Leh Wi Lan
Sierra Leone Secondary Grade Learning Assessment 2018

UKaid from the British people

Briefing note 4

Learning outcomes of the most disadvantaged students and status of inclusive practices in school

December 2018

> *"**Learning outcomes won't change unless education systems take learning seriously and use learning as a guide and metrics.** 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 our education system is delivering learning."*
>
> World Development Report, Learning to Realise Education's Promise, 2018.

On the 20th of August 2018, 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. 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.

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 despite completing eight (JSS2) to 11 (SSS2) years of formal education and passing various exams like the NPSE and BECE. This is possible because the exams mostly test memory but the SGLA tests skills and ability to apply knowledge to real-life situations. Girls, poorer pupils and those in remote schools tended to do worse.[1]

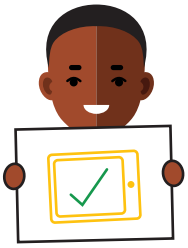
This briefing note presents key results from the SGLA for pupils and teachers. It addresses the following questions:

- How are JSS and SSS students doing in English and maths?
- Are there learning gaps between boys and girls, rich and poor students, and in different locations?
- What are the inclusive practices most commonly used by teachers and principals?
- What is the level of girls' safety in schools?
- What is the experience of students with disabilities?

About the Secondary Grade Learning Assessment

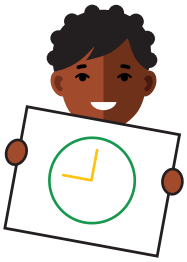
5,600

JSS2 and SSS2 pupils tested on English and maths.



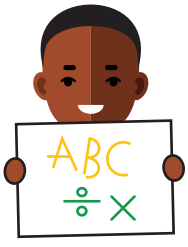
One-on-one

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



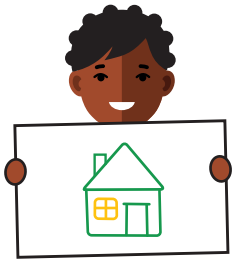
45 minutes

approximately per pupil.



40

questions per test covering both English and maths.



Background

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

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.

What is the level of English and maths skills typically demonstrated by JSS2 and SSS2 pupils?

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**.[2,3] Moreover, results this year suggest a small but real drop in English scores. Maths scores have remained largely unchanged compared to 2017.

For English, 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 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 1: Distribution of JSS2 and SSS2 pupils across English grade-level performance bands

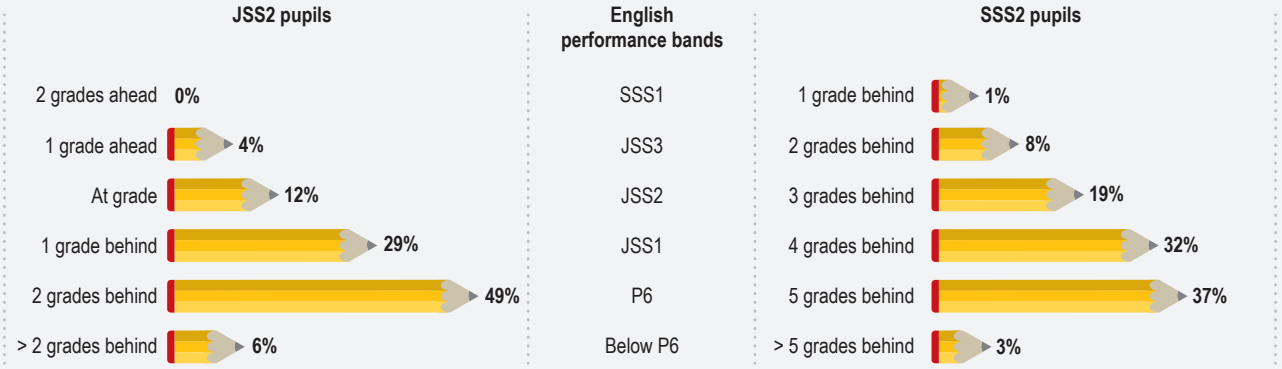
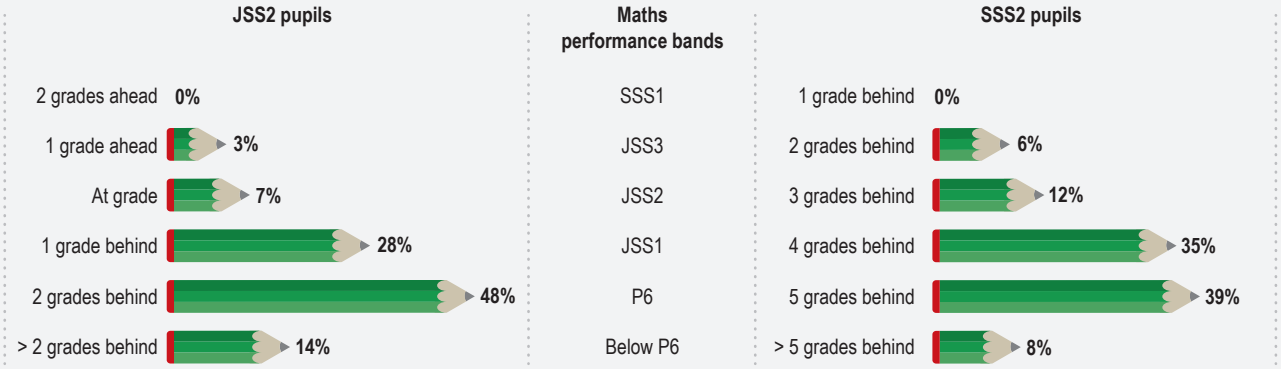


