accessible to pupils with disabilities, even though the effectiveness of these techniques is not captured in this survey.

Attitude and behaviour towards pupils with disabilities

Over half of the teachers sampled for this survey agreed that harassment of pupils with disabilities was discouraged in their school. Around 15 per cent teachers reported that teaching or non-teaching staff in schools discriminated in favour or against pupils with disabilities (for example, by grading them graciously or by not allowing them to participate). When asked whether non-disabled pupils interact freely with pupils with disabilities, around 74 per cent of teachers said they do.

Learning outcomes of pupils with disabilities

We compared learning outcomes of pupils from SGLA II reporting having difficulties in hearing, seeing, communicating, remembering, walking or taking care of themselves, with those of pupils that did not report any difficulty of such kind.

Difficulties in hearing is significantly correlated with performance of pupils in both English and math. For English, a significantly larger fraction of pupils reporting hearing difficulties do not reach a level of knowledge above primary grade. Similarly for maths, we find that the distribution of performance for pupils that have some difficulty in hearing is more centered on the lower bands than the distribution of pupils with no difficulties in hearing is. Difficulty remembering was also significantly correlated with pupils' performance. For both English and math, a larger fraction of pupils with difficulties in remembering fall in the performance band corresponding to primary grade level, and less pupils reach JSS1 and JSS2 knowledge.

More on schooling experience and learning performance of pupils with disability

- Background of pupils with disability: Section 6.1.
- Overview of infrastructure and teaching support in schools: Section 6.2.
- Overview of attitudes and behaviours towards pupils with disability: Section 6.3.
- Overview of learning outcomes of pupils with disabilities: Section 6.4.

Longlist of recommendations and next steps

The findings of SGLA II, as well as the baseline SGLA I, call for urgent action to ensure that secondary education in Sierra Leone caters to the diverse learning needs of all pupils, irrespective of gender, family background or remoteness of school location. MBSSE has already identified this all-important need to focus on learning – measured by tracking progress annually through the SGLA and WASSCE results – as one of its three overarching targets in the new Education Sector Plan (2018-2020). However, to realise this vital goal, a concerted effort is required from all education sector actors and stakeholder, under the stewardship of MBSSE.

To actively support MBSSE in realising this goal, based on the results discussed in this report, below is a longlist of initial ideas for recommendations for MBSSE's consideration:

- Align curriculum content with pupils' learning levels;
- Focus on teachers' skills, knowledge and attendance;
- Move from process compliance to actually promoting learning;
- Learn from success stories;
- Urgently address issues of sexual harassment and girls' safety in schools;
- Give pupils from poorer backgrounds a fair shot at success;
- Improve schooling experience for pupils with disabilities;
- Improve lesson plans based on teachers' feedback and content knowledge;
- Support principals to better manage and lead their schools.

The final section of this report discusses each of these in detail. In terms of next steps, a prioritisation workshop is proposed to develop a shortlist of prioritised, feasible actions that can be reasonably taken forward to address some of the challenges. It is hoped that a few, if not all, of the shortlisted actions would then be implemented and tested for effectiveness before the next learning assessment.

Contents

Boxes, figures and tables

Abbreviations

BECE	Basic Education Certificate Examination
CAPI	Computer-Assisted Personal Interviewing
DFID	UK Department of International Development
ELA	Education/Language Arts
EGMA	Early Grade Mathematics Assessment
EGRA	Early Grade Reading Assessment
EMIS	Education Management Information System
ESA	Education Sector Analysis
ESP	Education Sector Plan
GATE	UNICEF – Girl's Access to Education Programme
ICF	World Health Organisation's International Classification of Functioning, Disability, and Health
JSS	Junior Secondary School
MBSSE	Ministry of Basic and Senior Secondary Education
MEST	Sierra Leone Ministry of Education, Science and Technology
N	Number of observations
NPSE	National Primary School Examination
OPM	Oxford Policy Management
P	Primary grade (e.g. primary grade 2 or P2)
PDIA	Problem-Driven Iterative Adaptation
PGLA	Primary Grade Learning Assessment
PTA/CTA	Parent-teacher or Community-teacher Associations
PTR	Pupil-Teacher Ratio
SGD	Sustainable Development Goals
SGLA	Secondary Grade Learning Assessment
SSEIP	Sierra Leone Secondary Education Improvement Programme
SSS	Senior Secondary School
TSC	Teaching Service Commission
UNESCO	United Nations Educational, Scientific and Cultural Organisation
UNICEF	United Nations Children's Fund
WASSCE	West African Secondary School Certificate Examination
WGDS	Washington Group on Disability Statistics

1 Introduction

1 Introduction

"We have a vision of an appropriately educated, entrepreneurial and innovative citizenry; tolerant, productive and internationally competitive…Our mission [is] to provide opportunities for children and adults to acquire knowledge and skills, as well as nurture attitudes and values that help the nation grow and prosper."

(Sierra Leone Education Sector Plan 2018-2020, Getting It Right – Service Delivery, Integrity and Learning in Sierra Leone, pg. 3)

1.1 The Free Quality School Education Programme

"Education is an investment for human and economic development. It is a strong pillar for the nation's industries and also the foundation of moral regeneration and revival of its people. Without quality education, a nation cannot get the needed manpower for socio-economic advancement and an enlightened citizenry. This is why, it is argued that the quality of a nation's education determines the level of its national development."

(Keynote address by His Excellency President Julius Maada Bio on the theme: "Education for Development" at the launch of the Free Quality School Education Programme)

On the 20th of August, Sierra Leone saw a historic moment with the launch of the Free *Quality* School Education Programme (FQSEP). By focussing on 'quality' in the FQSEP, this ambitious programme proposes to go beyond simply filling classrooms through increased enrolment. It aims to gear Sierra Leonean schools towards delivering *sustained learning for all pupils*. It will be a success if children in all parts of Sierra Leone learn useful skills, whether they are girls, boys, poor or rich.

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1.2 About the Leh Wi Learn programme

Leh Wi Learn, formerly called the Sierra Leone Secondary Education Improvement Programme (SSEIP), aims to help the government of Sierra Leone addresss some of these challenges in secondary education. It is a five-year (2016-2021) UKaid-funded programme aimed at supporting Ministry of Basic and Senior Secondary Education (MBSSE) to achieve sustained improvements in girls' education and secondary grade learning outcomes.

Leh Wi Learn provides support to learning conditions, MBSSE and district capacity to plan, monitor, and manage service delivery, and capacity for monitoring, learning and research.

Underpinning Leh Wi Learn's model is investment in addressing the problem of lack of data on the current state of learning achievement, teaching practices and school environment, what is working, and why. Through its monitoring, research and learning work stream, Lewh Wi Learn will:

- Inform MBSSE strategy, planning and policy development and ensure these are data-driven and informed by evidence;

1 Interested readers can access the baseline SGLA report on http://www.education.gov.sl/. MEST (2017). Sierra Leone Secondary Grade Learning Assessment (SGLA) Technical Report. New England, Freetown: Ministry of Education, Science and Technology.

- Improve understanding of learning outcomes at junior and senior secondary levels in Maths and English, with data and evidence used for prioritisation of actions to improve teaching and learning;
- Develop long-lasting capacity at national and district levels to deliver strong monitoring, research and evidence in line with MBSSE's strategy and priorities;
- Identify existing pockets of best practice across districts, by establishing a system of sharing learning across the education system as a basis for performance improvements; and
- Establish a monitoring system to ascertain the effectiveness of Lewh Wi Learn's activities and provide a foundation for programme learning, improvement and adaptation.

1.3 The Secondary Grade Learning Assessments

In close collaboration with MBSSE, Lewh Wi Learn designed and implemented the second annual secondary grade learning assessment (SGLA). It was carried out in all five regions and 16 districts of Sierra Leone in the months of May and June 2018. Similar to SGLA I (2017), the objective of SGLA II is to help bridge the data gap and to provide MBSSE and other education sector stakeholders with robust nationally-, regionally- and district-level representative data on the status of learning and teaching in secondary grades, and track these annually for progress.

The learning assessment survey's design contained the following components:

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- **Principal's questionnaire** administered to 700 principals, covering topics like provision of supportive supervision for teachers;
- **A school observation instrument**, covering topics like school administration and operations.

This 2018 survey constitutes the second round of the learning assessment surveys and covers a range of indicators on pupil learning levels, teaching and supervision practices, girls' safety in school, and the schooling experience of pupils with disabilities. Specifically, this second SGLA report seeks to answer the following research questions:

- **What are Sierra Leone's secondary grade pupils learning?** What are the English and maths skills typically demonstrated by JSS2 and SSS2 pupils in 2018? How do these differ from the 2017 results? Are these skills in line with what they should have acquired by these grades, according to the national curriculum? Are pupils able to apply these skills to practical, real world problems? Are there any major differences in pupils' skills compared to 2017? Are there still major differences in pupils' skills by gender and other background characteristics?
- **What are some of the conditions under which teaching and learning takes place in secondary schools?** How have these changed since 2017, if at all? What are the pupil-teacher ratios (PTRs)? Do pupils, especially girls, feel physically safe in school and on the way to/from school? What is the schooling experience of pupils with self-reported disability?
- **What classroom practices are being used by junior and senior secondary teachers?** What is the approximate number of instructional hours delivered by the average teacher? Is teacher-absenteeism an issue and what are some of its drivers? What corrective measures are commonly taken against it? Are more teachers using the MBSSE lesson plans in 2018 than in 2017 and if not, why? What is teachers' feedback on MBSSE lesson plans?
- **What are some of the school management and leadership practices employed by secondary school principals in Sierra Leone?** Are they providing supportive supervision and pedagogical support to teachers, and how? How are they dealing with issues like teacher and pupil attendance? Are schools adequately supported by external supervision from, say, school inspectors?

1.4 The SGLA journey so far

Looking back at the SGLA II timeline, there were three distinct phases in the journey so far:

- **Phase I:** Developing the methodological design for the learning assessment and overall survey, including revisions to SGLA I instruments and planning for an expanded sample size of 700 schools (vs. 400 in SGLA I) (January-April 2018);
- **Phase II:** Operational planning and implementation of fieldwork (April-June 2018); and
- **Phase III:** Analysis and communication of results (July-December 2018)

As shown in the figure below, phase I started in January with consultations between MBSSE and the SGLA technical team, covering the objectives and some revisions to design features of the learning assessment such as sample size, procuring information on new region and districts. Some instruments were revised while a new instrument (school observation tool) was developed. In March, consultations continued between the SGLA technical team and MBSSE on the detailed design parameters of the learning assessment. Assessment booklets were submitted to MBSSE for review. The final assessment and survey design, including budget and communication timelines, were locked-in in April.

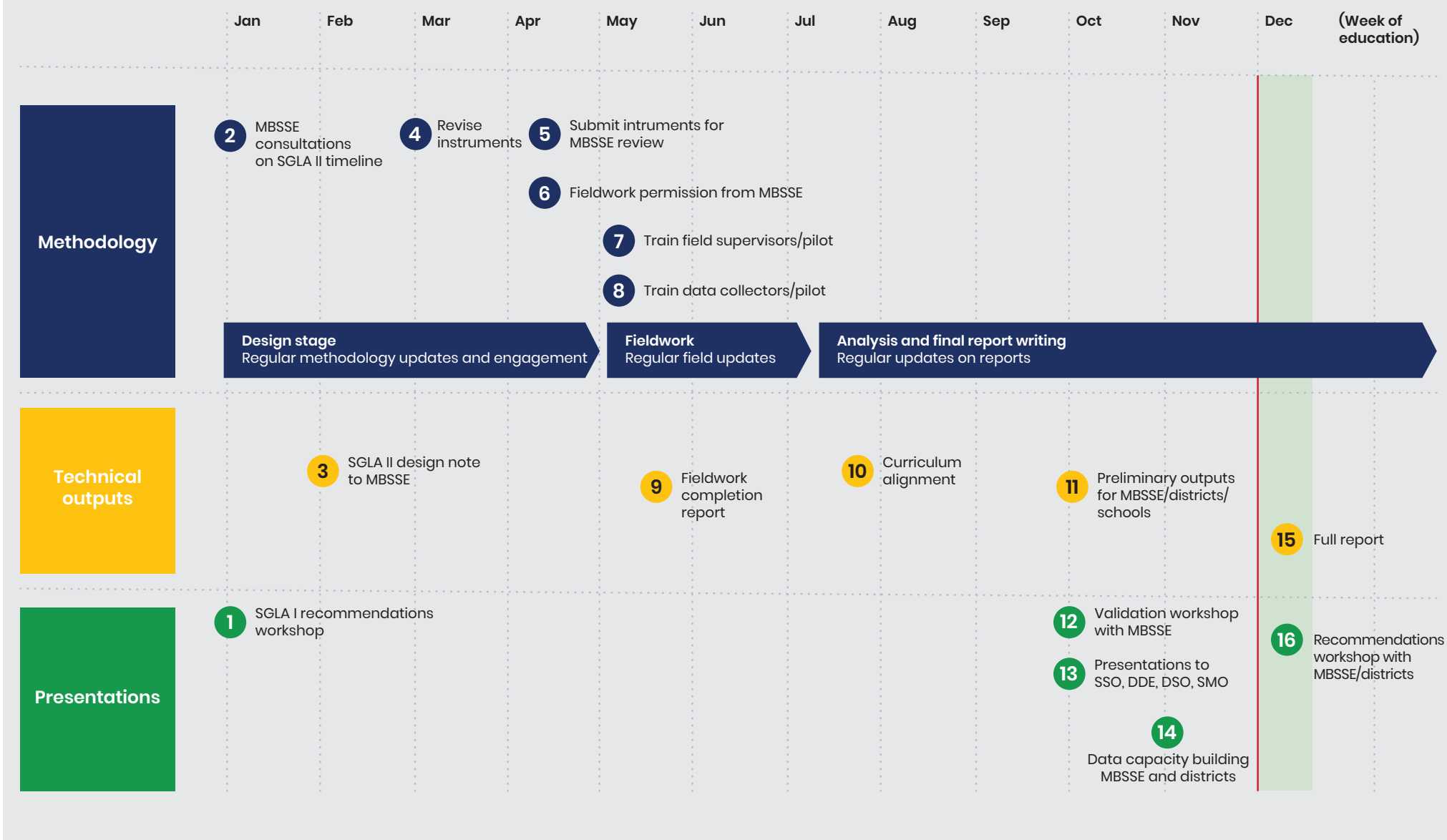
Phase II saw development of the fieldwork model; budgeting and logistical planning; securing school access permissions from MBSSE; recruitment and training of regional survey coordinators, supervisors and data collectors; and field-testing and piloting in Western Urban, Western Rural, Bo, Kenema and Pujehun. Fieldwork started on 15 May, ending on 27 June.

Phase III followed in July with data cleaning and preliminary analysis of pupil learning data by the SGLA technical team. A curriculum-alignment workshop with MBSSE and assessment/curriculum specialists in Freetown was conducted, to assign every question in the pupil assessment to a specific grade from primary to SSS. At this point, further consultations between the technical team and MBSSE were carried out to understand how the results should be presented and communicated to enhance their use and usefulness within MBSSE. The Lewh Wi Learn output-5 coordinator provided more up-to-date methodological and procedural updates to senior MBSSE officials, including cross-learning between the SGLA and the ongoing primary grade learning assessment (PGLA). Detailed analysis and report-writing by the SGLA technical team continued in August during which preliminary results were made available to the senior leadership at MBSSE.

In October, MBSSE convened a meeting between Lewh Wi Learn and the ministry's strategy and policy team – here, the SGLA technical team presented top-level key results in a validation workshop. To enhance practical use of the SGLA results at all levels, preliminary findings were also presented to the Lewh Wi Learn programme team and to the newly recruited cadre of school support officers (SSOs). An evidence and policy workshop was conducted for DDEs in November across all five regions, and data-analysis workshop was convened by MBSSE in December where the SGLA technical team trained select MBSSE staff on analysis and data visualisation techniques using the recent SGLA data.

It was agreed that the SGLA technical team would complete the detailed analysis and report-writing and submit a draft report, along with a longlist of recommendations, to MBSSE in December. MBSSE would then consider these proposed recommendations and work together with the SGLA technical team to arrive at a shortlist of prioritised actions, assigning responsible owners for each and indicative timelines for achieving them. This technical report has been written with the objective of facilitating such a prioritisation and recommendations workshop to be convened by MBSSE in January.

Figure 1: SGLA 2018 timeline for design, fieldwork, analysis, report writing and communication



2 Pupil learning outcomes in junior and senior secondary grades

2 Pupil learning outcomes in junior and senior secondary grades

This section presents answers to the following research questions:

Box 1: Key research questions on secondary grade learning outcomes in SGLA II

- What are the English and maths skills typically demonstrated by JSS2 and SSS2 pupils in 2018? Are these skills in line with what they should have acquired by these grades, according to the national curriculum?
- Are there any major differences in pupils' skills learning levels compared to 2017?
- Are there major differences in pupils' skills by gender and other background characteristics?

Source: Secondary Grade Learning Assessment survey (May-June 2018), pupil learning assessment.

Before discussing pupil learning results, a summary of pupils' background characteristics is presented below, to provide context to the learning outcome results.

Box 2: Background characteristics of pupils

- The average age of pupils in JSS2 and SSS2, at the end of the 2017-2018 academic year, is 15 and 18 years respectively.
- In JSS2, 41% of the pupils were age-appropriate for their grade (13-14 years old) while 52% were overage (i.e. older than 14 years). There was a similar pattern of overage pupils in SSS2 (38% age-appropriate, i.e. 16-17 years; 57% overage).
- Pupils reported the main language they speak at home as Krio in the West; Krio, Mende and Kono in the East; Krio and Temne in the North and North West; and Krio and Mende in South.

Source: Secondary Grade Learning Assessment survey (May-June 2018), pupil learning assessment.

2.1 About the learning assessment

About the Secondary Grade Learning Assessment

5,600 JSS2 and SSS2 pupils tested on English and maths.

One-on-one test administration: each pupil is tested individually by a data collector using a handheld computer device.

Approximately 45 minutes per pupil.

40 questions per test covering both English and maths.

Included background questions on pupils' age, language spoken at home and assets at home.

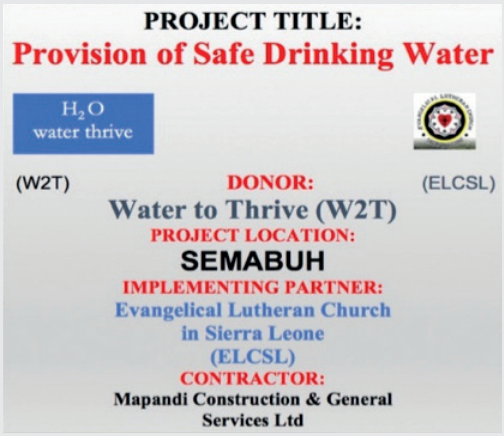
In SGLA II, each pupil was administered a test of around 40 questions covering both English language and maths, along with some background questions like pupil's age, main language spoken at home and household assets. The test took approximately 45 minutes per pupil, and was administered on a one-on-one basis by enumerators to individual pupils.

The SGLA tests focus on pupils' learning outcomes in JSS2 and SSS2, and are designed with reference to the national curriculum in these grades. Some of the test questions are also referenced to the primary grades 4 to 6 curriculum.[1] While the test is referenced to the national curriculum in P4-6, JSS and SSS grades, it does not focus on curriculum content coverage per se, which is already the focus of the examination system. In other words, the SGLA tests are not tests of content recall based on prescribed texts for BECE or WASSCE, say Shakespeare's Merchant of Venice. The SGLA tests instead focus on knowledge and skills acquired by pupils in these grades and their "real life" applicability.

The SGLA tests contained questions that pupils are expected to encounter and comprehend in their daily lives – both within and outside school. These include questions on prose, poetry, lists, tables, graphs, advertisements and webpages. In other words, the SGLA tests are balanced to assess both school-based knowledge and everyday English language and maths skills.

Below are two examples – the first one from an English language item from the SGLA II, which tests pupils' application of English comprehension skills through texts they are expected to encounter in everyday life. Rather than providing an extract from a text in the prescribed curriculum, this question assesses comprehension skills by providing visual and textual information through an extract of non-continuous text (billboard) about a development project. It requires pupils to locate and extract explicitly stated information (such as title of the project) and infer meaning from simple short continuous and non-continuous texts. While a seemingly unconventional question at first glance, this question ultimately tests a common skill – reading comprehension – which pupils will be required to demonstrate in school, work and life.

Box 3: Example of English language assessment question which tests pupils' ability to comprehend non-continuous texts from everyday life



There are often billboards for construction projects in villages in Sierra Leone. These show the name of the project, where the money for the project comes from, the name of the village, the organisation managing the project and the local business doing the actual work.