Figure 2: Distribution of JSS2 and SSS2 pupils across maths grade-level performance bands



2 The process of aligning the learning assessment questions with curriculum expectations 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 Executive Secretary (Basic Education).

3 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 item in the SGLA II test. Their discussions were supported with data about the occurrence of key terms in the outcomes stated in teachers' lesson plans.

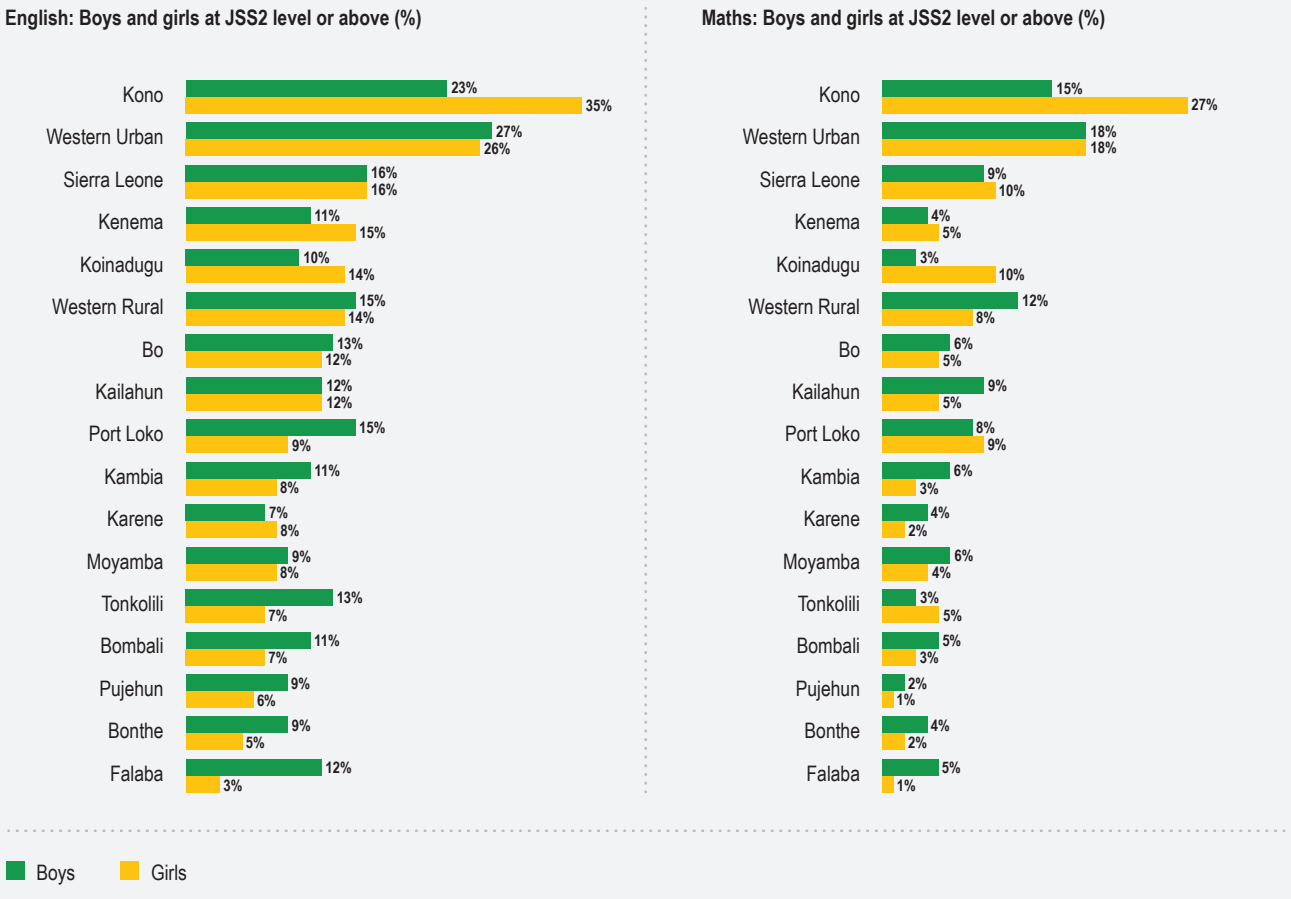
How does pupil learning vary by gender?