Look at this example in the photograph. Use it to answer the next six questions.

Where is the project?

A. Project Location
B. Contractor
C. Semabuh
D. ELCSL

What is the name of the project?

A. Semabuh
B. Water to Thrive
C. Evangelical Lutheran Church
D. Provision of Safe Drinking Water

Source: Secondary Grade Learning Assessment.

1 Inclusion of questions from P4-6 curriculum was seen as necessary to avoid "floor effects" in the test – this arises when a large proportion of pupils taking an assessment find most questions in the test too difficult, resulting in a large proportion of pupils scoring near the bottom of the scale, also referred to as "clumping near zero".

This second example below shows a more familiar maths question, which seems more common to how questions are presented in school textbooks and examinations. The examples below provide illustrations of items that aligned more closely with school-based maths skills.

Box 4: Example of school-based maths assessment items

Multiply	**What is 2/3 + 1/4?**
437 x 74 ——— ———	A. 2/12 B. 3/7 C. 3/4 D. 11/12

Source: Secondary Grade Learning Assessment.

2.2 Developing grade-appropriate performance bands in English and Maths

The process of aligning the learning assessment questions with curriculum expectations at various primary and secondary grades was carried out by a panel of experienced Sierra Leonean English and maths teachers, principals, examiners, curriculum specialists, and lesson plans developers. It was facilitated through technical assistance from the Leh wi Lan programme, under the auspices of the MBSSE Executive Secretary (Basic Education).

This curriculum alignment workshop helped refine notions of the links between skills required by each test question and their direct or foundational presence in the national curriculum. The attending experts took each SGLA test question and discussed and debated the most important skills being tested by each question and its placement in the national curriculum, ranging from below P6, P6, JSS1, JSS2, JSS3 and SSS1. The experts provided a grade level allocation for each question in the SGLA II test.

Their discussions were supported with data on the occurrence of key terms in the learning outcomes stated in teachers' lesson plans in English/Language Arts (ELA) and maths at primary, Junior (JSS) and Senior Secondary school (SSS) level.[2] These plans provide a comprehensive perspective on the intended school curriculum in Sierra Leone. Each lesson plan specified a learning outcome, which can be taken as an indication of the learning objectives for different school grades. Topics and objectives at lower levels are often foundational for related topics at higher levels. On the basis of these lesson plans, the national curriculum experts grouped skills tested in the assessment into five categories or performance bands. These reflect learning outcomes expected by pupils in various school grades, from primary grade to SSS1.

The English performance bands are shown in the table below. In the analysis and reporting, pupils are sorted into these five performance bands, each described by a set of skills appropriate for the specified grade in English language. This gives insights into the distribution of skills that pupils possess, and can help identify relative strengths and areas for development. Additionally, it indicates differences in learning outcomes, if any, between groups of pupils (boys and girls, poorer and richer, urban and rural).

2 From primary to JSS3 level there are 1137 ELA and 1265 mathematics plans, and at SS1 to SS2 levels, there are 88 English and 138 mathematics lesson plans.

Table 1: Grade-appropriate performance bands for English assessment	
Performance band label	**Band descriptor** The typical pupil in this band shows the skills for lower bands and also:
Primary grade level	Names some common objects and understands a simple English sentence. Locates and extracts explicitly stated information and infers meaning from simple short continuous and non-continuous texts.
JSS1	Locates and extracts immediate and overall meaning and information from 1-6 sentences of continuous or short non-continuous texts; understands the immediate impact on meaning of quantifier words (e.g. some, most, all, only).
JSS2	Interprets and infers overall meaning of short continuous and non-continuous text; relates two sets of information; applies basic grammar conventions and uses names of grammatical elements correctly.
JSS3	Identifies meaning and locates and extracts information from various sources such as short continuous (2-3 paragraphs) and non-continuous texts including pictures and tables using, where necessary, inductive reasoning and lower-level inferences to reach an overall understanding; infers the meaning of unfamiliar words from their context; uses technical language for the function of a word in a sentence.
SSS1	Extracts information from non-continuous text and applies inductive reasoning; understands the impact on contextual meaning of quantifiers such as some, all, only.

As with English, maths skills tested in the assessment were also grouped into broad categories or performance bands with band 1 linked to basic skills (e.g. complete simple arithmetic tasks) and band 5 linked to more demanding skills expected at JSS3 grade, like understanding the concepts of fractions, decimals and percentages. The maths performance bands are shown in the table below.[3]

Table 2: Grade-appropriate performance bands for Maths assessment	
Performance band label	**Band descriptor** The typical pupil in this band shows the skills for lower bands and also:
Primary grade level	May complete simple arithmetic tasks successfully. Extracts values shown in a barplot and visualises changes shown graphically, recalls and applies learned procedures for addition and subtraction of numbers set out in column form, calculates an increase of 15% in a price, recalls basic shapes and applies to real objects.
JSS1	Recalls and applies learned procedures for procedures such as HCF of 2-digit numbers; extracts numerical information from text and barplots to make simple comparisons; applies conventions of place value; represents information in a text as a simple number sentence.
JSS2	Extracts information from textual and visual representations to apply a one or two step procedure using simple arithmetic, comparisons, estimations and approximations; applies addition operations on clock time; recalls and applies learned procedures for multiplication, addition and subtraction of multiple-digit numbers set out in column form.
JSS3	Extracts information from textual and visual representations to develop and apply a multi-step procedure using simple arithmetic, estimations and approximations; understands the concepts of fractions, decimals and percentages and applies basic operations to these correctly and appropriately; understands the basic properties of simple geometric figures.

3 Note that no student fell in the SSS1 performance band for maths and as such this is not described in the band descriptors.

The table below provides examples of questions falling in each performance band.

Table 3: Performance bands and example questions from English and maths tests

Performance band label	Example of SGLA English question	Example of SGLA math question
Primary grade level	**Circle the word which best matches the picture.**  **A.** Gather **B.** Greeting **C.** Grating **D.** Guide	 **The shape of the red oil drum is best described as a:** **A.** Rectangular box **B.** Cylinder **C.** Sphere **D.** Cube
JSS1	**Read the passage about barbers (provided below, Extract 1) and answer the next three questions.** People feel safe in the hairdresser's shop because: **A.** The barber has a knife in his hand. **B.** They can escape from family crises. **C.** Their hair has been cut and they look good. **D.** Sitting back and unwinding helps them to feel secure	 **Look at the figure above. The shape of the blocks used for the walls is best described as:** **A.** Circular **B.** Square **C.** Triangular **D.** Rectangular

Table 3: Performance bands and example questions from English and maths tests (continued)

Performance band label	Example of SGLA English question	Example of SGLA math question
JSS2	**Read the passage about barbers (provided below, Extract 1) and answer the next three questions.** Barbers act as counsellors for their clients by: **A.** helping them with their career choices. **B.** taking scissors to their heads. **C.** listening to their problems. **D.** solving family crises.	 **Look at the figure above. The window space could be filled with blocks instead. About how many blocks would be needed?** **A.** 12 **C.** 18 **B.** 16 **D.** 21
JSS3	**Circle the word or phrase closest in meaning to the underlined word.** Did you see the lion <u>pounce</u> on her prey in the film? **A.** Attack **B.** Play **C.** Spring **D.** Stumble	**The figure below represents a rectangular garden bed 8 metres long and 3 metres wide. Answer the next two questions about this garden bed.**  What is the perimeter of the garden bed? **A.** 8m **C.** 22m **B.** 11m **D.** 24m
SSS1	**Use the information in the passage below (provided below, Extract 2) about building a health centre in the village of Yiben and the pictures to answer the next four questions** The passage tells us that the roof was on "before the wet season set in". The best phrase to replace "before the wet season set in" is: **A.** "before the floods started". **B.** "before there was any rain". **C.** "before it rained every day". **D.** "before there was rain most days".	

Example of text which pupils were asked to interpret

Extract 1: "Most people in Freetown will tell you that they have a trusted barber who they visit on a regular basis. Geoffrey, a tour guide, said: "Appearance is very important in Sierra Leone, people want to make sure their hair looks good." Barbers also take on the role of counsellors, listening to clients agonise over their love lives or confide in them about family crises. The barber shop provides a safe space for people to sit back and unwind – after all, it's important to feel relaxed as someone takes a knife to your chin or a pair of scissors to your head. "

Extract 2: "In mid-February 2016 the builder, Farner Kamara, and his community workforce began constructing the clinic with a great sense of urgency. As planned, the zincalume roof was on by the end of March, before the wet season set in, and plastering completed in July. By the start of September 2016, the building was finished with concrete floors, drainage, doors, windows and paint. It is a secure, national-standard building that is immediately recognisable as a health facility. It is the talk of two chiefdoms and, along with their school, the pride of the community."

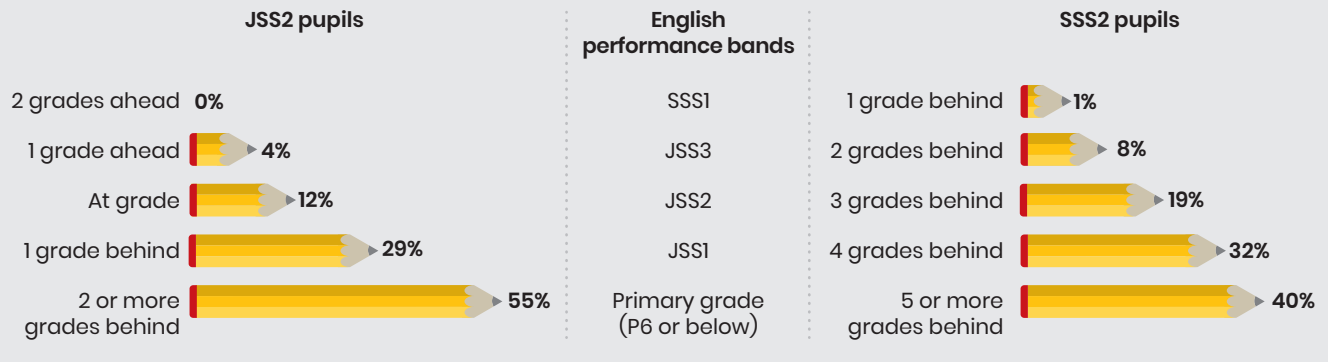
2.3 Results: Pupil learning outcomes in English and Maths

This section addresses the questions: What are the current levels of learning of JSS2 and SSS2 pupils in English and Maths? What are the English and Maths skills typically demonstrated by pupils in these grades? To examine this, pupils were sorted into the five grade-specific performance bands or levels discussed above. To achieve a performance band or level means that pupils in the particular band are more likely than not to be able to demonstrate the skills linked to that particular grade (as per the national curriculum) but are very likely to struggle with skills demanded by the curriculum in any higher grade.

The SGLA II reiterates findings from last year's survey: pupil learning levels in secondary grades are generally low. There is a wide gulf between pupils' actual skills and competencies compared to national curriculum expectations. Moreover, results this year suggest a small but real drop in English scores. Maths scores have remained largely unchanged compared to 2017.

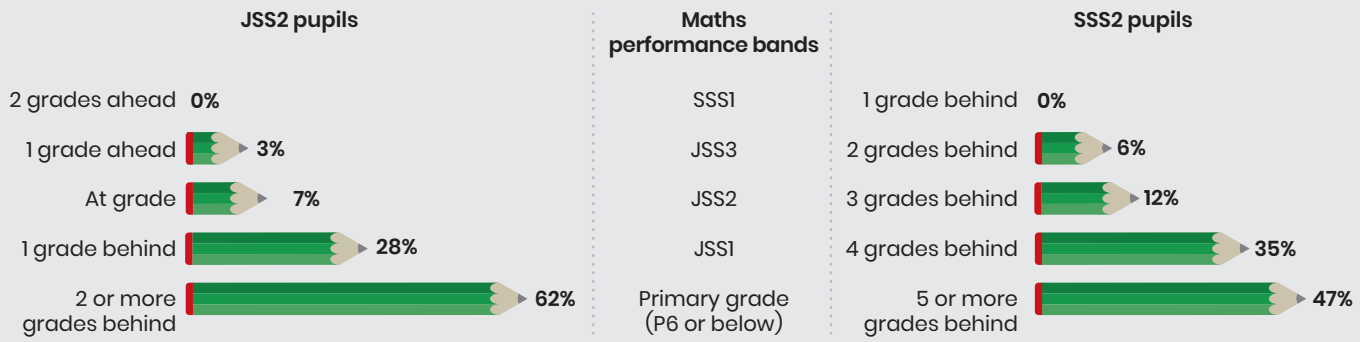
For English, as shown below, 55 per cent of JSS2 pupils and 40 per cent of SSS2 pupils are able to demonstrate English language skills expected from a pupil in primary grade, i.e. P6 or below, but very unlikely to demonstrate skills expected from any higher grades than P6. In other words, these JSS2 and SSS2 pupils have fallen behind curriculum expectations by two and five grades respectively. Around 12 per cent of JSS2 pupils showed English language skills as expected from a JSS2 pupil and a small percentage (4 per cent) showed skills exceeding expectations. Though a larger proportion of SSS2 pupils (versus JSS2 pupils) appear in the higher performance bands, ultimately a majority of these pupils have fallen behind by up to four grades – they are operating somewhere between JSS1 and SSS1. Almost no SSS2 pupil is able to show skills expected at the end of SSS1 in the SGLA.

Figure 2: Distribution of JSS2 and SSS2 pupils across English grade-level performance bands



A similar picture emerges for maths. As shown below, over 60 per cent of JSS2 pupils and almost 50 per cent of SSS2 pupils are able to demonstrate maths skills expected at primary grade level, i.e. P6 or below, having fallen behind by two and five grades respectively. There is thus a higher proportion of pupils in the lowest bands in maths compared to English. Only 7 per cent of JSS2 pupils show maths skills as expected from a JSS2 pupil and a small percentage (3 per cent) showed skills exceeding expectations. Once again, though a larger proportion of SSS2 pupils (versus JSS2 pupils) appear in the higher performance bands, ultimately more than half of these SSS2 pupils have fallen behind by up to four years. In the SGLA test, only 6 per cent SSS2 pupils are able to show skills expected at the end of JSS3 and none show maths skills at SSS1 level.

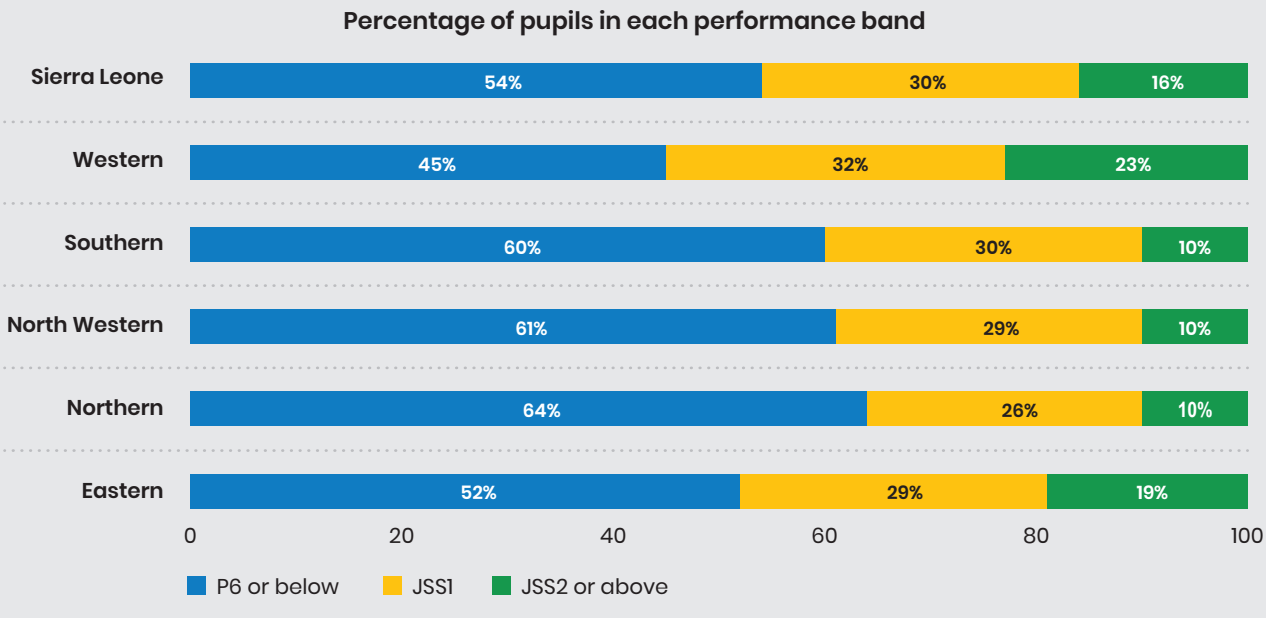
Figure 3: Distribution of JSS2 and SSS2 pupils across maths grade-level performance bands



2.3.1 How does pupil learning vary across provinces and districts?

There are significant regional differences in pupils' performance – pupils in the Western and much of Eastern region score significantly higher than the national average. For instance, in JSS2 English, Kono and Western Urban districts both have higher proportions of JSS2 pupils performing "at grade" compared to the national average of 12 per cent. Eastern and Western provinces tend to have less pupils in the P6 or below band and more in the bands associated with higher grades; this is true for both subjects but differences are less pronounced in maths.

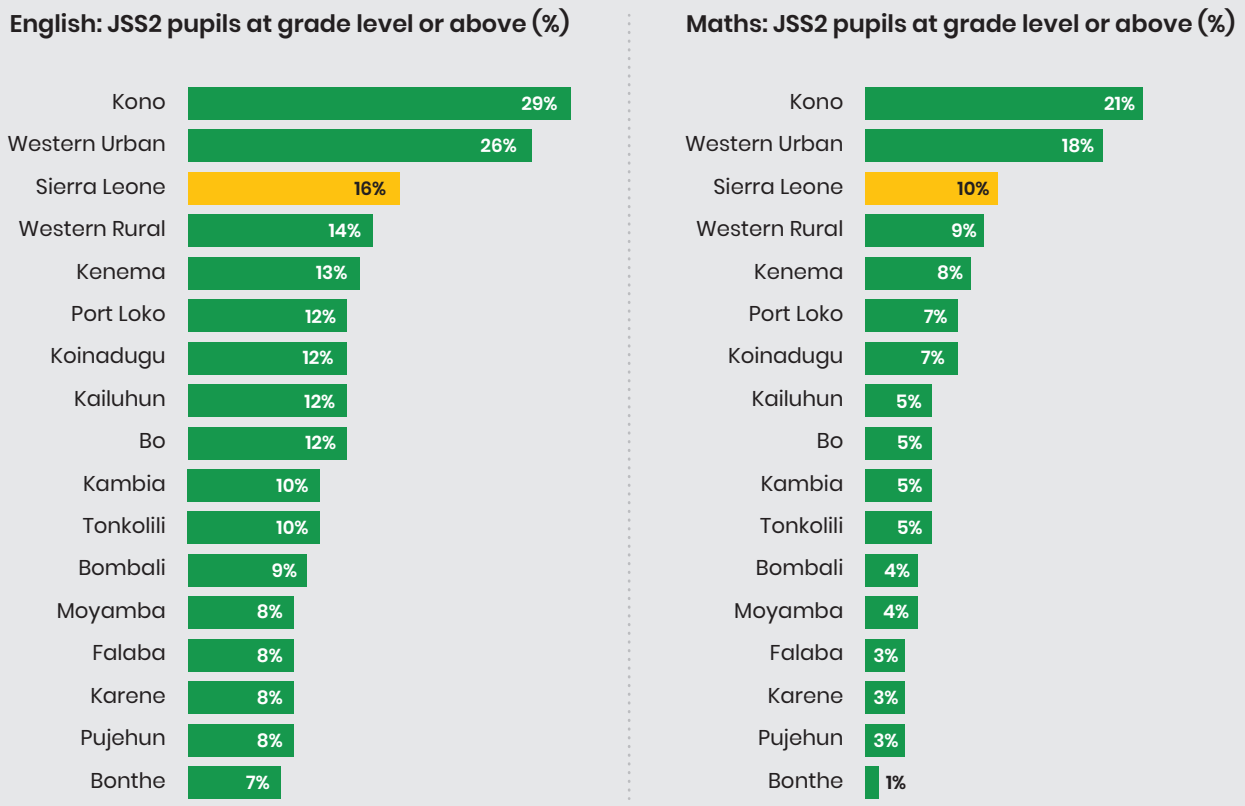
Figure 4: Regional disparities in pupils' performance (JSS2 English)



The larger sample of 700 schools in the 2018 SGLA gives us the opportunity to examine district level pupil performance more closely than was possible at the baseline last year. In the discussion below, for brevity, we only focus on JSS2 pupils. In particular we ask: What is the average JSS2 performance in English and maths, by district? Which are "best" and "worst" performing districts?

The two figures below give us the percentage of JSS2 pupils who demonstrated English and maths skills in line with the competencies expected of JSS2 pupils (or above) in the national curriculum. The rest of the pupils are below JSS2 level, including a vast majority (55-60%) are at primary grade level, i.e. two or more years behind. As we can see in the two figures below, JSS2 pupils writing the Leh wi Lan learning assessment from Kono, Western Urban and Western Rural showed stronger performance than other districts. Kono and Western Urban are above the Sierra Leone national average in both subjects. In the same figures, we can also see that Falaba, Karene, Pujehun and Bonthe among the districts that are falling behind.

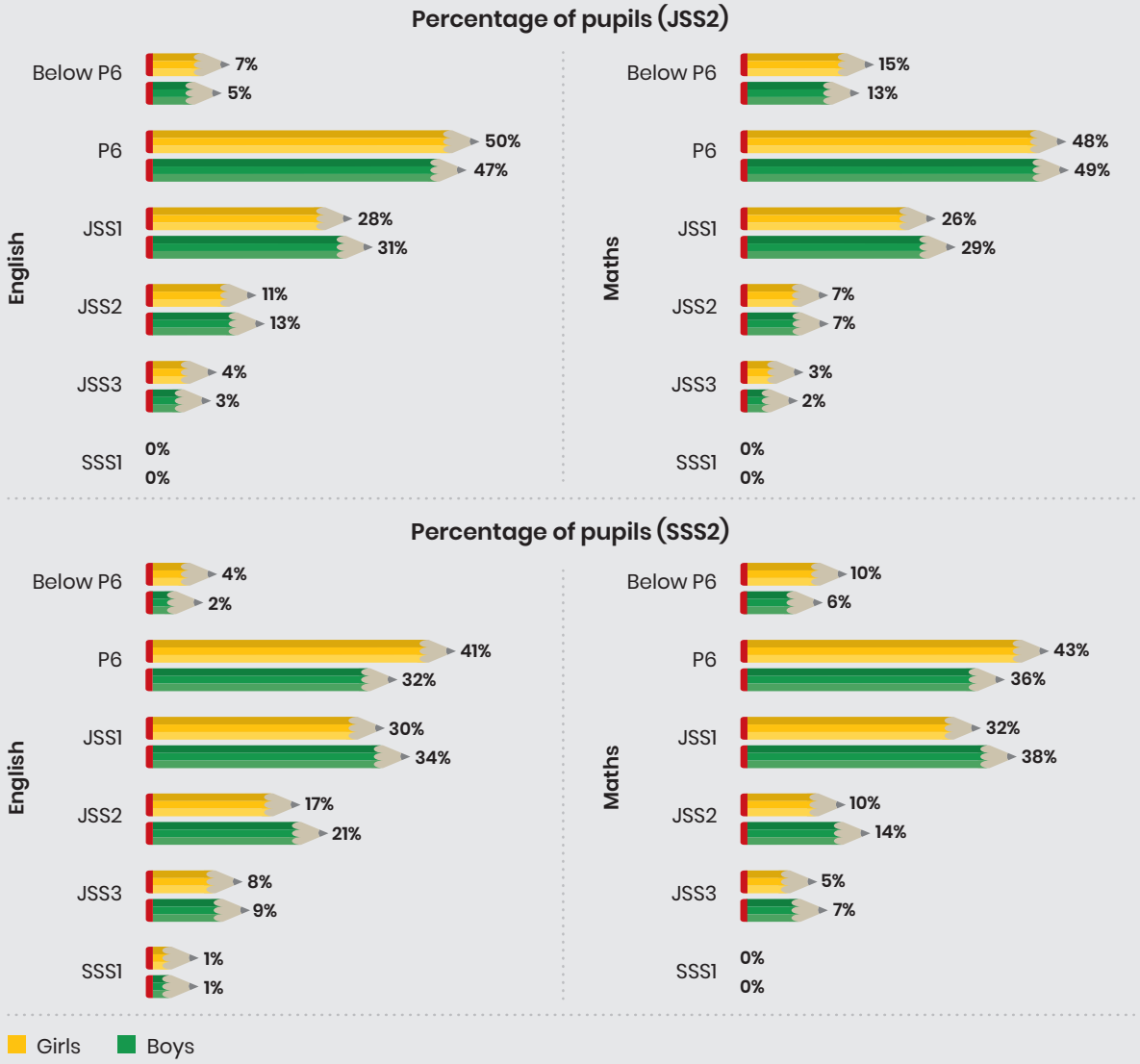
Figure 5: District disparities in pupil performance (JSS2 English and maths)



2.3.2 How does pupil learning vary by gender?

Across both grades, on average boys perform better in these tests than girls. This gap is exists but is small in JSS2, but appears to widen as girls move from JSS2 to SSS2. Girls are more likely to have skills limited to those expected at primary grade level, i.e. P6 or below, but struggled with skills demanded from higher grades. Compared to boys, significantly fewer girls reach JSS1-level knowledge or above, neither for English nor maths. In other words, for both English and math, significantly more girls from JSS2 grade fall within the first performance band, and significantly more boys than girls perform at JSS1 level. Differences in performance by gender are starker at SSS2 grade than at JSS2 grade. Indeed, at SSS2 grade, differences between the female subsample and the national average are significant for the first four bands for both English and math, with girls being overrepresented in the two lowest bands and under-represented in the higher bands. A similar, but opposite trend emerges for boys at SSS2 level. These results are very similar to gender differences seen in the first SGLA last year.

Figure 6: Gender disparities in pupil performance (JSS2 and SSS2)



Source: Secondary Grade Learning Assessment survey (May-June 2018), pupil learning assessment.

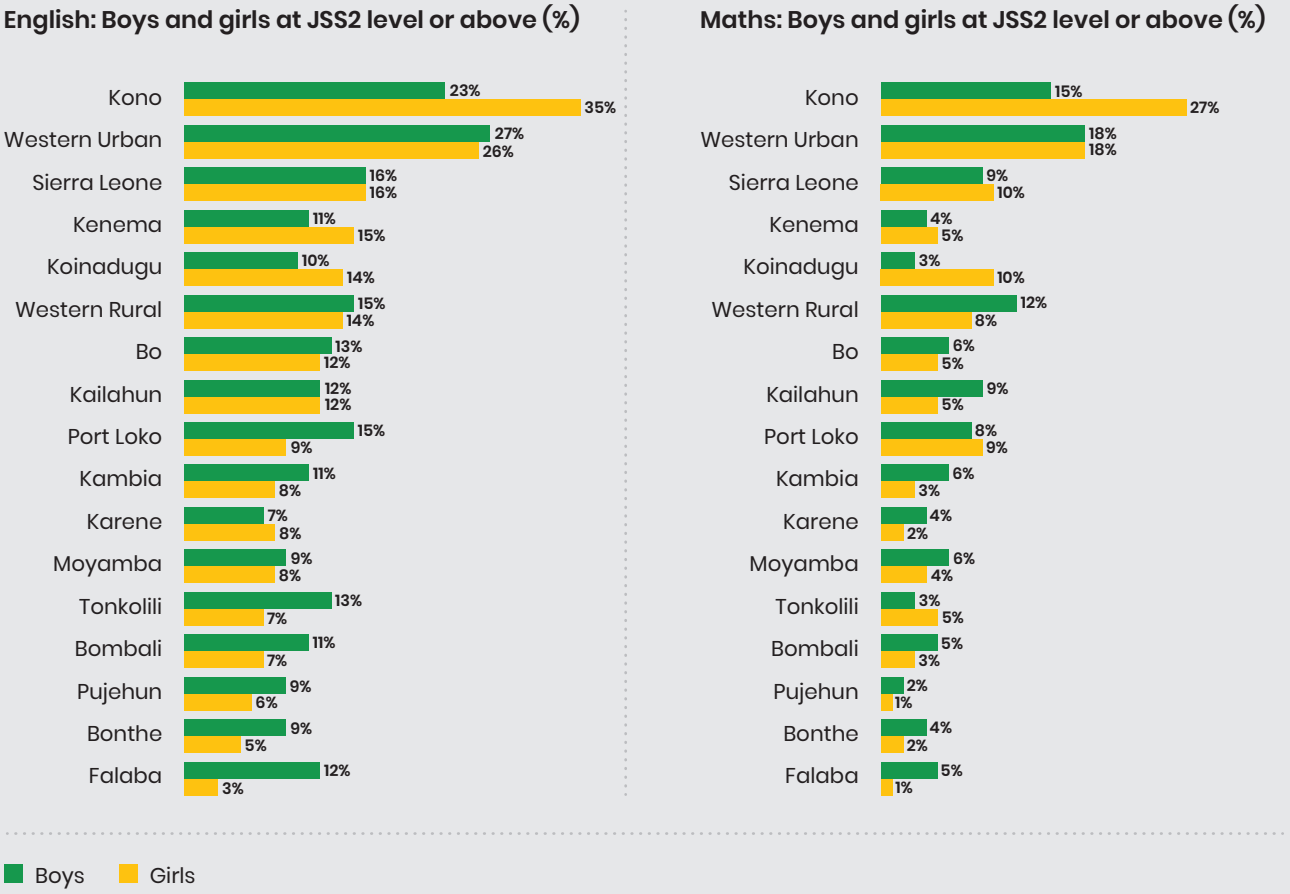
It is also interesting to note that gender-based differences in pupils' performance in JSS2 grade exist in all provinces except for the Western area for English, and the Eastern and Northern province for math. Differences between boys and girls are also larger at SSS grade than at JSS grade for both subjects and across provinces, except for the Western province where no gender-based differences exist in performance of pupils from SSS2 grade.

Once again, we exploit the larger SGLA II sample size to examine gender gaps in each district. For brevity, we focus on JSS2 pupils only, and ask: In which districts do we find the largest difference in average performance between boys and girls? Which districts have the widest "gender gap" in JSS2 pupil performance?

The two figures below give us the percentage of JSS2 boys and girls, separately for each district, who demonstrated English and maths skills in line with the competencies expected of JSS2 pupils (or above) in the national curriculum. The gender story across districts is complex, and varies substantially across the country. The main noteworthy points are:

- The gender gap in JSS2 is fairly muted, and in fact in some districts girls do better than boys (e.g. Kono, Kenema, Koinadugu). Some districts don't show much difference at all.
- However, there are some districts with large gender gaps with girls performing much worse than boys (e.g. Bonthe, Falaba, Bombali).
- Not shown here but from wider SGLA results discussed above, we know that the average performance of girls across the country gets much worse than boys as they move to higher grades (i.e. SSS2).

Figure 7: Gender disparities in pupil performance, by district (JSS2)



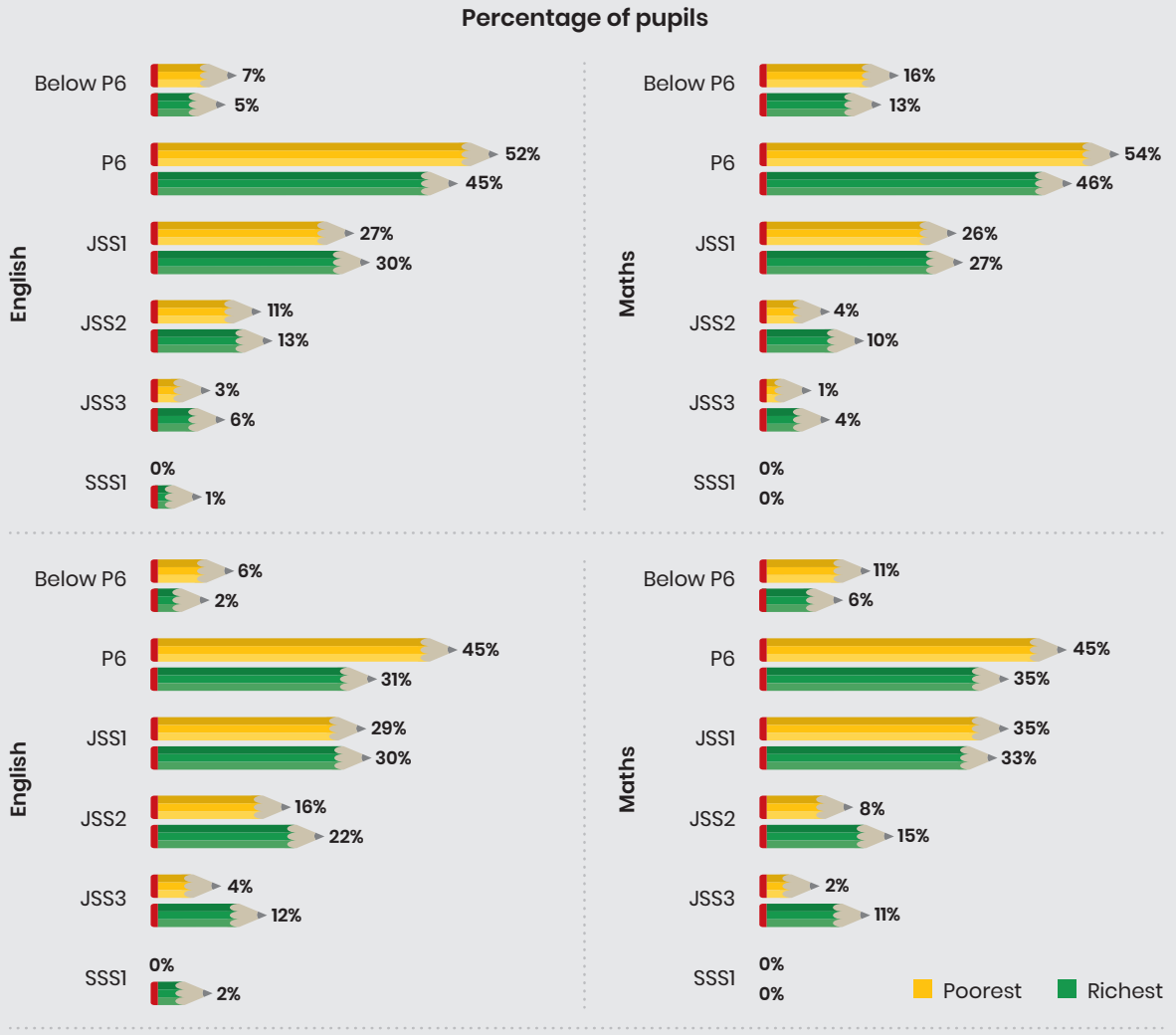
There could be a number of factors driving this difference. As we see in later chapters, results from this survey in both years have shown that female teachers constitute a very small percentage of the teaching workforce in secondary grades; and girls reported various instances of harassment while commuting to or from school; school toilets being unsafe and far from the main school building; absence during menstruation; sex-for-grades and sexual harassment by staff and male students.

2.3.3 What is the relationship between pupils' test scores and family background?

Pupils' own family background is one of the biggest determinants of their learning level. Across both grades, pupils from the richest households (i.e. top 20 per cent pupils based on a household asset index) perform significantly better than pupils from the poorest 20 per cent of households.

In what follows, we compare the performance of pupils in the first quintile of the household asset index (poorest) to performance of pupils in the highest quintile (richest). For the purpose of this analysis, the middle three quintiles are not considered. Comparing pupil performance by household wealth shows that a significantly larger percentage of pupils from less advantaged households only reach skills that are expected at P6 level or below for English, in both JSS and SSS grade, compared to their counterpart from more advantaged backgrounds; a similar picture holds for math as well. Moving up the grade-appropriate band scale, we find less pupils from disadvantaged household and more pupils from the richest families populating the performance bands for both math and English, with stark wealth-based differences between rich and poor pupils for top bands in math. Similar to what was observed for gender-based differences, disparities in learning between richest and poorest pupils appear to be larger at SSS grade.

Figure 8: Disparities in pupil performance by household wealth (JSS2)



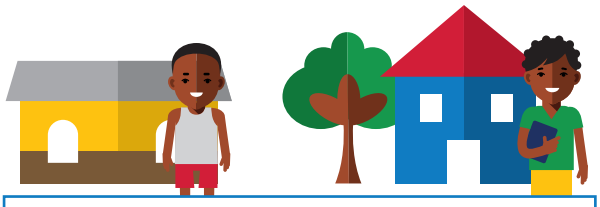
Source: Secondary Grade Learning Assessment survey (May-June 2018), pupil learning assessment.

As for gender-based differences, the magnitude of differences in pupils performance by household wealth varies across provinces. Interestingly, for both math and English, across JSS and SSS grade, no significant differences exist in the Eastern province between the richest and poorest pupils. The North-Western and Northern provinces also display no wealth-based differences in English and math respectively.

2.3.4 Can remoteness of school location predict pupil learning?

In both English and maths, there is a significant negative relationship between remoteness of school and pupils' performance. In other words, pupils' learning levels drop as we travel away from schools that are located near the district headquarter town, towards more remote schools. Pupils from remote schools, across both JSS2 and SSS2 grades, are more likely to feature in the lower performance bands (P6 or below). This result is consistent with baseline findings from 2017.

A number of factors could contribute to this relationship. For instance, this survey provides indicative evidence that schools farther away from district headquarter towns are generally not as well-managed as those near the district headquarter towns. The remoter schools are significantly worse in terms of their learning environment and overall school management indices. In terms of administration and planning, schools near district capitals are the strongest.



Pupils from remote schools are more likely to feature in the lower performance bands

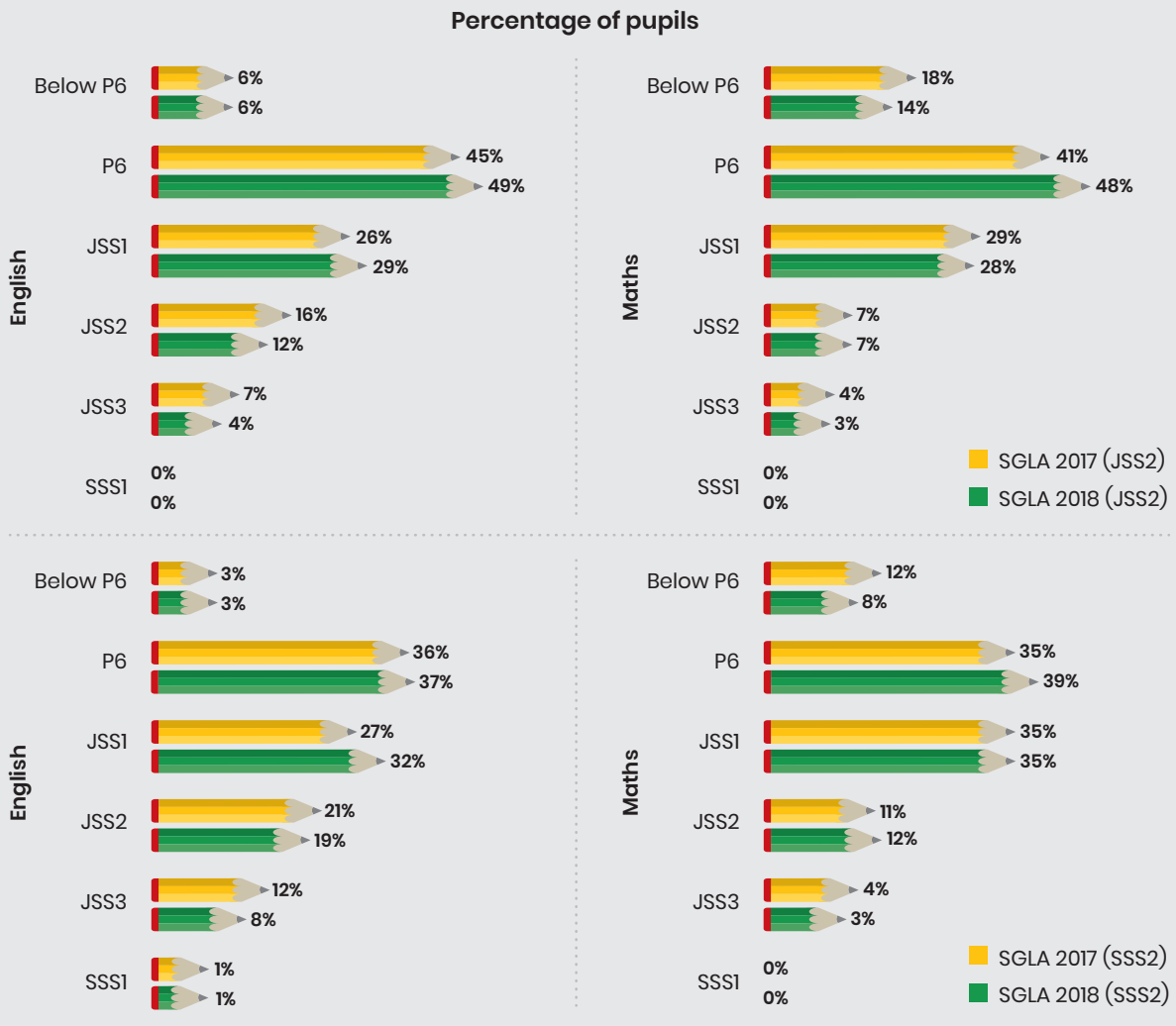
2.4 Comparing SGLA I and II results: are there any notable shifts in pupil performance since SGLA I?