There are persistent learning gaps in performance, at the disadvantage of girls

Across both grades and both subjects, girls perform worse than boys in the SGLA tests. While a gender-gap in performance exists but is relatively small at JSS2 grade, it widens as girls move from JSS2 to SSS2. At SSS grade, less than 50 per cent of girls reach JSS1-level knowledge in maths, against a figure of 59 per cent for boys. Similarly, for English, 44 per cent of girls in SSS2, against 34 per cent of boys, show skills limited to those expected at primary grade level but struggle with skills demanded from higher grades. These results are in line with the evidence from SGLA 2017 and point towards evidence of a persistent gender gap in performance, to the disadvantage of girls, and this widens as they progress to higher grades.

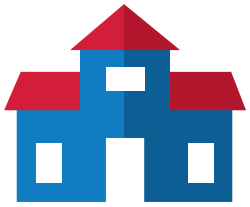
It is however interesting to note that **the existence and magnitude of gender-based differences in performance vary significantly across the country**. At the provincial level, gender gaps are small in the Western and Eastern provinces. Similarly, at the district level, the gender gap in JSS2 grade is fairly small, and in fact in some districts girls perform better than boys (e.g. Kono, Kenema, Koinadugu). However, districts like Bonthe, Falaba and Bombai show large gender gaps. For example, focusing on the performance of JSS2 students, in Falaba only 3 per cent girls reach a level of knowledge that is appropriate for their grade in English, against a figure of 12 per cent for boys and a national average of 16 per cent for both genders.

Figure 3: Gender disparities in pupil performance, by district (JSS2)



Girls' safety in school

Increased girls' safety in the school environment can play an important role in improving the performance of female students. The SGLA survey asked the sampled teachers a range of questions on girls' safety in school, in order to understand whether female pupils feel a general sense of physical safety in the school environment, what the incidence of sexual harassment is and whether mechanisms are available to female pupils for reporting harassment. Results from SGLA II are in line with those from 2017.



12% of teachers said school toilets were too far from main school building for girls to feel safe

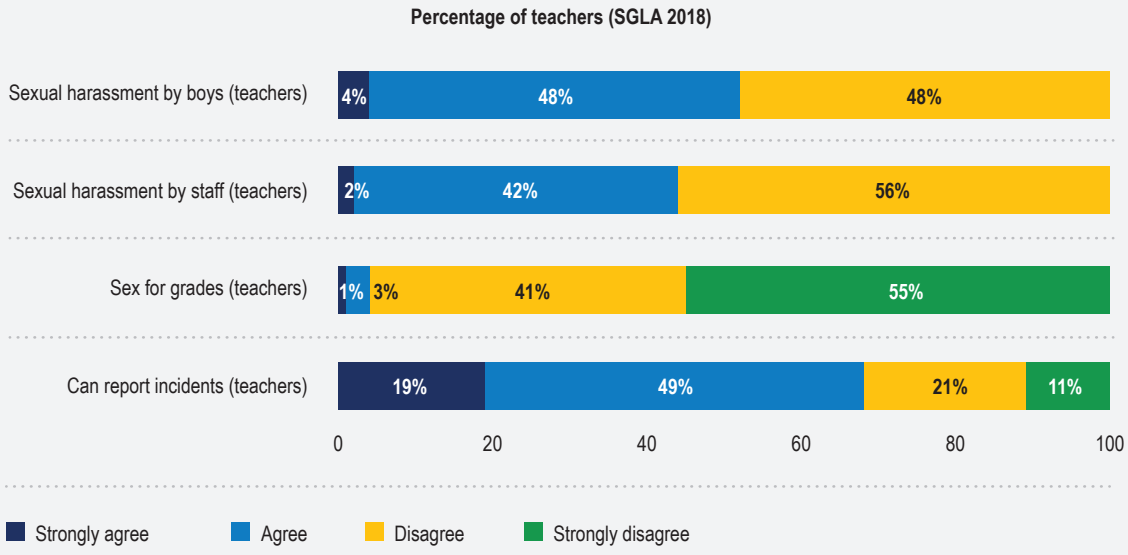
50% of teachers said inadequate toilet facilities meant girls missed school during menstruation

35% of teachers reported girls experienced harassment on the way to and from school

In particular, more than 90 per cent of teachers 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 of respondents reported that female pupils were subject to harassment while travelling to and from school. When asked about the location and safety of school toilets, only 12 per cent of teachers reported that toilets were too far from the main building, so that girls did not feel safe using them. However, around half the teachers reported a tendency for girls to absent themselves from school during menstruation.

The results from both SGLAs suggest that teachers, the vast majority of whom are male, systematically underestimate the incidence of sexual harassment in their schools. Indeed, only 4 and 2 per cent of teachers reported that girls in their school were subject to sexual harassment by male pupils and male school staff respectively. The incidence of sex-for-grade also seem to be under-reported, with only 3 per cent of teachers agreeing to the statement that some male teachers ask female pupils for sexual favours. Province-level results on sexual harassment suggest that this phenomenon is uniformly common across the country. 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 4: Sexual harassment by school staff



The results from SGLA II, however, also suggest that mechanisms exist within the school and community whereby female pupils can report instances of sexual harassment in most schools, with more than two-thirds of teachers agreeing this was the case. However, the effectiveness of these mechanisms is not known and needs to be looked into in future rounds of the SGLA.