There was a small but statistically significant drop in English scores between 2017 and 2018. This is true for both JSS2 and SSS2, but differences are larger for JSS2. For maths, there is a small improvement in lower bands, with more pupils now able to show at least P6-level skills in 2018, but the rest of the distribution is largely unchanged since SGLA I. While significant shifts are not expected within a single year and long-term trends cannot be inferred from just two years' data, the real drop in English scores needs to be thoroughly understood and further rounds of SGLA will confirm if this drop continues.

When comparing results for SGLA I and II, we notice a slight drop in performance for English in 2018 compared to 2017. Indeed, we find a larger fraction of pupils falling within bands JSS1 and below for English in 2018 than 2017, and consequently less pupils in the higher bands (JSS2 and above) in 2018 than 2017. This is true across both JSS2 and SSS2 grade, but differences in performance over time are larger for JSS2 pupils.

For maths, we notice some improvement in performance by pupils who were in the lowest bands (they are now scoring slightly better in 2018 than 2017) but this improvement – though real – is small. However, this small improvement finds its ceiling at P6-level knowledge.

Figure 9: Comparing pupil performance between SGLA I and II results



Source: Secondary Grade Learning Assessment survey (May-June 2018), pupil learning assessment.

2.4.1 Comparing results across SGLA I and II for specific questions

It is useful to provide examples of questions on which pupils performed significantly worse in 2018 than they did in 2017. For English, the examples provided refer to questions testing pupils' ability to extract and use information from a table and knowledge of basic grammar rules. For math, the examples report questions on the use of addition and multiplication. The full text of the questions is reported below, together with graphs showing the percentage of pupils who answered correctly, in JSS and SSS grade and for 2017 and 2018 separately.

Box 5: Comparing results across SGLA I and II for specific questions

Examples of English items

District	Headquarter town	Area (km^2)	Province	Population in 2004	Population in 2015
Bombali	Makeni	7,985	Northern Province	408,390	606,183
Koinadugu	Kabala	12,121		265,758	408,097
Port Loko	Port Loko	5,719		453,746	614,063
Tonkolili	Magburaka	7,003		347,197	530,776
Kambia	Kambia	3,108		270,462	343,686
Kenema	Kenema	6,053	Eastern Province	497,948	609,873
Kono	Koidu Town	5,641		335,401	505,767
Kailahun	Kailahun	3,859		358,190	525,372
Bo	Bo	5,219	Southern Province	463,668	574,201
Bonthe	Mattru Jong	3,468		139,687	200,730
Pujehun	Pujehun	4,105		228,392	345,577
Moyamba	Moyamba	6,902		260,910	318,064

Item 1: The name of the head quarter town of some districts is different from the name of the district. How many districts are like this?

A. 5 **B.** 7 **C.** 9 **D.** 12

Item 2: The districts in the eastern province are:

A. Kambia, Kenema and Kono
B. Kailahun, Kenema and Kono
C. Kenema, Koinadugu and Kono
D. Kailahun, Kambia and Kenema

Item 3: Choose the sentence that is written correctly.

A. Me, Abu and Kai plan to go to the movies.
B. Jenneh and I collected bottles to take home.
C. My teacher gave the homework to Hawa and I.
D. Marie and me walked up the hill with our bags.

Box 5: Comparing results across SGLA I and II for specific questions (continued)

Examples of Maths items

Item 1: Add

$$\begin{array}{r} 6{,}259 \\ +4{,}653 \\ \hline \\ \hline \end{array}$$

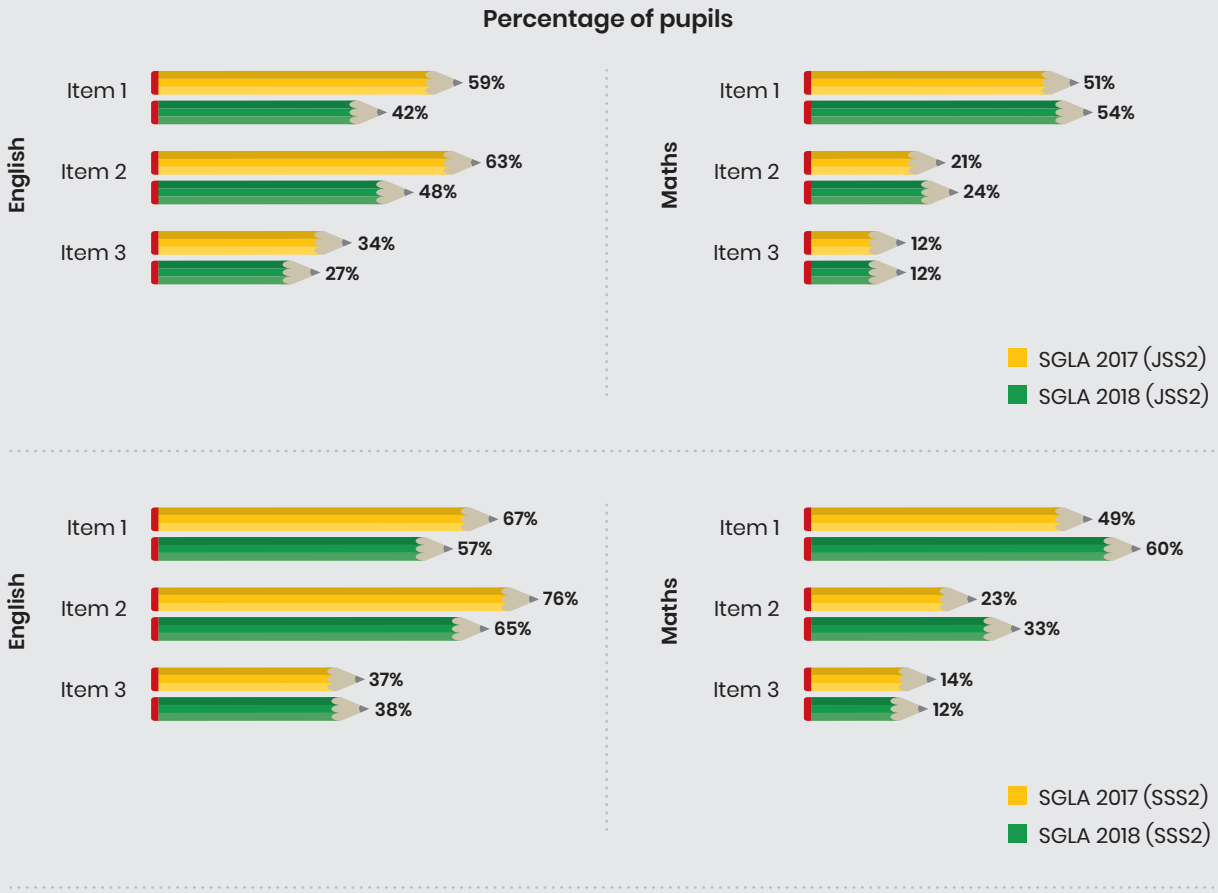
Item 2: Write three hundred and twenty-one thousand, five hundred and fifty-four in figures.

Item 3: The figure below represents a rectangular garden bed 8 metres long and 3 metres wide. Answer the next two questions about this garden bed.

What is the perimeter of the garden bed?

A. 8m **B.** 11m **C.** 22m **D.** 24m

Figure 10: Notable differences in pupil performance for specific questions



Source: Secondary Grade Learning Assessment survey (May-June 2018), pupil learning assessment.

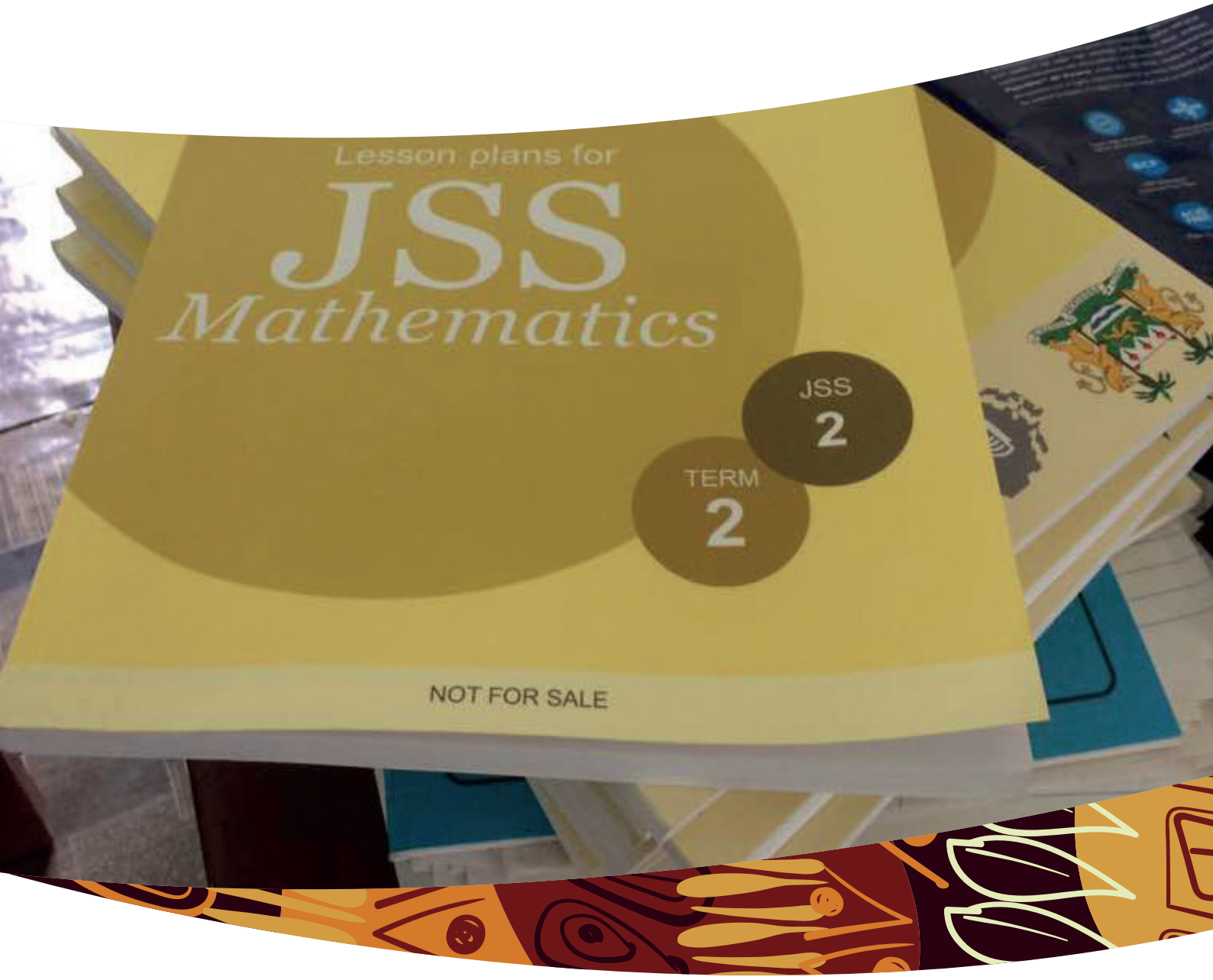
Concluding remarks

The main overarching observation from both rounds of SGLAs is that secondary grade learning levels in Sierra Leone are low. Large proportions of pupils do not demonstrate more than basic English and maths skills despite completing eight (JSS2) to 11 (SSS2) years of formal education and passing the NPSE and BECE. In fact, this year in SGLA II, there is a small but real drop in English language skills – we thoroughly need to understand why.

There is very little progression in pupils' learning outcomes from lower to higher bands as they move up the grades. Starting with a weak foundation in JSS, pupils are understandably unable to capitalise on previous knowledge and therefore progression in learning from JSS to SSS grades is minimal. Despite 8-11 years of schooling and having officially passed the NPSE, a large proportion of pupils in both grades are demonstrating no more than some very basic English and maths skills and will most likely find it very difficult to respond to the pace of the BECE or WASSCE curriculum which makes much more ambitious demands from its exam-takers.

Those who demonstrate some of the more demanding skills are more likely to be male pupils, from wealthier households, whose schools are less remotely located and are typically from the Western or Eastern regions, while those who perform lower on average are more likely to be female pupils, from less wealthy households and remote schools – a combination of these is likely to imply a multiple burden of disadvantage for the pupil. The causes and underlying driving mechanisms for this difference in performance should be important areas for further investigation.

3 Teaching practices in secondary schools



3 Teaching practices in secondary schools

This section presents evidence on the current state of classroom practices in junior and secondary schools in Sierra Leone on a sample of 2,023 teachers.[1] Before discussing the results in detail, some background information on teachers is presented in the box below, to help contextualise the findings.

Box 6: Background characteristics of JSS teachers in SGLA II

- **Only 5 per cent of sampled JSS and SSS teachers are female (same as SGLA I).** The western region has a significantly higher proportion of female JSS and SSS teachers at nearly 8 per cent. This is significantly larger than other province. The eastern and north-western regions rank the lowest, where female teachers constitute around 1 per cent of the sampled JSS and SSS teachers.
- **Just over a third (34 per cent) of teachers have the Higher Teacher Certificate, HTC, (secondary) qualification (same as SGLA I).** There is wide regional variation: northern region (48 per cent) while eastern region (26 per cent).
- **The average age of teachers is 33.5 years**, against a figure of 35 years from SGLA I.
- **Average teaching experience is 9.5 years**, against 11 years in SGLA I. Southern region has the most experienced teachers while there is insignificant difference in teacher experience among the other regions.

3.1 Quantity of instructional time and pupil-teacher ratios

3.1.1 Teaching hours

Teachers sampled in both rounds of the survey, on average, taught for just over 12 hours in a standard week. The number of hours taught per week amounts to approximately two and a half hours of teaching per day (or less than half the standard school day).[2]

SSS teachers were found to spend more time teaching per day than their JSS counterparts (roughly 30 minutes more per day). The average SSS teacher reported that they taught for about 14 hours in a week (2 hours 50 minutes per day) whereas this figure was a couple of hours lower at 12 hours a week (2 hours 19 minutes per day) for JSS teachers. These results are very similar to those from SGLA I.

In SGLA I, we also noted that one in three teachers (33 per cent) reported significant disruptions to their instructional time in the past two weeks, although this varied substantially across provinces.[3] The average disruption was as high as four days in the last two weeks. This was a day higher at SSS level, with teachers reporting an average of five days of classes disrupted in the past two weeks, compared to four days in JSS. According to teachers, disruption was most often linked to pupil absenteeism, which led to suspension of classes. This was followed by disruption due to ongoing exams or teachers being away from school due to trainings or workshops.

The average teacher teaches for **two and a half hours per day**.

This amounts to less than half the standard school day.

1 The eligibility criteria for a teacher to be included in the sample was that they should be teaching English and/or maths in JSS or SSS levels and present in school on the day of the survey. Unless otherwise specified, this is the reference population for results in this section.

2 The average teacher taught for 2 hours and 28 minutes per day. This was calculated by asking teachers the number of periods they taught and the average length of a standard period. The length of the standard school day in secondary schools in Sierra Leone is approximately 5.5-6 hours (including breaks) in single shift schools and 5-5.5 hours in double shift.

3 The start of the survey in mid-May 2017, immediately followed a period of over 3 weeks of school closure due to a national voter registration exercise in the country.

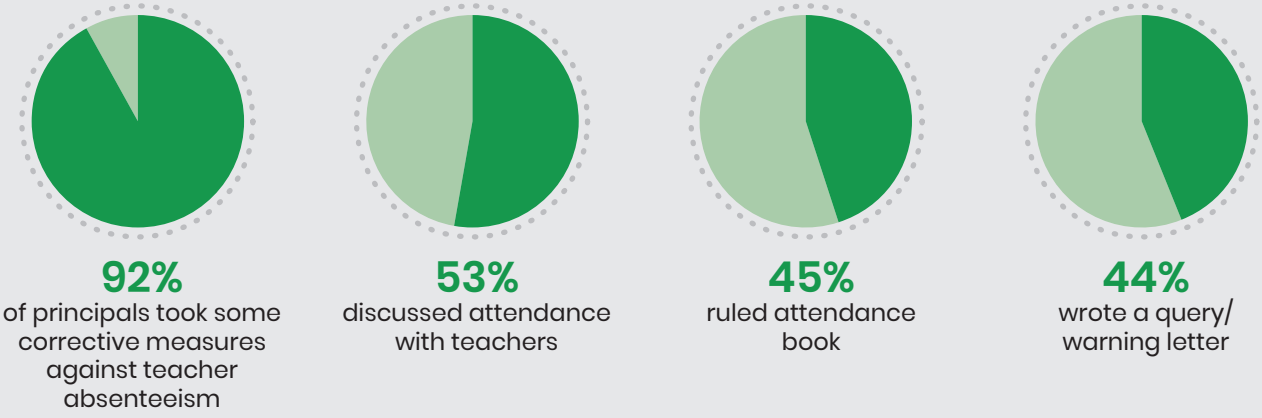
3.1.2 Teacher absenteeism from school

According to teachers sampled for SGLA II, the main reason for being absent from school was own or family illness, with 67 per cent of teachers reporting this. However, principals linked teachers' absence from school to low levels of teacher salary and remuneration (51 per cent of principals mentioned this in SGLA II).[4] This could be due to poor motivation because of low remuneration, but the underlying mechanism connecting low remuneration to teacher absenteeism is difficult to fully disentangle in a quantitative survey. The other common reason for teachers' absenteeism was social or religious obligations requiring them to be away from school, with 18 per cent of teachers reporting this in SGLA II.

Explaining their own absence from schools – be it authorised or unauthorised absence – principals particularly spoke of attending meetings or events outside of school (60 per cent of principals) as well as own or family health issues (31 per cent).

Nearly all principals from SGLA II (92 per cent) reported taking some corrective measures against teacher absenteeism. Similar to results from SGLA I, the most commonly cited action was to discuss the issue with teachers (53 per cent), followed by principals who reported the ruling attendance book at opening time and following up absences (45 per cent). Principals also wrote letters or queries of warning or reprimand (44 per cent). The province-level results are very similar to national results, with little variation across provinces: vast majority of principles reported taking action against teacher absenteeism, with the three most-commonly cited reasons being the same as reported at the national level.