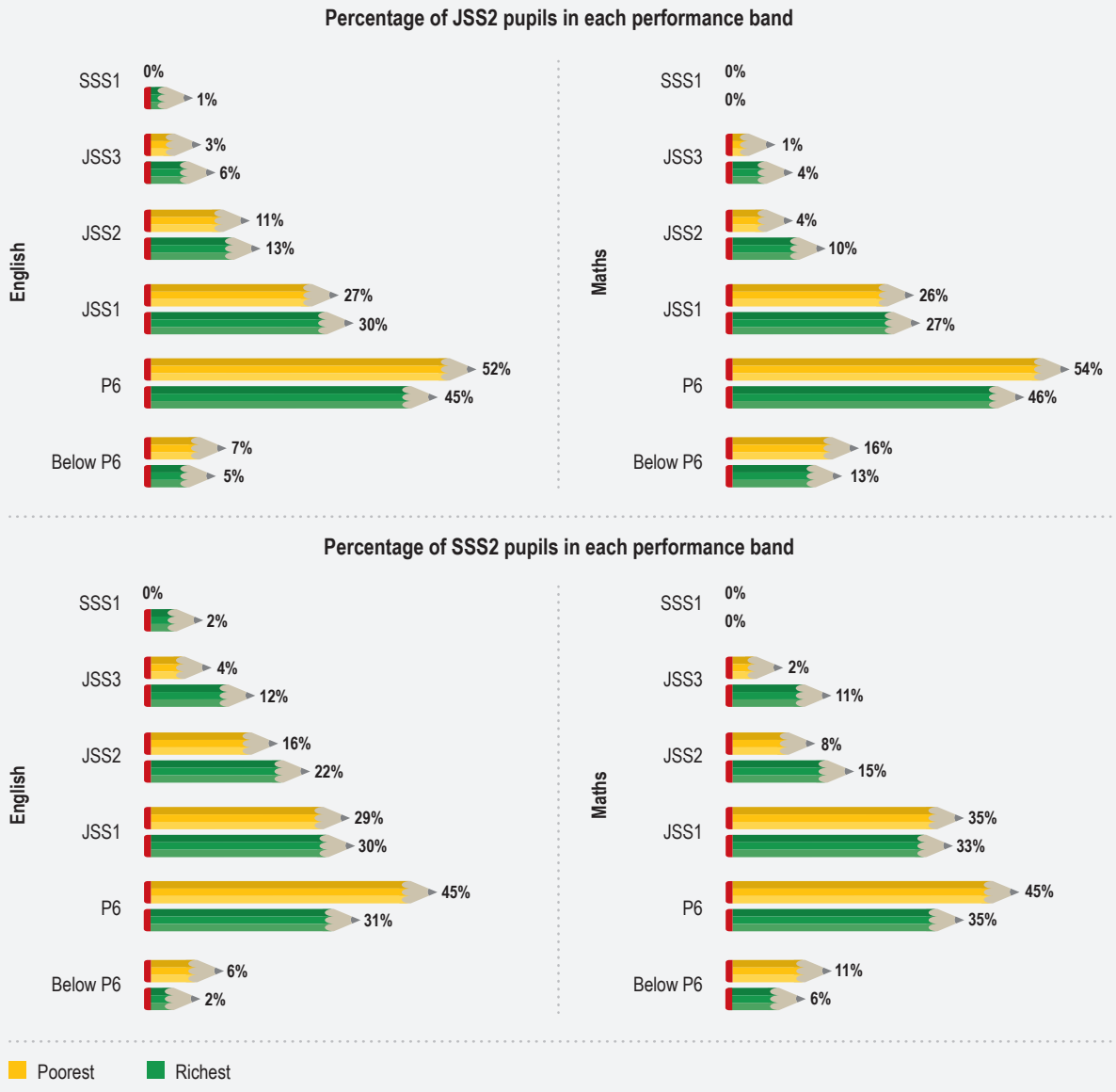
What is the relationship between pupils' test scores and family background?

Pupils' own family background is one of the biggest determinants of their learning level. We construct an index of household wealth based on a series of assets that the household owns and compare the richest households (i.e. top 20 per cent pupils based on the household asset index) to the poorest (i.e. bottom 20 per cent).

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 emerges from maths as well. For example, looking at test results for SSS2 students in English, 51 per cent of pupils from the poorest households only show knowledge at primary grade levels, against 33 per cent from the richest households. Similarly, while only 14 per cent of JSS2 students from the poorest households are "at grade" or above for English, more than 20 per cent of JSS2 students from the richest households reach knowledge at least at JSS2 level. Moving up the grade-appropriate band scale for maths, wealth-based differences between rich and poor pupils are stark for bands equivalent to JSS2-level knowledge of above.

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 5: Disparities in pupil performance by household wealth



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

As for gender-based differences, the magnitude of differences in pupil 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. At the district level, wealth-based performance gaps at SSS grade are particularly stark in Karene.

Can school location predict pupil learning?