Figure 11: Corrective measures taken by principals against teacher absenteeism



3.1.3 Pupil-teacher ratio

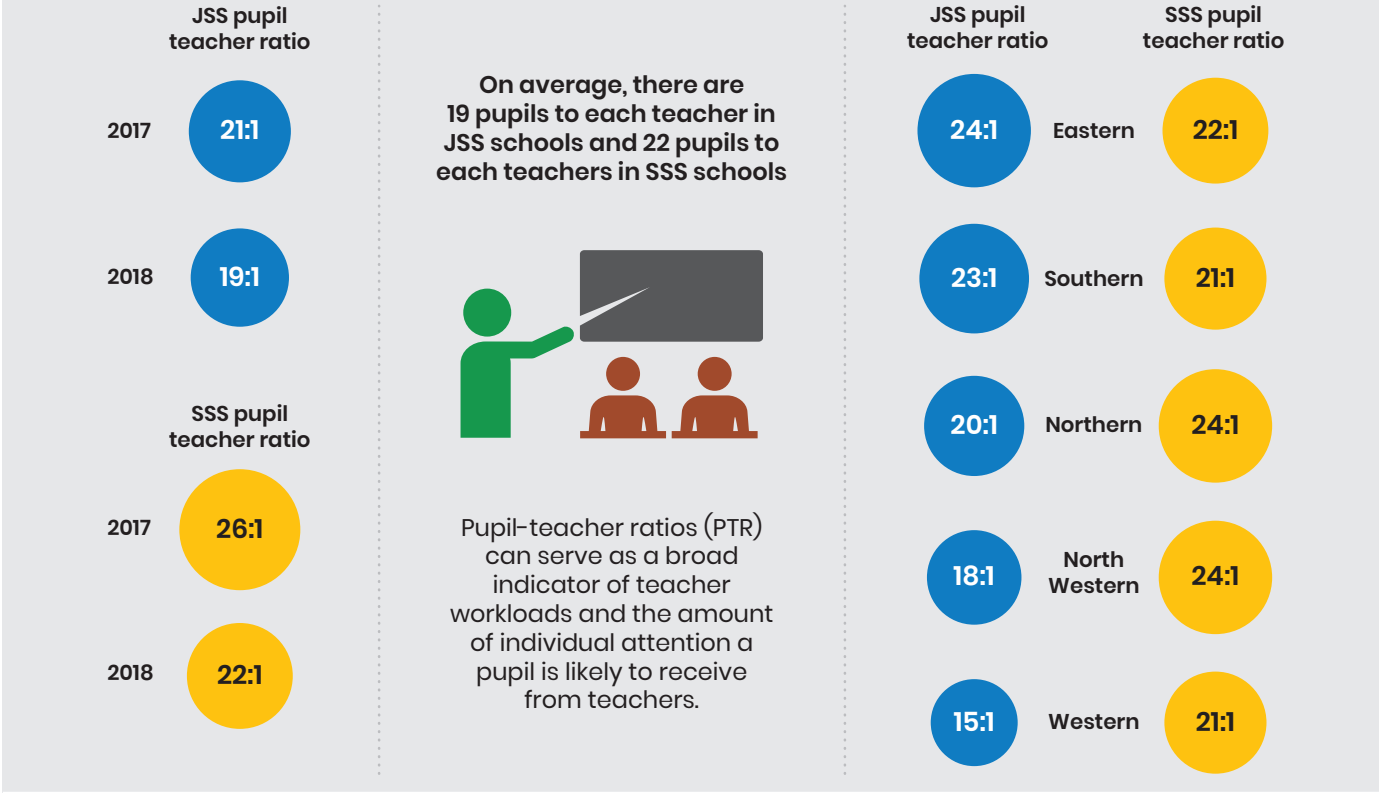
Pupil-teacher ratio (PTR)[5] serves as a broad indicator of teacher workload and the amount of individual attention a pupil is likely to receive from teachers. The numerator is the total number of pupils enrolled in a given JS or SS school, whereas the denominator is the total number of teachers teaching in that school. Schools that have both JSS and SSS sections are counted separately in each grade category, with the appropriate sampling weight. Information on PTRs comes from the principal interviews, and is largely drawn from school registers.[6]

4 Based on a sample of 694 heads of schools interviewed in the SGLA 2018.
5 The average PTR counts teachers teaching both JSS and SSS grades once; while the PTR at JSS (SSS) counts all the teachers who teach in JSS-sampled schools (SSS-sampled schools), even if they also teach at the other levels. Information on numbers of teachers and pupil enrolment was collected as part of the principal interviews.
6 We do not have information through this survey on availability of specialist teachers in English and maths.

SGLA II found that PTR is relatively small and manageable, and similar across JS and SS schools. These figures are reported in the graph below. On average, there are 19 pupils to each teacher in JSS schools and 22 pupils to each teachers in SSS schools. The corresponding figures on PTR from the baseline survey were higher but only slightly, with 21 and 26 pupils per teacher in JS and SS schools respectively.

Province-level PTRs are also shown in the figure below. PTRs are higher in SS schools relative to JS schools in the northern, western and north-western provinces. JSS schools in eastern and southern provinces have relatively higher PTRs compared to the national average of 19:1.[7]

Figure 12: Pupil-teacher ratios at national and province levels



3.2 Use of MBSSE lesson plans

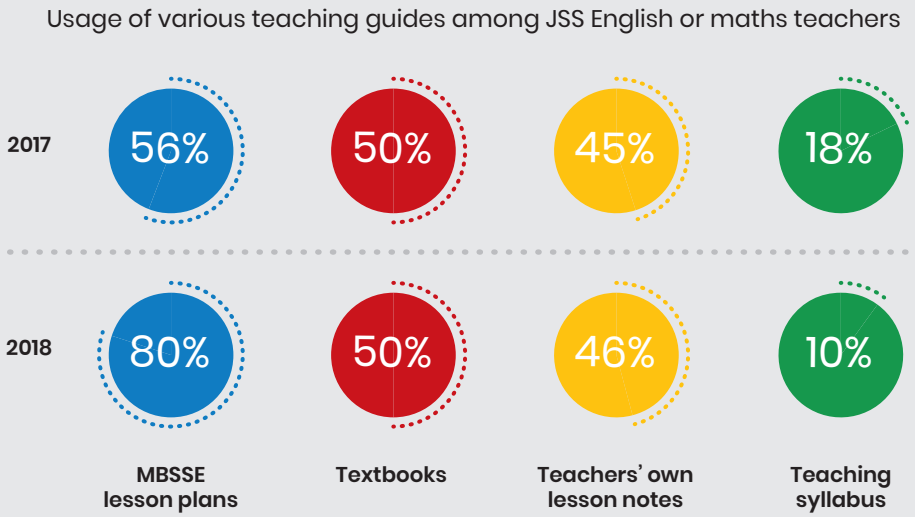
The SGLA also interviewed teachers about teaching guides used to help plan and prepare for their lessons. In April 2017, MBSSE distributed lesson plans in Language Arts and maths amongst 40,000 primary and JSS teachers across Sierra Leone to support delivery of high quality classroom instruction. In this regard, the timing of the first SGLA survey in May-June 2017 provided an interesting opportunity to capture baseline usage trends and get initial feedback from teachers on the structure, content and usefulness of lesson plans. SGLA II now allows us to assess whether use of lesson plans has been further consolidated among teachers, as well as gather teachers' feedback the lesson plans.

In what follows we present results from the teacher interviews from SGLA II. Comparisons with outcomes from the teacher interview in SGLA I are also reported, where relevant.

Almost all secondary school teachers used some form of teaching guide to plan and prepare for their lessons, with a substantial proportion of teachers (80 per cent) reporting the use of MBSSE lesson plans for this purpose. This is 24 percentage points higher than last year, where 56 per cent teachers had reported using the lesson plans. Similar to the baseline, other important teaching guides continue to remain textbooks (around 50 per cent) and lesson notes (around 46 per cent) – usage of these teaching guides has largely remained stagnant unlike lessons plans where a large year-on-year increase is observed.

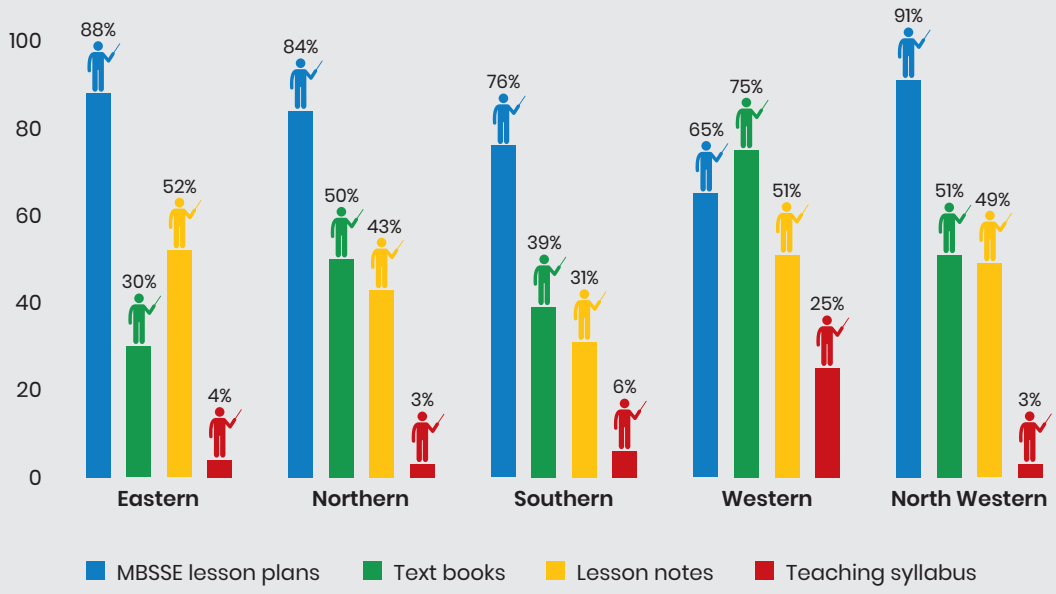
7 In preliminary regression analyses, we do not find any clear pattern between PTR and remoteness of school, or PTR and overall pupil performance.

Figure 13: Common teaching guides used by teachers



At the province level, some variation is observed in the different forms of teaching guides used. In the western province, the most commonly cited teaching guide is textbooks (75 per cent of teachers). For all other provinces, MBSSE lesson plans are the most commonly cited guide (76% or above in the 4 provinces).

Figure 14: Common teaching guides used by teachers, by province



Teachers who reported using MBSSE lesson plans were further asked to share feedback on the lesson plans, and how they were able to use them in their teaching.[8] Similar to the baseline survey, teachers were read out 23 different statements related to these themes and asked the extent to which they agreed or disagreed with each one. Statements were clustered around:

- appropriateness of the length of lesson plans,
- structure and ease of use,

8 This part of the survey was only administered to a teacher if she indicated that they taught English and/or maths to at least one grade of JSS, since at the time of SGLA II, MBSSE provided printed lesson plans only at the JSS level and only for two subjects i.e. Language Art and maths. Consequently, of the total 2,023 teachers, the sub-sample of teachers that answered questions about their use of teaching guides was 1,251 teachers.

- appropriateness of the level of difficulty of content,
- how lesson plan content and examples related to pupils,
- how pupils' learning and understanding could be assessed through lesson plans.

As per teachers' own self-reported responses, they can generally understand the use and purpose of lesson plans to facilitate learning. However, they struggle to incorporate all the prescribed activities in the lesson plans within the duration of one period. This could be driven by a range of factors, such as teachers' own mastery of the subject material (especially if they lack subject specialism); or constrained lesson time (especially in shift schools); or the lesson plans indeed being more ambitious than what teachers can feasibly deliver within one period.

When asked if they felt they understood how to use the lesson plans, almost 97 per cent of teachers reported that they agreed or strongly agreed with the statement. A similar pictured emerged when teachers were asked if they understood what pupils might learn when using the lesson plan, with 32 per cent and 66 per cent strongly agreeing and agreeing with the statement, respectively. Nearly all teachers (99 per cent) reported that they could assess whether pupils were understanding the content of the lesson plans. However, more than 60 per cent of respondents also reported that they struggled to fit all activities in the lesson plans into one period. This figure, despite lower than in baseline,[9] is still indicative of a potential area for improvement for the lesson plans.

The table below summarises teachers' responses from SGLA II on how they are able to use lesson plans.

Figure 15: Teachers' ability to use MBSSE lesson plans

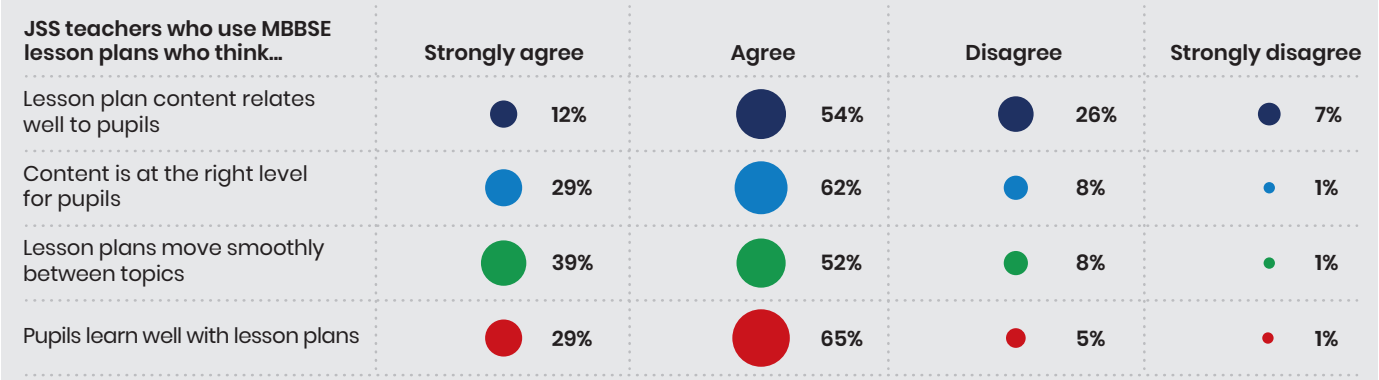
JSS teachers who use MBBSE lesson plans who are able to...	Strongly agree	Agree	Disagree	Strongly disagree
Understand how to use lesson plans	37%	60%	3%	0%
Understand what pupils might learn	32%	66%	2%	0%
Check if pupils are understanding content	36%	63%	1%	0%
Fit all activities into one period	9%	30%	51%	10%

Source: Secondary Grade Learning Assessment survey (May-June 2018), teacher interview.

Teachers also gave positive feedbacks on the design of the lesson plans. They considered the lesson plans to be well-structured, and their content to relate well to pupils. About 92 per cent of teachers felt the lesson plans moved smoothly between topics, making them easy to understand. A similar majority (94 per cent) also said that they felt the lesson plans helped their pupils learn well. Consistently with SGLA I, vast majority of teachers (91 per cent) said the content of the lesson plans was not at the right level for their pupils. However, a third of the teachers also continued to be concerned that some content (especially examples used to explain concepts) did not relate well to the context and realities pupils were used to. These findings are summarised in the table below.

9 66 per cent of teachers sampled in SGLA I, when asked whether they could fit all activities into one period, disagreed with the statement.

Figure 16: Teachers' feedback on MBSSE lesson plans



Source: Secondary Grade Learning Assessment survey (May-June 2018), teacher interview.

When interpreting the figures from these tables, it is worth remembering that results may be affected by a social desirability bias, whereby teachers may have felt compelled to answer questions in a way that is seen favorably by others. Readers are therefore encouraged to interpret these results as an indicative assessment of lesson plans uptake and use.

JSS teachers teaching English and/or Maths who reported not using MBSSE lesson plans were also asked about the main reasons for not doing so. A large majority reported not having received the lesson plans and/or not having received training (86 and 32 per cent respectively).

3.3 Teachers' understanding of lesson plan content

In SGLA II, we also introduced a short assessment of teachers' own understanding of the lesson plan content. They were asked two questions:

- Teachers asked to match grade-specific learning objectives, picked directly from the lesson plans, to their corresponding JSS grades, as a quick test to assess their understanding of the lesson plan content. For this section of the interview, teachers were given three flash cards with learning objectives for each subject (English and math), which they had to match with the corresponding JSS grade from 1 to 3. They could not assign more than one objective to a single grade. Only 40 per cent teachers could correctly match learning objectives to the appropriate JSS grades.
- Teachers were asked to the name the five standard parts of a lesson plan, in any order they wish: Opening; Introduction to the New Material ("I Do"); Guided Practice ("We Do"); Independent Practice ("You Do"); and Closing. Only 35 per cent of teachers could correctly name all five parts of the lesson plan.

As the above discussion has shown, it is encouraging to note a vast majority of teachers are reporting the use of and giving positive feedback on JSS lesson plans. However, what is concerning is that – based on a mini assessment – it is clear that teachers' own understanding of the lesson plan content is fairly weak. Further distribution, teacher training and support, and coverage of other subjects and SSS grades should be pursued. This survey could be complemented by qualitative inquiry into the effectiveness of lesson plan usage. In addition, potential problem areas identified by teachers, such as length of modules and relevance of content to local contexts should be considered by lesson plan developers for further revision and improvement.

4 School leadership and management

4 School leadership and management

What are some of the school management and leadership practices being employed by secondary school principals in Sierra Leone? Are they providing supportive supervision and pedagogical support to teachers, and how? How are they dealing with issues like teacher and pupil attendance? Are classrooms and schools inclusive to pupils from diverse learning needs? Are schools adequately supported by external supervision from, say, school inspectors? Are these results different from the findings from the 2017 survey? In this section we attempt to answer these questions.

Before discussing the results in detail, some background information on principals sampled in SGLA II[1] is presented in the box below to help contextualise the findings, and a comparison is given with the results from SGLA I.

Box 7: Background characteristics of JSS and SSS principals and school ownership

A total of 694 heads of schools were interviewed, which consisted of 260 principals, 118 assistant or vice principals, 299 acting principals, 5 proprietors and 12 heads of schools whose position could not be classified as any of the above (e.g. senior teachers or school finance officers).

- Less than 10 per cent of all heads of schools interviewed are female, in both rounds of the survey. The figure is significantly larger in the western province at 17 per cent and much lower for the northern, eastern and north-western provinces with figures of 3, 3 and 2 per cents respectively
- The typical head of school was 43 years old (46 years old in baseline). Variation in principal age and experience is small across provinces. Only the southern province stands out as having the highest average age.
- On average, they had 18 years of experience in teaching profession
  - Had 6 years of experience in heading any school
  - Had 5 years of experience in heading the current school
  - 86 per cent of them were heading a school for the first time.
- 50 per cent had Higher Teacher Certificate (Secondary), compared to 41 per cent from baseline.
- 30 per cent had a B.Ed./BA (Ed)/BSc. (Ed) or equivalent Bachelor degree in education, compared to 41 per cent from baseline.
- 10 percent had a M.Ed./MA(Ed) or equivalent Master or MPhil/PhD in education, against 11 per cent from baseline.
- 11 per cent of all secondary schools from SGLA II are government-owned, while the rest are privately owned. Over 60 per cent of these privately-owned schools receive government assistance. Private schools are predominantly mission schools.

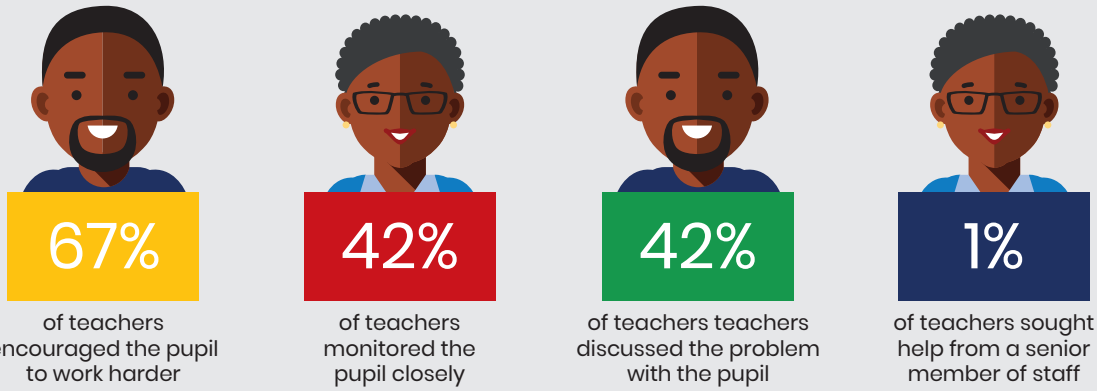
1 The term 'principals' is used to refer to all the types of heads of schools. In some schools where both JSS and SSS wings had been sampled, the head was common across both wings and hence interviewed only once covering all JSS and SSS questions. Hence, the total number of respondents for the principal interview is less than the total number of schools in the survey.

4.1 School inclusiveness

Are classrooms and schools inclusive to pupils from diverse learning needs? In SGLA II, teachers and principals were asked about school inclusiveness, and whether they had any pupils in their class that were who were particularly struggling with their studies relative to other pupils (for whatever reason). Almost all (97 per cent) of teachers reported having at least one weak pupil who struggled with lessons in their class during the previous term. This was substantiated by principals, 93 per cent of whom reported having weak pupils in their school.

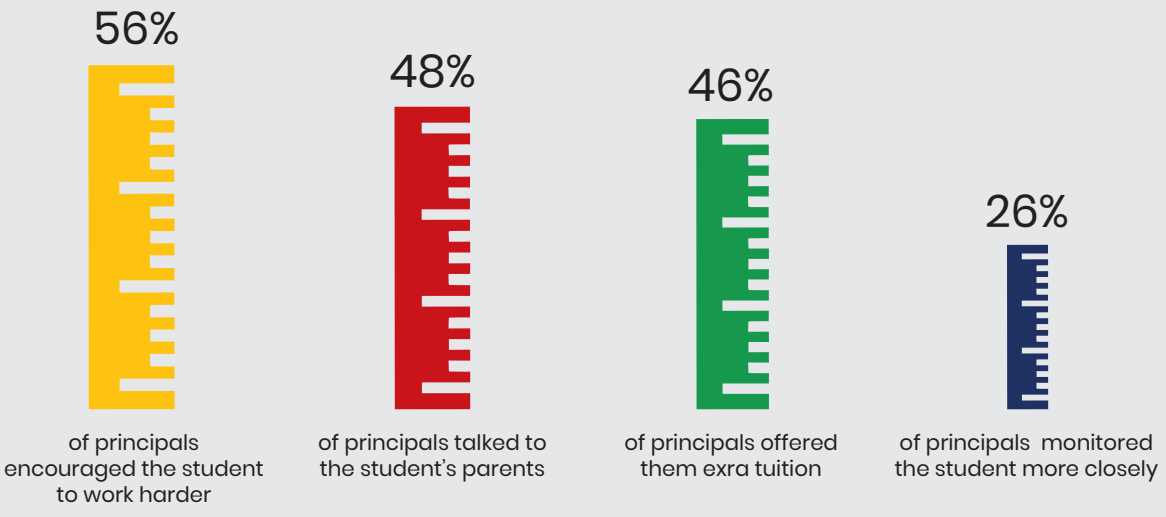
When asked about actions taken to support weak pupils, 99 per cent of teachers reported taking at least some action. The most cited forms of support were encouraging the pupil to work harder (67 per cent of teachers reported taking this action), monitoring the pupil closely (42 per cent) and discussing the problem s/he is facing (42 per cent). Only around 1 per cent of teachers reported seeking support from a senior member of staff. Principals were also asked about actions to support weak pupils: 56 per cent of the respondents said they encouraged pupils to work harder, 48 per cent reported talking to the pupil's parents and 46 per cent reported offering extra tuition. This information is summarised in the figures below.

Figure 17: Actions taken by teachers to support 'weak' pupils



Further, 73 per cent of principals also reported having 'marginalised' pupils in their school (e.g. pupils from low-income families, relatively to their peers; pupils with physical or intellectual disabilities). Principals were also asked about actions taken to support marginalized pupils. The most common forms of support reported by heads of schools II were encouraging the pupil to work harder (49 per cent) and offering extra tuition (43 per cent).

Figure 18: Actions taken by principals to support marginalised pupils



4.2 Staff meetings and formal one-on-one meetings

Staff meetings appear to be common in secondary schools in Sierra Leone, with approximately 94 per cent of teachers and 96 per cent of principals reporting that they have had staff meetings in the previous term (January to April 2018). An average teacher attended two such meetings in the second term[2] and an average principal conducted two such meeting in the same period: this translates roughly into one staff meeting a month on average, and is consistent with the results from the baseline.

It is difficult to fully capture the effectiveness of these meetings within a quantitative survey like the SGLA. However, responses suggest staff meetings largely deal with day-to-day school issues and administration, but also increasingly focus on pedagogy and learning. According to principals, the most common topics of discussion during these staff meetings were teacher absenteeism, school administration and teaching practices/pedagogy. Only 5 per cent of principals reported that their school did not maintain any meeting notes. More than half of the respondents (56 per cent) reported meeting notes are usually maintained but were not available at the time of the interview, whilst close to 39 per cent of principals were able to show the meeting notes.[3]

4.3 Lesson observations

Lesson observations can be a useful tool for measuring and improving teachers' pedagogical effectiveness in a classroom. Effective lesson observations can potentially serve several purposes, including:

- Describing the current status of pedagogical practice and identifying issues;
- Investigating instructional inequities by gender, socio-economic status, race/ethnicity of pupils; and
- Improving current teaching practices, especially if observations are followed up by detailed and constructive feedback to teachers.

Results from SGLA II suggest that most junior and senior secondary schools in Sierra Leone have active systems of internal lesson observations, with an average teacher being observed approximately once a week – results being consistent with SGLA I baseline findings. A large majority of principals (89 per cent) reported that they had conducted lesson observations during the previous term. This was substantiated by teachers – a majority of them (69 per cent in SGLA II, compared to 63 per cent in SGLA I) said their lessons had been observed in the previous term. Lesson observations were usually conducted by the principal, vice principal or acting principal.[4] Teachers in SGLA II reported an average of 5 lessons observed during the term, compared to 6 in 2017.[5]

of teachers said their lessons had been observed at least once in the last term and the typical teacher had roughly one lesson observation per week.

It is difficult to comment on the number of lesson observations per term because there is no established national guideline for the required number of observations within a given time period. The results, however, suggest that lesson observations are a regular practice, and more than two-thirds of principals reported keeping a schedule of lesson observations – although only 14 per cent of principals were able to show one. Keeping notes or records of lesson observations is less common, with 69 per cent of principals reporting not doing so.

2 This figure is lower than the actual average number of staff meetings per term, because answers to the question on number of meetings per term were top-coded at 15.
3 A majority of secondary school teachers also have formal one-on-one meetings with their principal or head of department: 67 per cent of teachers reported having such meetings in the previous term, at an average of two meetings over the term. This figure is lower than the actual average number of one-to-one meetings per term, because answers to the question on number of meetings per term were top-coded at 15.
4 Teachers sampled in SGLA 2018 reported that most of these observations were conducted by principals (56 per cent), heads of department (21 per cent) and acting principals (19 per cent).
5 This figure is lower than the actual average number of lesson observations per term, because answers to the question on number of lesson observations were top-coded at 15.

The principal and teacher interviews from SGLA II included questions on lesson observation feedback, to provide some insights into the effectiveness of these observations. Nearly 93 per cent of principals reported that some form of feedback is provided after lesson observations. This was substantiated by teachers, 80 per cent of which reported receiving some feedback on lesson observations. The most common type of feedback, as reported by principals, is a one-on-one discussion with the teacher, with 89 per cent of principals reporting this action being taken in their school. Other types of common feedback on lesson observations are presented in the figure below.

At the province level, results are very similar to the national-level findings. Upwards of 90 per cent principals across all provinces claim that some form of feedback from lesson observations is provided. Furthermore, the most commonly cited feedback in all provinces is to discuss with teachers one-on-one. In the western province, discussing the observations with a senior member/principal is also fairly common, 49%, and significantly higher than what is observed in other provinces.

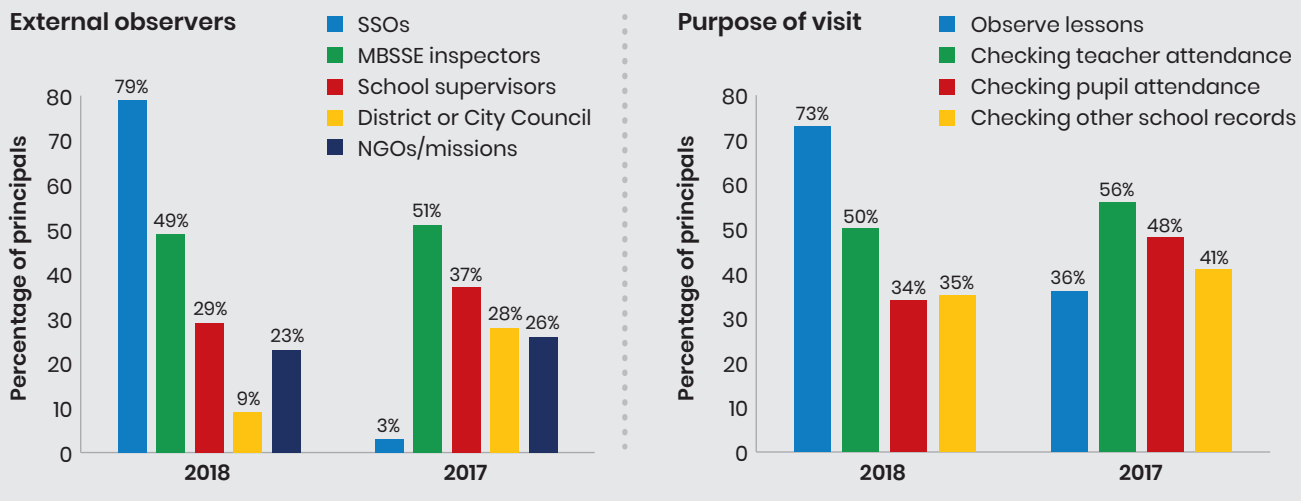
Evidence on the extent of teacher absenteeism is provided during school observations, when data collectors were asked to go around the school and count the number of classes with pupils but no teachers. In SGLA II, 26 per cent of classrooms were unattended, i.e. they had pupils in them but no teachers. A question that remains unanswered is why, despite the robust number of lesson observations per term, the average instructional time per teacher per day is limited and there is fairly high prevalence of unattended classrooms. This remains a subject for future enquiry.

An unattended classroom

4.4 External supervision

In addition to internal supervision through staff meetings and lesson observations, external supervisor visits are also conducted by various actors across JSS and SSS schools in Sierra Leone. A vast majority of principals (86 per cent) reported at least one external supervision visit during the previous term (January to April 2018) and on average six supervision visits over the same term – up from four visits per term in the baseline survey.[6] The most frequent external supervision visits were by school support officers or SSOs (reported by 79 per cent of principals in SGLA II but only 3 per cent in SGLA I). This is followed by MBSSE inspectors (49 per cent),[7] school supervisors (29 per cent)[8] and representatives from NGOs/missionary bodies (23 per cent). Compared to baseline results, a significantly larger fraction of principals reported visits from school support officers which shows initial signs of implementation and awareness of the SSO cadre now operational in JSS/SSS schools.

Figure 19: External supervision visits: frequency and purpose



6 Note that the number of visits was top-coded at 16. 21 per cent of principals reported receiving more than 16 visits, but these respondents are not included in the calculation of the average number of visits per term.

7 This was 51 per cent in SGLA I – no statistically significant difference.

8 This was 37 per cent in SGLA I – a statistically significant difference.

The main purpose of supervision visits, as reported by school principals sampled in SGLA II, was to observe lessons (73 per cent of principals), check teachers' and pupils' attendance (50 and 34 per cent respectively), and check other school records (35 per cent). The lesson observations by external supervisors were in addition to the ones reported by the internal observations by principals themselves as mentioned in the previous section.[9]

At the province level, the proportion of principals citing external visits during the previous term is as high as 97 per cent in the southern province and as low as 76 per cent in the western province. Of the external visits that have taken place, school support officers are the least frequent visitors in the western province relative to other provinces, with the north-west province citing highest frequency of SSO visits (94 per cent of principals). On the other hand, MBSSE inspectors were the most frequent external visitors in the western province, and lowest in the north-west province. Except these differences, province- and national-level results are largely comparable.

Most secondary schools in Sierra Leone had some type of school action- or school development plan (SAP/SDP) and interacted with parents and the wider community through some form of parent-teacher or community-teacher associations (PTA/CTA). Consistent with SGLA I findings, a large proportion of these bodies (88 per cent) continue to remain active, having met at least once since the last term, i.e. between January and April 2018.

4.5 A new SLM indicator

For the first time in the SGLA II, a new composite index has been introduced. Its objective is to provide an indicator for the quality of school leadership and management. Leh wi Lan plans to introduce training and support for secondary school principals in Sierra Leone to improve their school leadership and management (SLM). For this reason, and to provide useful information generally on SLM for policy makers and MBSSE staff, a number of indicators relating to SLM have been added to SGLA II. An SLM index has been constructed based on these indicators which covers five areas of SLM:

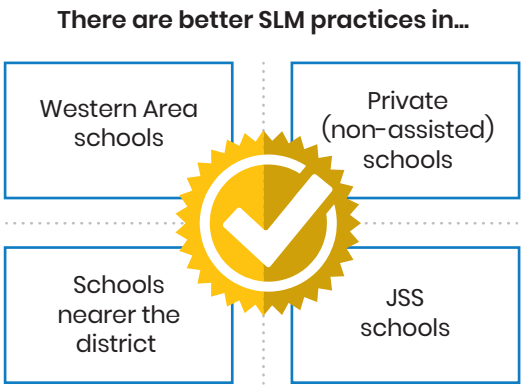
1. **Leading teaching:** The extent to which the principal, and other staff who manage the school, lead the development of teaching through training, observation, and monitoring.
2. **Administration and planning:** The administrative processes that the school has in place to keep lessons on schedule, ensure curriculum coverage, and finance the school.
3. **Interaction with the community:** This refers to the quantity and quality of interaction between the school, parents, other members of the community, and other local organisations.
4. **The inclusiveness of the school** to children whose performance is weaker or who come from marginalised groups
5. **Positive learning environment:** where school staff, as well as students, share common values and vision, and can discuss their progress and issues, and learn from each other.

More details on this new SLM indicator is provided in the technical annexes of this report.

9 Teachers were also asked about the frequency of such external lesson observations. Similar to the principals' response, 68 per cent of teachers reported to have received at least one lesson observation by an external supervisor in the previous term. Further, they reported the school support officers (SSO) to be the most frequent external observers (83 per cent), followed by MBSSE inspectors (20 per cent).

Headline results from the new SLM indicator

Analysis by province: The leading teaching, learning environment, and administration and planning indices, are consistent in suggesting that the western province has an advantage over the others provinces. This advantage is strongest in the case of leading teaching: i.e. the extent to which the principal, and other staff who manage the school, lead the development of teaching through training, observation, and monitoring. Northern and Southern states appear to have the worst challenges with school leadership and management. There appear to be particular relative shortfalls in terms of: leading teaching in the Southern province; with working with the community in the north; positive learning environment in Eastern province; and in administration and planning in the Northern and North-West provinces.



Analysis by level (JSS/SSS): JSS appear to be slightly better-managed than SSS, with significant differences in terms of leading teaching, positive learning environment, and in the overall school management index. There are no significant differences in terms of administration and planning, working with the community, or inclusion.

Analysis by school-type: There is some variation among school types, with private (mission) schools being better-managed while private (community) schools are worse-managed, than government-owned schools. There are statistically significant differences particularly in administration and planning, where private (community) schools seem to be particularly weak and private (mission) schools particularly strong. The advantage that the Western region appears to enjoy in SLM can largely be explained by school type. Some 72% of schools in the Western region are private (and non-assisted) and only 19% are government-assisted private schools; elsewhere in the country, more than half of schools are government-assisted.

Analysis by remoteness of school location: Schools which are further from district capitals are generally not as well-managed as those near the district capitals. The remoter schools are significantly worse in terms of leading teaching, the learning environment, and the overall school management indices. In terms of administration and planning, schools near district capitals (0-10km) are the strongest, but schools that are 10-20km away are the weakest.

Relationship with learning outcomes: The overall school management index is positively associated with students' English and mathematics scores, and the relationship is robust to controlling for province, school type, students' socioeconomic status, and the remoteness of the school. The effect is statistically significant, and substantial: moving from the 1 per cent worst-managed schools to the median school in the sample is associated with an increase in both English and mathematics scores of around 0.14 standard deviations.

5 Girls' safety in school

5 Girls' safety in school

Elimination of gender disparities in access to and completion of schooling is key to the achievement of the Sustainable Development Goal (SDG) of inclusive education for all. In Sierra Leone, although gender parity was achieved at the primary level in 2011, substantial gaps remain at higher levels of education and the probability of enrolment – which is equal for boys and girls up to approximately age 13 – declines for female pupils in higher grades (World Bank, 2014). Given societal norms for early marriage and heightened concerns for physical safety of girls – exacerbated by socioeconomic and geographic characteristics – ensuring that the school environment is such that girls do not feel vulnerable or threatened is of paramount importance.

The SGLA survey asked the sampled teachers a range of questions on girls' safety in school, in order to address the following research questions:

Box 8: Key research questions at baseline (Girls' safety in school)

- Do female pupils feel a general sense of physical safety in the school environment and on the way to/from school?
- Do female pupils feel safe visiting the school toilet? Do they absent themselves from school while menstruating?
- What is the incidence of sexual harassment faced by female pupils from teachers and male pupils, including instances of insults and "sex-for-grades"?
- Are there mechanisms available to female pupils for reporting harassment?

Source: Secondary Grade Learning Assessment survey (May-June 2018), teacher interview.

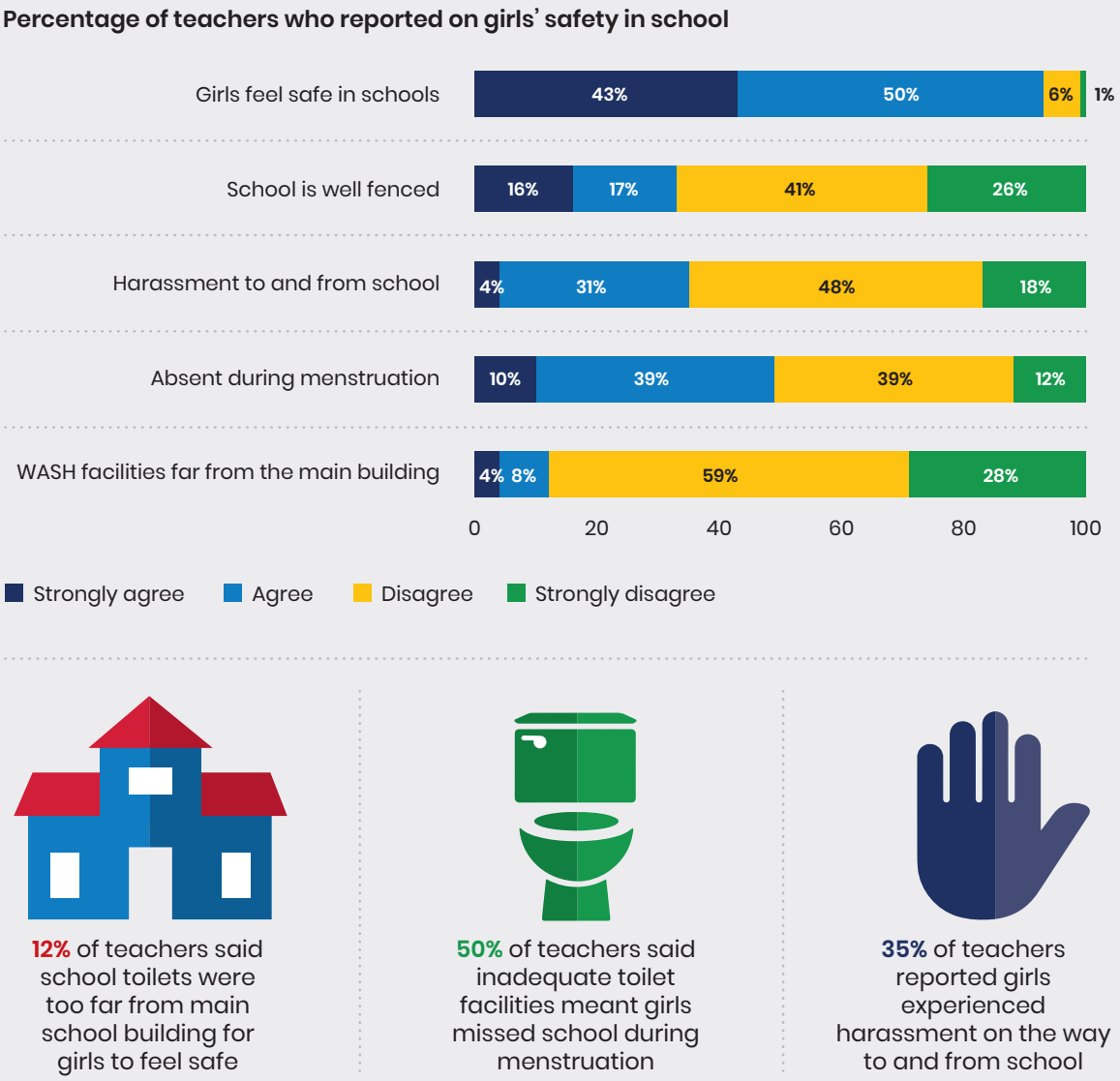
5.1 Physical safety in and on the way to school

The results on physical safety of girls are very similar to those reported by teachers in SGLA I. Teachers were asked if female pupils felt safe in the school and if they risked harassment on their way to and from the school. A significant majority of teachers (93 per cent) reported that girls overall felt safe in school. However, less than 40 per cent of the teachers reported that their school was well-fenced such that strangers could enter the school, and more than a third (35 per cent) of respondents reported that female pupils were subject to harassment while travelling to and from school. Teachers were also asked if school toilets were far from the main building with girls fearing going there alone, and if girls absent themselves from school due to fear of using the toilets during menstruation. Only 12 per cent of teachers felt that girls' toilets were far enough from the main school building such that female pupils did not feel safe using them, whilst almost half the teachers, i.e. 49 per cent, believed that girls had a tendency of absenting themselves from school during menstruation.

1 Given that questions discussed as part of this module were often quite sensitive in nature and it was not always possible to have a female enumerator interview girls, in SGLA II we did not administer these questions to female pupils themselves, only to their teachers. Enumerators were instructed to be particularly mindful of respecting gender relations when administering this set of questions in the teacher interviews. They were instructed to not express any views or judgements, nor provide any explanation of what each question meant. Hence, although it was not possible to eliminate the risk of respondents feeling uncomfortable to talk about girls' safety, the risk was mitigated to the extent possible.

The figure below summarises this information.