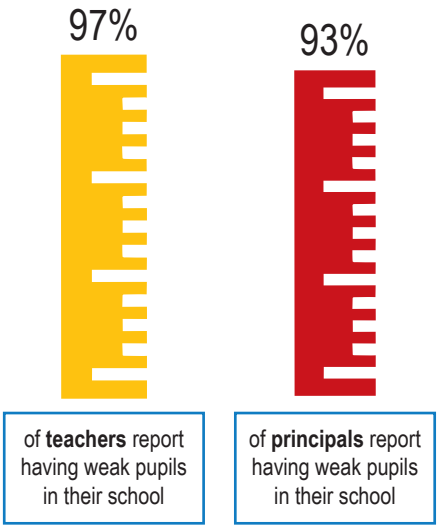
In both English and maths, there is a significant negative relationship between remoteness of school and pupils' performance. Consistently with results from 2017, results from SGLA II show that the learning level drops as we travel away from schools that are located near the district headquarter town, towards more remote schools. Pupils from remote schools, across both JSS2 and SSS2 grades, are more likely to show knowledge at the level of P6 grade or below, but struggle with skills required from higher grades.

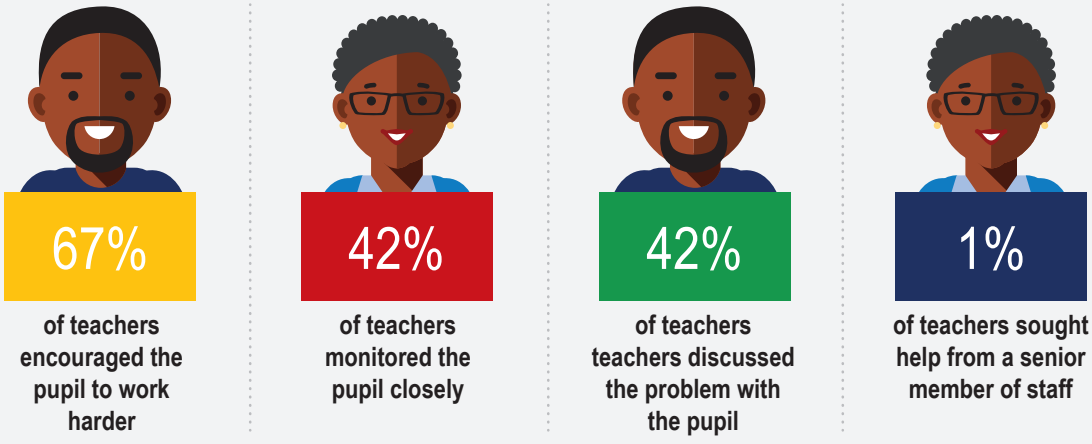
Among the factors that could contribute to this relationship, this survey provides indicative evidence that school management plays an important role. Indeed, results from SGLA II show that schools that are locate farther away from the district headquarter town are on average not as well-managed as those near the district centre. Differences in management are significant both in terms of their learning environment and overall school management indices. Schools near district capitals are also the strongest on indices of administration and planning.

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 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, monitoring the pupil closely and discussing the problem s/he is facing with the pupil him/herself. However, only around 1 per cent of teachers reported seeking support from a senior member of staff.





Similar actions to support weak students were reported by principals: 56 per cent of them 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. Principals were also asked about presence of marginalised students in their school. 73 per cent of principals reported having students from low income families (relative to their peers) or with physical or intellectual disabilities in their school. The most common forms of support reported by heads of schools were encouraging the pupil to work and offering extra tuition.

Students 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. This section presents results on the learning assessment and school inclusiveness from a subsample of 2110 pupils in SGLA II reporting some form of disability.[4]