Figure 20: Girls' safety: physical safety and toilet facilities in schools



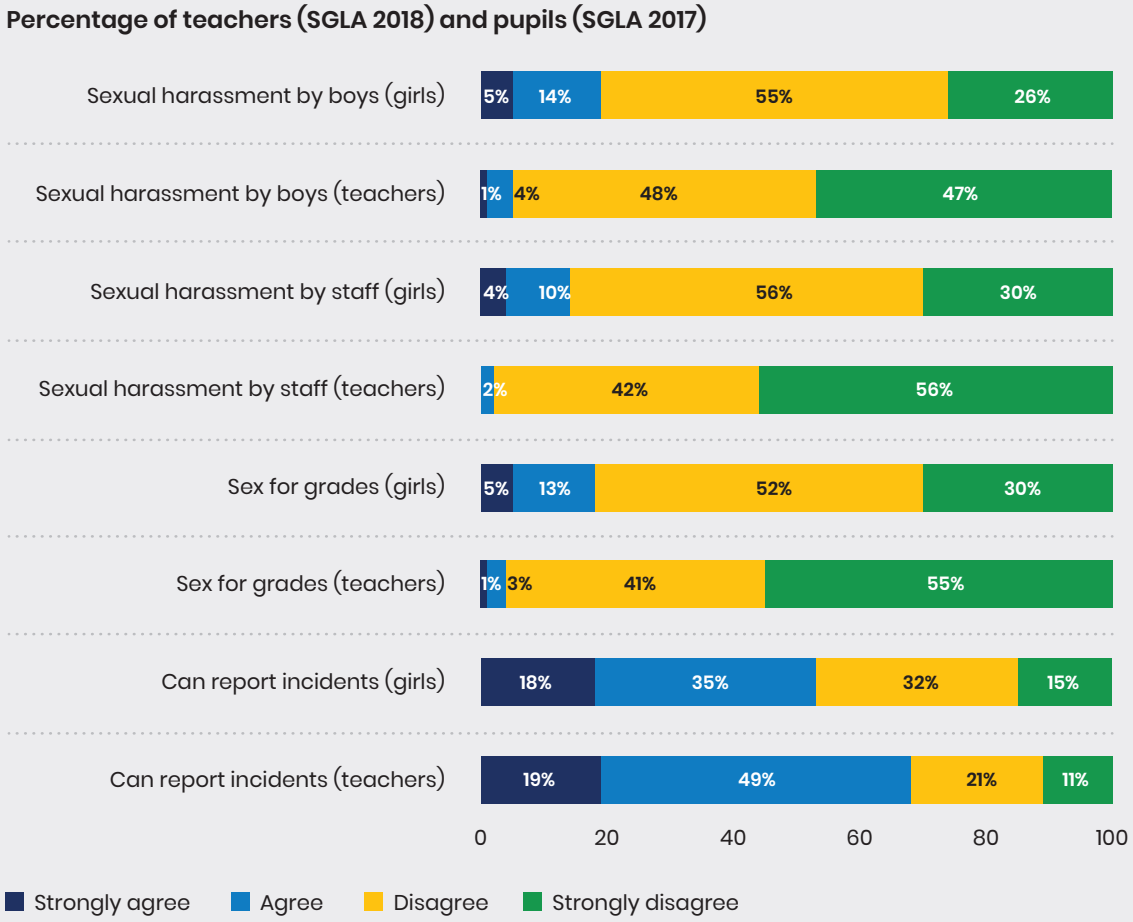
5.2 Sexual harassment

From the results of both SGLAs, it appears that teachers, the vast majority of whom are male, systematically underestimate or under-report the incidence of sexual harassment in their schools. Indeed, only 4 per cent of teachers (compared to 20 per cent girls in SGLA I) reported that girls in their school were subject to sexual harassment by male pupils, and only 2 per cent teachers (compared to 15 per cent girls) reported that girls experienced sexual harassment by male school staff. When asked about sex-for-grade, only 3 per cent of teachers (compared to 20 per cent girls) agreed to the statement that some male teachers in their school ask female pupils for sexual favours. However, mechanisms appear to exist whereby female pupils can report instances of sexual harassment in most schools, with more than two-thirds of teachers (68 per cent) agreeing this was the case. However, the effectiveness of these mechanisms is not known. These results are summarised in the graph below.[2]

2 The GLADI programme is establishing mechanisms for girls to report instances of sexual harassment and school safety. This includes School Safety Guides, girls/boys clubs, suggestion boxes in schools, etc., as well as supporting schools to organise School Safety Committees once a week. Since these are new initiatives, we are yet to find out the effectiveness of these mechanisms.

Province-level results on sexual harassment are very similar to the national results, with little variation between provinces. Furthermore, we find a positive though weak correlation between girls' safety in schools (i.e. greater physical safety and less sexual harassment) and girls' performance on the SGLA test.

Figure 21: Sexual harassment by school staff and male pupils



14%
of female pupils said girls were subject to sexual harassment from other staff members

18%
of female pupils agreed some male teachers asked girls for sexual favours in return for good grades

6 Schooling experience of pupils with disabilities

6 Schooling experience of pupils with disabilities

Pupils with disabilities face multiple forms of discrimination, which leads to their exclusion from society and school. Attitudes toward children with disabilities, as well as a lack of resources to accommodate them, compound the challenges they face in accessing education and performing well in school. Disability-sensitive schooling, therefore, involves not only ensuring that schools are well equipped with the necessary physical infrastructure, but also that teachers adopt teaching pedagogies and practices that integrate pupils with disabilities in the learning process. The attitudes of teachers, non-teaching staff and fellow pupils play is an integral part of this process.

This section presents results from a sub-sample of 2,000 pupils with some form of disability, across all the 700 schools included in SGLA II. The box below explains further.

Box 9: Pupils with disabilities in the SGLA (Definition and limitations)

Definition and types of disabilities

To incorporate various forms of disabilities, a broad definition was used alongside a list of possible disabilities to guide the selection of pupils. In the SGLA, disability was broadly defined as referring to any physical, mental or learning impairment that affected the full and effective participation of a pupil in learning. The disability classifications were based on a typology of 'functioning' provided by the Washington Group on Disability Statistics, using the World Health Organisation's International Classification of Functioning, Disability, and Health (ICF) as a conceptual framework (Washington Group, 2017). These included six core functional domains: seeing, hearing, walking, cognition, self-care, and communication. Each question has four response categories, which are read after each question:

- No, no difficulty;
- Yes, some difficulty;
- Yes, a lot of difficulty;
- Cannot do it at all.

Constructing a sub-sample of pupils with disabilities

Unlike SGLA I where a purposive sample of 200 pupils with one or more physical or intellectual disability were identified by teachers for a short test, SGLA II did not conduct any separate purposive sample for pupils with disability. Instead, all eight pupils in a school who were (randomly) selected for the assessment were administered the short Washington Group disability questionnaire (short-version). Among these pupils, those who reported having 'some difficulty', 'a lot of difficulty' or 'cannot do at all' were classified by 'pupils with disabilities' for the purposes of the SGLA II analysis. This amounted in a sub-sample of over 2,000 pupils.

Limitations of results presented in this section

Findings presented in this section have limitations due to the definitional complexities with the term 'disability', i.e. what it means and translates to in different languages and contexts. As there was no medical cross-examination as part of the SGLA to confirm the disabilities, the results and findings rely entirely on self-reported responses by pupils on their disability status. There is indicative and anecdotal evidence from field staff of pupils identifying themselves as having a disability in anticipation of receiving material or non-material support, e.g. a pair of reading glasses. These concerns limit our ability to robustly infer from these results and certainly not beyond the current sub-sample, as indeed children with the most severe disabilities are likely to be out of school. This, being a school survey, could not reach them to understand their barriers to accessing education.

Source: SGLA team.

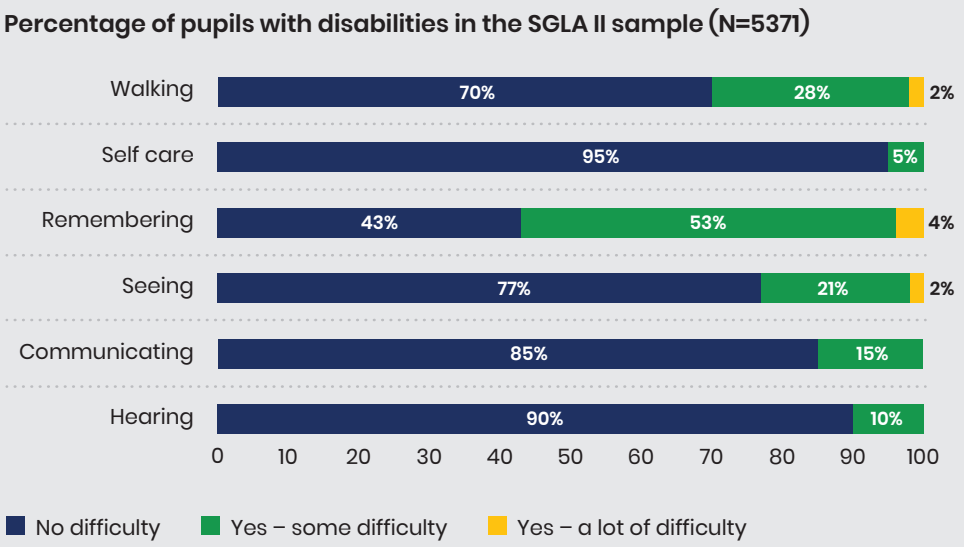
6.1 Background of pupils with disabilities

Around 64 per cent of all the sampled pupils in SGLA II (i.e. 2110 in total, out of 5371 pupils) reported having some form of difficulty in hearing, seeing, remembering, self-care, walking or communicating.[1] More precisely:

- **Remembering:** Almost 60 per cent of all sampled pupils reported having some or a lot of difficulty in remembering.[2]
- **Walking:** Almost a third (30 per cent) reported having difficulty walking. While difficulty in walking should not indicate difficulty in learning per se, it could inhibit a pupil's full and effective participation in schooling, especially in a school without appropriate physical infrastructure (e.g. ramps and railings).
- **Seeing:** Nearly 23 per cent of the sampled pupils reported having some form of difficulty seeing.
- **Hearing and communicating:** Difficulty in hearing and communicating was relatively less common among the sampled pupils, with a total of 11 and 15 per cent of pupils reporting difficulties in hearing and communicating respectively. This possibly indicates that these are among the more severe barriers to access and learning, and hence school-aged children with hearing or communication problems are either in special schools or out of school altogether.
- **Self-care:** 5 per cent pupils reported some difficulty with self-care (i.e. washing, bathing, wearing clothes)

There was no pupil in the SGLA II sample who reported 'cannot do at all' for any of the assessed disabilities. Province level disaggregation of disability statistics appears to be similar to that observed at the national level.

Figure 22: Types and extents of disabilities



6.2 Provision of infrastructural and teaching support

Questions on school environment and support for pupils with disabilities were part of the teacher questionnaire in SGLA II. These included noting if there was infrastructure such as ramps and toilets for disabled access, if there were specially designated staff to support pupils with disability, if teachers used inclusive teaching methods and, when required, if the school had extra classes outside of school hours for pupils with disability. Additionally, teachers were asked about any discriminatory attitudes by teaching and non-teaching staff (biased in favour or against), and behaviour of fellow pupils.

1 In what follows, the reference population is the 2,110 students who reported having any difficulty in hearing, seeing, communicating, walking, remembering or self-care.
2 The translation of 'cognition' with 'remembering' the Washington Group conceptual framework might have led to a higher proportion of pupils self-identifying with a difficulty.

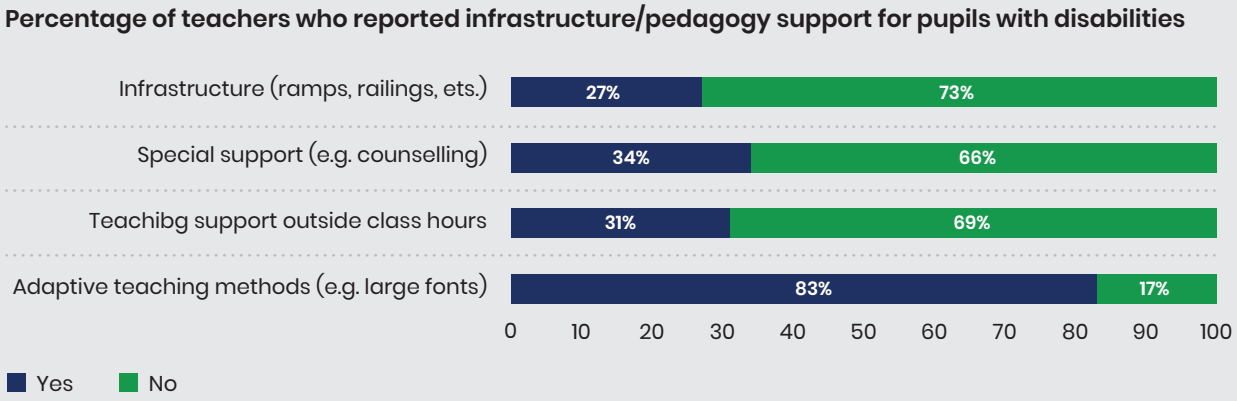
More than two-thirds of the teachers (73 per cent) reported that there was no provision of ramps, railings or any other infrastructural arrangements at their schools. Even if a school is single-storied, this could still pose a mobility challenge in accessing certain parts of the school which are raised above the ground. Similarly, 66 per cent of teachers reported no special support such as counselling provided to pupils with disabilities.

The vast majority of teachers said their school did not provide a **special physical infrastructure** or any other special support (e.g. counselling, help with lessons outside class hours).

Teachers were also asked if those with physical or learning difficulties were given additional teaching outside regular classes. A large majority of them (69 per cent) reported this was not the case. Teachers were also interviewed about their use of adaptive teaching methods (e.g. using large font for visual disability) to integrate pupils with disabilities into the learning process. A majority of them (83 per cent) self-reported that they did adapt their pedagogies to make the lesson delivery more accessible to pupils with disabilities, even though the extent and effectiveness of these techniques is not captured in this survey. When asked whether teachers in their school ever met with parents or other community members to talk about challenges for pupils with a disabilities, 68 per cent of teachers reported this was the case, and 90 per cent of them also reported the last such meeting happened during the current school year.

These results are very similar to those reported by teachers in SGLA I. A summary of the main results is reported in the figure below.

Figure 23: Physical infrastructure and pedagogical support for pupils with disabilities



6.3 Attitude and behavior towards pupils with disabilities

The UNESCO Global Monitoring Report 2015 highlights the low literacy and high dropout rates among pupils with disabilities, often due to stigmatisation, isolation and discrimination in the classroom or wider school environment (UNESCO, 2015). About 64 per cent of the teachers sampled for this survey agreed that harassment of pupils with disabilities was discouraged in their school. When questioned if the teaching or non-teaching staff discriminated in favour or against pupils with disabilities, for example, by grading them graciously or by not allowing them to participate, around 18 and 15 per cent of teachers respectively reported this was the case. Compared to baseline, results on the attitudes of other pupils towards pupils with disabilities seem to be less of a concern. Specifically, when asked whether other pupils interact freely with pupils with disabilities, around 74 per cent of teachers said they do. As part of the teacher interview, respondents were also asked whether they thought teachers at their school knew how to teach pupils with physical or learning disabilities and 80 per cent of respondents either strongly agreed or agreed with the statement. Furthermore, 73 per cent of teachers also reported there were people in their school they could turn to for advice, in case they had difficulties teaching pupils with disabilities.

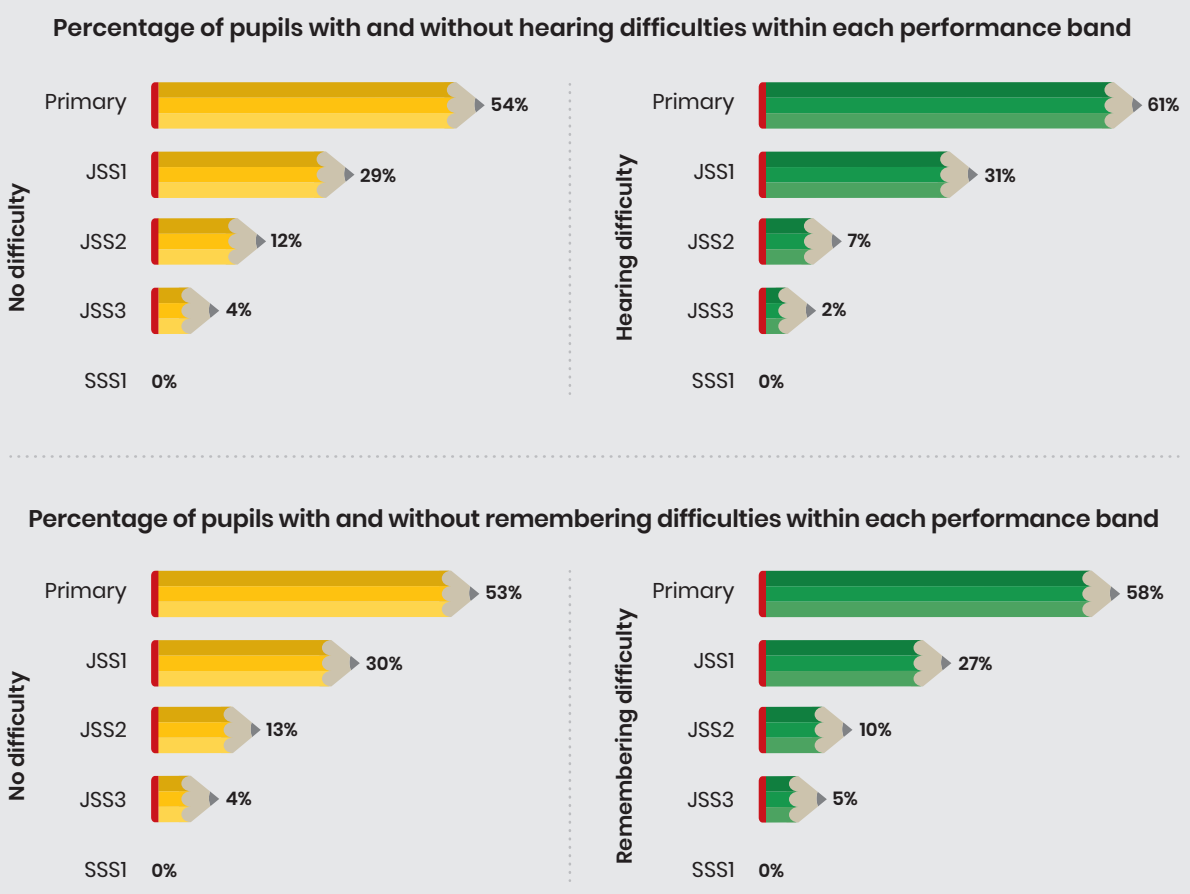
6.4 Learning outcomes of pupils with disabilities

This section compares learning outcomes of pupils with disabilities in from SGLA II with pupils that did not report any difficulty.[3]

Difficulties in hearing bears a significant negative correlation with pupils' performance in the learning assessment, both English and maths. We find that distribution of pupils with hearing difficulties is more centered in the lower bands (i.e. primary level) than pupils with no hearing difficulties.

Difficulty with remembering is also negatively correlated with pupils' performance. For both English and maths, a larger fraction of pupils with difficulties in remembering fall in the performance band corresponding to primary-grade level knowledge, whereas significantly less pupils reach JSS1 and JSS2 knowledge. The graphs below show these results for the performance of JSS2 pupils in English. We do not find similar significant correlations between other types of disabilities captured in the SGLA II and pupil performance in the test.

Figure 24: Learning outcomes of pupils with hearing and remembering difficulties (JSS2 English)



These results, based on a self-reported sub-sample of 2,000 pupils with disabilities, provide a useful snapshot of learning levels but have clear limitations that are discussed above. Be it pertaining to definitional challenges and identification of 'disability' among pupils, need-signalling among pupils, or the fact that any inference beyond the specific group of pupils interviewed and assessed for this survey is not recommended. While reference has been made between learning outcome results of the purposively sampled pupils with hearing and remembering difficulties with results of pupils without these disabilities, simple like-for-like comparison is neither possible nor recommended. A more qualitative study of the learning barriers and challenges faced by pupils with disabilities is recommended in future rounds of the SGLA.

3 Results presented in this section refer to unweighted figures.

7 Longlist of recommendations and next steps

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"Learning outcomes won't change unless education systems take learning seriously and use learning as a guide and metric….Lack of measurement makes it hard to know where things are, where they are going, and what actions are making any difference…The first step to improving system-wide learning is to put in place good metrics for monitoring whether programs and policies are delivering learning."