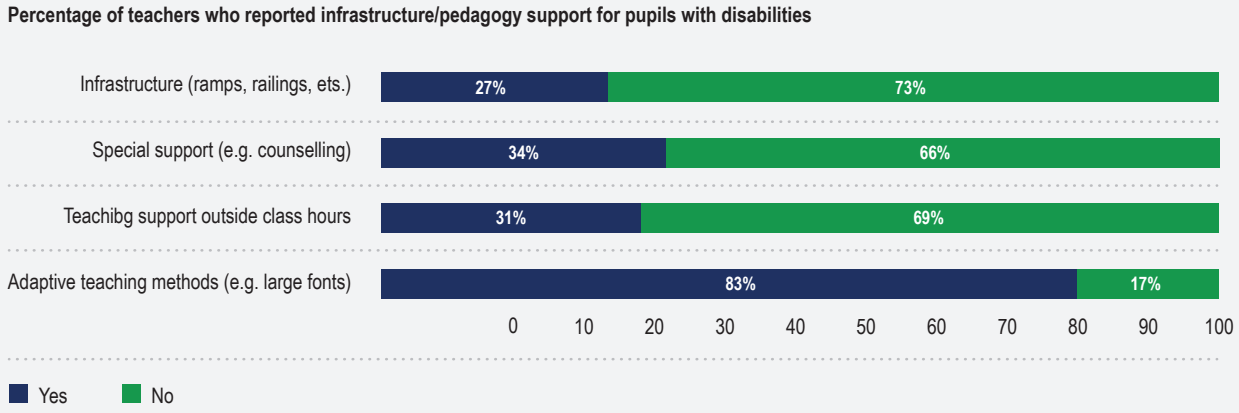
The most commonly reported forms of disability were difficulties in remembering and walking, with most pupils reporting some difficulty in these functions but none reporting they cannot do it at all.

When comparing the learning outcomes of students reporting some form of disability to those of pupils without any disability, the evidence suggests that difficulties in hearing bear a significant negative correlation with pupils' performance, both English and maths. We find that the distribution of pupils with hearing difficulties is more centred 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 P6-level knowledge or below, and significantly less pupils reach JSS1 and JSS2 knowledge.

The SGLA survey also asked sampled teachers about the schooling experience of students with disabilities. The vast majority of teachers said their school did not provide a special physical infrastructure (e.g. ramps) 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. However, 83 per cent of teachers 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. Meetings with parents or community members to talk about challenges faced by pupils with disabilities appear to be fairly common in Sierra Leone.

Figure 6: Physical infrastructure and pedagogical support for pupils with disabilities



Finally, harassment of pupils with disabilities seems to be discouraged in schools. Furthermore, less than 20 per cent of teachers reported that the teaching and non-teaching staff discriminated in favour or against pupils with disabilities, and 74 per cent of teachers reported that students with disabilities interact freely with other pupils.

4 In the SGLA, disability was broadly defined as referring to any physical, mental or learning impairments that affected the full and effective participation of a pupil in learning. These included six core functional domains: seeing, hearing, walking, cognition, self-care, and communication. For a more detailed description of the definition of disability, we refer the reader to the main report.

Concluding remarks

The main overarching observation from both rounds of SGLAs is that large performance gaps in learning exist and are driven by pupils' background and characteristics. A larger proportion of female pupils do not demonstrate more than basic English and maths skills despite completing eight (JSS2) to 11 (SSS2) years of formal education, compared to their male counterpart. Distance of the school from the district headquarter town also significantly affects performance and 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 seem to be a systematic under-reporting of the incidence of sexual harassment in schools. Furthermore, 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. These challenges have deep-set economic and social roots, but it is important to work towards sensitising teachers and male pupils to become part of the solution, and ensuring that appropriate accountability mechanisms exist to support girls lodging complaints. Finally, considering more female participation in the workforce could be a step towards ensuring that teachers appreciate the extent and seriousness of sexual harassment and girls' lack of safety in the school environment.

The SGLAs also provide indicative evidence of what is it like to be a pupil with disability in a secondary school in Sierra Leone. Results from the learning assessment show that difficulties in hearing and remembering significantly and negatively affect students' performance in the SGLA tests. **Furthermore, 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.** Overall, this indicates that we need to do more research to better understand the issue at hand before arriving at any concrete solution.

About the project and contact details

Leh Wi Lan/Sierra Leone Secondary Education Improvement Programme (SSEIP) is a five-year (2016-2021) UKaid-funded programme aimed at improving English and maths learning achievement in all secondary schools, especially for girls. This briefing note was produced under *Leh Wi Lan's* monitoring, evidence and research workstream as part of the annual secondary grade learning assessment. Any views and opinions expressed do not necessarily reflect those of UK Department for International Development, Sierra Leone Ministry of Basic and Senior Secondary Education, Mott MacDonald or Oxford Policy Management.

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