(World Development Report 2018: Learning to Realize Education's Promise, pg. 16; World Bank, 2017)

7.1 Concluding remarks

This second round of the SGLA offers robust evidence on what JSS2 and SSS2 students in Sierra Leonean schools know and can do in English and Mathematics, and how these have changed, if at all, over the past year. One of the primary objectives of this report is to provide MBSSE and other education sector stakeholders with robust nationally- and district-level representative data on the status of learning, teaching and school management in the secondary schools of Sierra Leone, and track these annually for progress. Together with complementary evidence on teaching practices, this second year of the SGLA generates evidence-based recommendations for how to start addressing teaching and learning challenges in secondary schools. This section draws the report to a close by proposing some initial ideas for recommendations, in the form of a longlist – to be discussed within MBSSE and the Lewh Wi Learn SGLA team – and, as was done with SGLA I, a proposed process for moving from a longlist of recommendations to a shortlist of actions. Suggestions for subsequent rounds of the SGLA are also discussed.

The main overarching observation from both rounds of SGLA is that secondary grade learning outcomes in Sierra Leone are poor. Large proportions of pupils do not demonstrate more than basic English and maths skills despite completing eight (JSS2) to 11 (SSS2) years of formal education and passing the NPSE and BECE. In fact, this year in SGLA II, there is a small but real drop in English language skills – we thoroughly need to understand why. Starting with a weak foundation in JSS, pupils are understandably unable to capitalise on previous knowledge and therefore progression in learning from JSS to SSS grades is minimal. They are very unlikely to keep pace with the advanced demands of the JSS and SSS curriculum or perform well in BECE and WASSCE exams, which take place at the end of JSS3 and SS4 respectively. The system is particularly not delivering 'learning for all', especially girls, poorer pupils and those in remote schools.

This calls for urgent action to ensure the system caters to diverse learning needs of all pupils, irrespective of gender, family background or location. Through the initiation of the Free Quality School Education Programme (FQSEP), the MBSSE has already identified the urgent need to focus on quality education and learning – measured by tracking progress annually through the SGLA and WASSCE results – as one of its three overarching targets in the new Education Sector Plan (2018-2020) (MEST, 2017a, pg.7).[1] However, to realise this all-important goal, a concerted effort is required from all education sector actors and stakeholder, under the stewardship of MBSSE.

Partners like Lewh Wi Learn are providing active support to MBSSE in realising this goal, and this SGLA is one such initiative to ensure MBSSE's policies and programmes are evidence-based and backed by data. Based on the results discussed in this report, below is a longlist of initial ideas for recommendations for MBSSE's consideration.

1 The other two overarching targets are: "tangible improvement in education service delivery" and "improved systems integrity" by reducing exam malpractice.

7.2 Longlist of recommendations

Align curriculum content with pupils' learning levels

As was recommended following SGLA I, this second year's SGLA results once again makes amply clear that important changes in the secondary grade curriculum and commensurate teaching practices are highly necessary. Results suggest that a large proportion of pupils in both grades are struggling to keep pace and respond to the ambitious demands of the curriculum.

The MBSSE is already looking into piloting remediation teaching methods for JSS1 pupils, to ensure they are armed with the foundational literacy and numeracy skills, and the SGLA results are being used to inform this pilot. This is encouraging indeed. One of the entry points for MBSSE and partners is to understand how to better align secondary grade curriculum content with pupils' learning levels – could the curriculum meet pupils at their current level and gradually bring them up to where the system expects them to operate? Could non-standard approaches to learning, such as remediation, be brought to bear on the challenge at hand? These approaches either shift the curricular pace down a notch to better coincide with pupils' learning potential (as is usually the case with tracking or training teachers in remedial pedagogy), or accelerate the pace of pupil learning, usually through more targeted attention or tutoring, such that pupils can better keep up with curricular pace (Banerjee, Cole, Duflo, & Linden, 2005; Duflo, 2011).

Research has shown that two countries with exactly the same potential learning could have massively divergent learning outcomes, just because of a gap between curricular and actual pace – the country which goes faster has much lower cumulative learning (Pritchett & Beatty, 2014). In other words, and quite paradoxically, learning could go faster if curricula and teachers were to slow down. Slowing down the curriculum to coincide with students' current level might seem like a failure but it would help the system re-orient teaching and learning away from what happens for a small group of able pupils towards the typical pupil who is now better equipped to move ahead.

Just because remediation has worked in India or Kenya does not guarantee automatic success in Sierra Leone but these approaches would be worth MBSSE's consideration. If Sierra Leone decides to go down this route, some concrete action points would be to, first, assess the degree of gap between curricular content and pupils' learning levels and understand the flexibility currently afforded to teachers and principals to re-orient teaching at the right level and adjust pace. This would also require a serious consideration of the current examination and assessment system in secondary grades. Should we continue to rely largely on the BECE and WASSCE as a measure of academic success in secondary grades? Is the pressure to pass these seemingly all-important exams leading to "teaching to the test", exam malpractices and rote-learning? Do we need a more gradual and continuous system of classroom-based formative assessments to help pupils up the learning trajectory? Based on this initial diagnosis, a framework and operational plan for remediation would need to be designed.

Focus on teachers' skills, knowledge and attendance

This report has discussed a number of key results pertaining to teachers: how much time they spend on classroom instruction, what keeps them away from school, what teaching aids they use in class, how principals manage teacher absenteeism, and what supervision and pedagogical support teachers receive. Specifically, for quantity of instructional time, these results suggest that teachers are not teaching for a considerable proportion of their time in school, and instructional time in class is being further affected by disruptions, seemingly linked to low pupil attendance but possibly also due to teachers' own school absenteeism. Additionally, in SGLA II, we have evidence of one in four classroom (with pupils) being left attended due to teacher absenteeism – a huge drain on school resources and learning time.

These are important results, and seem to suggest that urgent structural changes to teacher management is necessary. Nevertheless, they trigger more questions for further research than actions for immediate implementation. This quantitative learning assessment survey had highlighted important teacher management issues. However, unpacking teacher management issues – especially when it comes to teacher motivation – is beyond its scope. Before embarking on any change, it would be important to systematically diagnose, preferably through some rapid action-research, what is currently not working well for effective teacher management, specifically (but not limited to):

- Are **teachers' subject knowledge and pedagogical skills** adequate for the demands of a typical JSS or SSS classroom? Is the current pre-service training meeting these needs? What constraints do they face in the classroom for effective delivery of quality instruction? Can any of this be remediated through in-service training? How can principals and school support officers (SSOs) provide necessary scaffolding to a struggling teacher?
- What drives **teachers' intrinsic and extrinsic motivation** in Sierra Leone? To what extent is it determined by reward and remuneration, location of posting and allowances, career progression, satisfaction from pupils' good performance, and other factors?
- **Are teachers willing to be deployed to remote schools?** Pupils in remote schools are performing less well than those in less remote schools. Does this have anything to do with the management and motivation of teachers in these schools? What concrete actions can encourage talented teachers to work in disadvantaged schools?
- **How can school leadership and management be enhanced for better teacher management?** How can community actors (parents, elders and local influential figures) also be brought into the arena and encouraged to contribute towards possible solutions?

Based on what emerges from this enquiry, MBSSE – together with the Teaching Service Commission (TSC) and other partners – should consider an action plan for getting teacher management right as this is critical to overcoming the hurdle of slow learning.

Move from superficial process compliance to actually promoting learning

From the evidence presented in the sections above, and verified across both years of the SGLA surveys, the typical secondary school in Sierra Leone feels like a case of looking like a good school without actually delivering much learning.[2] Schools are implementing lots of 'best practice' processes – they seem to have low PTR, use of teaching aids and lesson plans, lots of lesson observations and staff meetings, external supervision and CTA/PTA activity but ultimately poor learning outcomes. MBSSE and partners need to understand why this is the case – are schools and their administrations, intentionally or unintentionally, being incentivised to gain legitimacy and internal/external support through process compliance alone, whereby they are rewarded for "looking like" good schools rather than actually promoting learning? We need to explore if this is the case and, if so, how best to break this "camouflage" and reorient schools to put learning at the front-and-centre of all incentives, actions and behaviour.

2 This is often termed as 'isomorphic mimicry'. 'Isomorphism' and 'isomorphic mimicry' are terms from evolutionary biology, popular since the 19th century, which refer to different organisms evolving to look similar without actually being related. In particular, isomorphic mimicry is the process by which one organism mimics another to gain an evolutionary advantage. Lately the term has caught on in the area of education, courtesy of Lant Pritchett, and is used to refer to fundamentally dysfunctional education systems that look like well-performing systems. Such dysfunctional systems pretend to conduct teaching and learning like the kind that goes on in functional education systems, but without their core underlying functionalities and therefore do not actually deliver much learning.

Learn from "success stories"

The SGLA II affords us an opportunity to drill down on district-level results and understand how system performance varies from district to district. The learning assessment results indicate the distribution of pupil abilities in both subjects is fairly diverse: i.e. there is a small proportion of pupils who seem to know the curriculum and able to correctly answer the more demanding questions, while vast proportions who at best demonstrate the elementary skills expected in primary grades. The first step in unpacking what distinguishes these two groups of pupils has been done in this report by looking at some of the background characteristics of pupils (e.g. gender, family's assets, province, district, remoteness of school) to understand the average profiles of pupils who are performing well and those for whom the education system is not delivering much learning. A few notable patterns emerge, e.g. Kono district performing better than the national average, and in some cases better than Western Urban district too. However, most of these results are for the typical or large sub-populations of pupils and schools, not individual units of analysis.

MBSSE and partners should therefore consider exploring possibilities to learn from pockets of effective learning already present in Sierra Leone ("positive deviance"). A starting point would be to see what characterises districts and schools where pupils are scoring well in the SGLA – are any of these replicable in a disadvantaged district or school? Are the teachers and principals doing anything different, which helps their pupils succeed? Are there lessons to be learnt from these pockets of learning that can be taken as lessons for other schools in the system? Are there cases of schools where pupils are performing well despite being in a remote location or where most pupils are from a disadvantaged background – can we learn anything from such schools?

Urgently address issues of sexual harassment and girls' safety in schools

The girls' safety results presented in both years of the SGLA have made the first step in providing empirical evidence for what it is like being a female pupil in a secondary school in Sierra Leone, and the picture is truly disturbing.

Not only do girls score less than boys do in the learning assessment, but when in school, they are subject to lack of physical safety and sexual harassment. A sizeable proportion of female students are facing harassment while travelling between school and home, and while in school being sexually harassed by male pupils and teachers, including being asked for sexual favours by teachers in return for grades. One might ask – what have toilets got to do with girls' education? We find that lack of adequate toilet facilities near the main building of the school means that girls feel unsafe using them and absent themselves from school during menstruation.

What is worse is that teachers – who are mostly male and supposed to be guardians of pupils while they are in school – systematically underestimate the prevalence of the problem. This possibly prevents them from recognising the extent of the problem as experienced by female pupils first hand, but also prevents them from contributing to solutions at the school and community level. While mechanisms exist for lodging complaints, their effectiveness is not known.

Paradoxically, however, a majority of girls say they "feel safe in school" which probably reflects the relative incidence and extent of harassment they encounter outside school in the community. But the fact that lack of girls' safety in schools is very common and seen in many developing country school systems (Levy, 2017) and, therefore, not unique to Sierra Leone shouldn't hold us back from acknowledging the problem and trying to address it. No doubt, these challenges have deep-set social and economic roots but it is worth considering ways to start addressing this issue, namely by:

- Sensitising teachers (especially male teachers) and male pupils to become part of the solution – ensure they appreciate the extent and seriousness of the problem, its consequences on school and society, their role in the problem, and what they could individually do to prevent incidents of harassment.

- Ensuring effective accountability mechanisms exist such that when a girl or someone else lodges a complaint, they can do so without fear of retribution and appropriate action is taken. Garner support from the CTA/PTA to make these mechanisms more effective.
- Consider more female participation in the teaching workforce – While clearly easier said than done, there is ample evidence which suggests female teachers make an positive impact on girls' enrolment, attendance and achievement in school (UNESCO, 2006).

Give pupils from poorer backgrounds a fair shot at success

The SGLA results in both 2017 and 2018 show that pupils from poorer backgrounds – irrespective of grade and subject – performed significantly worse than those from more well-off backgrounds. There is a clear need to understand why this is the case and what is holding back poorer pupils. Experiential evidence from Sierra Leone and other developing countries can give us some leads along the lines of differences in parental education, level of support at home, access to more and better education resources at home and school, the resource levels of schools poorer pupils go to, access to private tuitions outside school, aspirations and whether the environment that helps them achieve their goals. However, we need to understand these constraints further especially, for instance, the constraints poorer pupils experience at home and school; including the direct and indirect costs of schooling; the rationale between their education decisions; the opportunity cost of attending school and learning versus wage-earning options in the labour markets; and what teachers and school management can do to ensure these pupils don't fall through the cracks of the system. This is especially important for the success of the FQSEP and we need to utilise the positive momentum as a result of the launch of this programme. Armed with this knowledge, MBSSE – through the FQSEP – should consider trying out different support systems for poorer students and test if these approaches are delivering more learning for poorer students.

Improve schooling experience for pupils with disabilities

Despite its methodological limitations in sampling pupils with disabilities, the SGLAs provide indicative evidence of what is it like to be a pupil with disability in a secondary school in Sierra Leone. While specialised infrastructure (e.g. ramp, railings) and other support (e.g. counselling) seems lacking, teachers are reportedly doing what they can in classrooms to adapt pedagogy to the special needs of these pupils. Attitudes of other pupils towards those with disabilities is also a concern. Overall, this indicates that we need to do more research to better understand the issue at hand before arriving at any concrete solution.

Improve lesson plans based on teachers' feedback and content knowledge

One of the clearer action points that has emerged from the feedback provided by teachers who are currently using the MBSSE lesson plans is remarkably consistent across both years of the SGLA. While it is encouraging to see the enhanced of lesson plan usage – 80 per cent of teacher are using the lesson plans – it is worth noting that a substantial proportion of teachers have also said they struggle to fit in all the material and activities of the lesson plans within the time allotted for one period, and that the content of some of the lessons, as given in the lesson plans, is sometimes removed from the immediate context and lived realities of pupils. It is therefore proposed that lesson plan developers consider this feedback from users for future revision and improvement. Further, SSOs should also consider supporting teachers effectively use the lesson plans, especially avoid treating these lesson plans as scripts and instead use them as guidance material. Finally, Lewh Wi Learn needs to consider the initial evidence provided by SGLA II that teachers are probably themselves struggling to understand the content of the lesson plans, and need stronger and more intensive scaffolding, mentoring and support from SSOs and principals.

Support principals for more effective school leadership and management

Leading teaching

Most principals report that someone conducts lesson observations and that there are staff meetings, but they do not always have paper records of these activities to hand. Moreover, relatively few teachers said their lessons had been observed recently, or that they had staff or one-on-one meetings, suggesting that principals may over-estimate the frequency of these activities. It may be useful to establish accountability mechanisms around some of the activities that principals (or other senior school staff) need to engage in, in order to monitor teachers and track changes in performance over time.

It was relatively rare for principals to have discussed measures to address weakness in teaching with a teacher, to have contacted higher authorities about the performance of a teacher, or to adjust their work responsibilities to try and improve performance. It would be useful to understand in more detail how principals manage poor performance by a teacher, and what tools they have at their disposal to do this. For example, are there good channels for reporting poor performance, and will using those channels have a positive outcome for the school? Do principals have options for adjusting teachers' work responsibilities, or is this aspect of teacher management perceived as fixed?

Learning environment

The extent to which school leadership is able to establish a positive learning environment, where staff and students share common values and vision, and can discuss their progress and issues, and learn from each other, appears to be weak. This aspect of school leadership is less concerned with day-to-day management and support of teachers, and more concerned with whether there is an ethos of learning that informs all aspects of the school's operations. It may be useful for the programme to consider ways of helping principals to build a stronger learning environment, particularly in the groups of schools where this aspect of SLM appears to be relatively weak.

Administration and planning

Nearly all schools have timetables. But beyond this, many schools do not have some of the tools that would be useful for planning the operations and development of the school, such as schemes of work, a cash book, and a school development plan or school action plan. Administration and planning is relatively strong in government schools, which presumably have stronger guidance about following standardised administrative procedures. It is possible that private schools have their own alternative procedures not picked up by the survey, such as alternative ways of documenting agreed plans for developing the school. It will be useful for the programme to consider what forms of administrative procedure could be adopted across all school types in order to strengthen school planning.

7.3 Recommendations for next year's SGLA

This annual SGLA is expected to be repeated again in May-June 2019 with comparable performance bands and indicators to track any progress vis-à-vis 2017 and 2018. It is proposed that the following reflections from the first and second SGLAs be incorporated into the planning and implementation of the third SGLA.

Transfer technical know-how from the SGLA team to MBSSE

The SGLAs can only be successful in achieving their objective of supporting evidence-based education policy and planning if the Leh wi learn team successfully transfer the technical know-how and methodology for its design and implementation to colleagues within MBSSE, so that the annual SGLA can continue smoothly even after Leh wi learn comes to an end in 2021. This is not an impossible feat but will be possible only if the MBSSE are very much in the driving seat and are closely involved in all aspects of SGLA from design to conclusion, progressively phasing out the role of the external SGLA team in the detailed implementation of the SGLA. The SGLA technical team urgently needs to identify and continue engaging relevant colleagues within MBSSE in all aspects of the SGLA towards the longer-term goal of establishing MBSSE's own assessment unit which owns and carries out the annual SGLAs with minimal advisory support from external experts. MBSSE has full ownership and access to the anonymised SGLA I and II data, and this will continue for subsequent rounds of the SGLAs. Detailed data documentation guides will be provided alongside the datasets to ensure the data is easy to access and interrogate.

Share lessons with primary-grade learning assessment team

Through the design and implementation of both rounds of the SGLAs, the technical team has acquired significant expertise in rapid deployment of learning assessments at a national level, data analysis and reporting. It would be beneficial to share any cross-learning with the primary grade learning assessment team, which is also walking on the same path with its assessments in P4 and 5. Conversations are ongoing between the two teams to ensure learning, reflection and approaches are harmonised across the two learning assessments.

Undertake complementary qualitative studies

Throughout this report, several quantitative results were discussed whereby it was felt that, while these findings are useful, more information is required before moving to concrete recommendations, especially qualitative research in the areas of teacher management, learning from "success stories" in the system. Specific qualitative research questions should be identified and undertaken as complementary deep-dives as part of SGLA III.

7.4 Prioritisation of concrete actions: easier said than done

Measurement of learning shortfalls does not provide automatic clear guidance on how to remedy them. The actual process of moving from raw descriptive data to a longlist of recommendations to then a shortlist of prioritised actions is naturally complex – both technically and politically. It requires weighing and making delicate trade-offs. While partners like Lewh Wi Learn can actively support with, MBSSE will ultimately have to lead the prioritisation process, form coalitions with other sector partners and own these concrete action points.

Appropriateness of strategies and entry points will vary from one region and district to the next. Therefore, MBSSE and other national actors are best suited to identify these entry points because they have the most fine-grained understanding of what is practically, financially and politically feasible within their context. In line with this, the goal of this synthesis is not to advocate for the adoption of specific policies, but rather to provide a menu of possible recommendations for consideration, all backed by high-quality evidence and analysis that a) demonstrate that there are problems within the system and helps to convince key decision makers to focus their attention on these issues; and b) offers useful ideas and analysis to inform the development of strategies to address these problems.

This approach highlights the importance of context and argues for iterative approaches in devising responses to complex problems. It also appreciates the highly complex and inter-connected ways in which education systems move from inputs to actually delivering learning – all the while balancing the incentives of millions of actors in the system and various distractors which could disrupt the production of learning.

Bearing in mind these inter-connected complications and complexities, as next steps, it is proposed that the longlist of recommendations, as outlined above and any other ideas that might emerge, be assessed and discussed in a brainstorming workshop with MBSSE and Leh wi learn/SGLA team. The intended outcome of this workshop would be to discuss and assess the feasibility of each 'longlisted' recommendation and develop a shortlist of prioritised, feasible actions that can be reasonably taken forward to address challenges. It would be necessary to assess resource requirements for each of the shortlisted actions, build coalitions among actors, and assign responsible owners for shortlisted actions. It is hoped that a few, if not all, of the shortlisted actions would then be implemented and tested for effectiveness until the next learning assessment. A proposed timeline for this proposed process and next steps in presented below.

Figure 25: Proposed timeline for next steps

December
SGLA team to longlist potential recommendations linked to specific challenges identified in the SGLA based on experience in Sierra Leone and internationally.

January
Conduct brainstorming workshops with MBSSE and other sector stakeholders (teachers, examiners, partners) to add to longlist of recommendations.

January
Conduct prioritisation workshops with MBSSE and other stakeholders to assess longlist and develop shortlist of prioritised, feasible actions that can be taken to address cvhallenges.

January
Assign responsible owners to shortlist actions, build coalitions and consider resources.

February-May
Implement and assess actions until next learning assessment.

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REPUBLIC OF SIERRA LEONE

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