



Briefing note 1 – January 2021

Back to School Study: Status of pupil learning outcomes in junior and senior secondary schools of Sierra Leone post-school closure










About the Back to School Study

Schools in Sierra Leone closed on 31st March 2020 after the country's first COVID-19 case was confirmed. Schools reopened six months later on 5th October. During this time, nearly two million pre-primary and primary, 450,000 junior secondary and 300,000 senior secondary pupils were not attending school.¹ This is not new to Sierra Leone – in 2014-15, schools shut for nearly nine months due to Ebola. Evidence suggests the cost of school closure for children's education and well-being was high, and more profound for girls and the poorest pupils. In response to COVID-19, Sierra Leone's Ministry of Basic and Senior Secondary Education (MBSSE) and Teacher Service Commission (TSC) immediately launched a radio teaching programme, distributed rations to pupils in the poorest communities, and conducted community sensitisation to keep girls safe. The objective was to safeguard children and promote learning recovery when schools reopen.

In this context, the Back to School (BTS) study offers a unique opportunity to use quantitative and qualitative evidence to guide MBSSE's COVID recovery priorities. The BTS study provides robust estimates of the learning and child well-being impacts of the COVID shock to Sierra Leone's education system. Details of the study design are shown below.

This briefing note reports on the status of pupil learning outcomes in junior and senior secondary schools post-COVID-19 induced closures by addressing four key questions:

- What type of reach and effects have MBSSE's COVID distance learning initiatives had i.e. radio teaching programme?
- How have school closures affected pupil learning outcomes amongst secondary grade pupils in Sierra Leone?
- Are there noteworthy differences in pupil learning outcomes by gender and other background characteristics?
- Are there any noteworthy differences in pupil learning levels vis-à-vis results from the 2019 Secondary Grade Learning Assessment (SGLA) survey?²

 <p>2,000 JSS3 and SSS3* pupils tested on English and maths immediately after schools reopened in October</p>	 <p>One-on-one test administration: each pupil is tested individually by a data collector using a combination of paper test and handheld computer device for approximately 50 minutes</p>	 <p>40 questions per test covering both English and maths</p>	 <p>Key Informant Interviews (KIIs) with members from MBSSE, Leh wi Lan, District Education Offices (DEOs) and Teaching Service Commission (TSC)</p>
 <p>Background questions on pupils' age, language spoken at home, assets at home, special needs, use of pupil handbooks and radio teaching, and well-being questions associated with COVID-19 school closures</p>	 <p>Focus Group Discussions (FGDs) with JSS3 and SSS3 pupils, and school and community representatives (via the Community Teacher Association – CTA)</p>	 <p>All government mandated COVID-19 health and safety protocols were followed during the conduct of the BTS Study</p>	

*JSS3 and SSS3 are examination grades for BECE and WASSCE, respectively.

1 Current enrolment figures from Sierra Leone Annual School Census 2019.

2 SGLA surveys conducted by the UKAid-funded Leh Wi Lan programme in 2017, 2018 and 2019 report annually on the status of teaching and learning in Sierra Leone. Interested readers can access the SGLA reports on <http://www.education.gov.sl/>



What activities were children involved in during school closures?

When schools were closed, most pupils divided their time amongst domestic chores, supporting their family in income generating activities, time for study, as well as rest and recreational activities. This is shown in the figure on the side. The distribution itself varied significantly by gender and background characteristics.

Despite their many engagements, most pupils (84 per cent) self-reported being able to take out time to study, however, the duration and frequency of study during the closure varied between children. This was often linked back to individual motivation and the surrounding environment for the child. Some children reported studying for 10 minutes once a week, while others put in five-six hours daily and also took private tuitions. Pupils in all regions were conscious that they had to study more because they were in exam grades (JSS3 and SSS3). On the whole it appeared that richer pupils, those in urban areas, boys and JSS pupils found more uninterrupted time to study than others.

Evidence from parents and school representatives was more mixed and suggested that children treated the school closure as a 'holiday' and did not use this time to learn. Similarly, most children complained about being too tired to study after completing domestic chores or income generating activities. This often meant that children were only able to study at the end of the day when it was dark and they faced challenges with electricity.

“When I went to the village all I was doing was farming... I did not even take a book to my village. We went to the farm every day from morning to evening except if it rained. But if we went in the morning we would be at the farm till evening when we would be returning to prepare food.” (Girl JSS3 pupil, Southern Province)

“During the corona period, I would usually go for studies at 4pm to my teacher for classes and after that I would come back home and go over the work he taught me. Then I would normally go the field and play football and after that I would go to the garden and do some garden works. I would then come back home and rest for the next day to embark on the same activities.” (Boy SSS3 pupil, Eastern Province)

Children's activities during school closure



Household chores
More common for girls than boys



Income-generating activities
Farming, petty trading, mining, Okada (motorcycle) riding, apprenticeship, gardening – more common for older (SSS) pupils than younger (JSS) pupils



Studying
Depended on pupils' grade and motivation – richer pupils, boys and JSS pupils studying more often



Rest and recreation
Socialising with friends, watching TV, playing video games, football (especially popular among boys)



Violence and exploitation
some boys drawn to drugs, gangs 'cliques', violence; girls exposed to exploitative relationships

What learning resources and support did pupils access during school closures?

Learning materials that pupils had access to before schools closed were also the most commonly used during closures. These included lesson notes from teachers and friends, textbooks, pupil handbooks and past examination papers. Figure 1 shows the most commonly used learning materials reported by pupils.

“I was using my notes and texts books to practice and study. I used them to solve assignments that were given to us during school hours before the outbreak of COVID-19. I used to solve those assignments again so that I did not forget them.” (Boy SSS3 pupil, Eastern Province)

Figure 1: Learning materials used during school closure

77%
Teacher notes



69%
Textbooks



52%
Friends notes



48%
Pupil handbooks



45%
Past exam papers





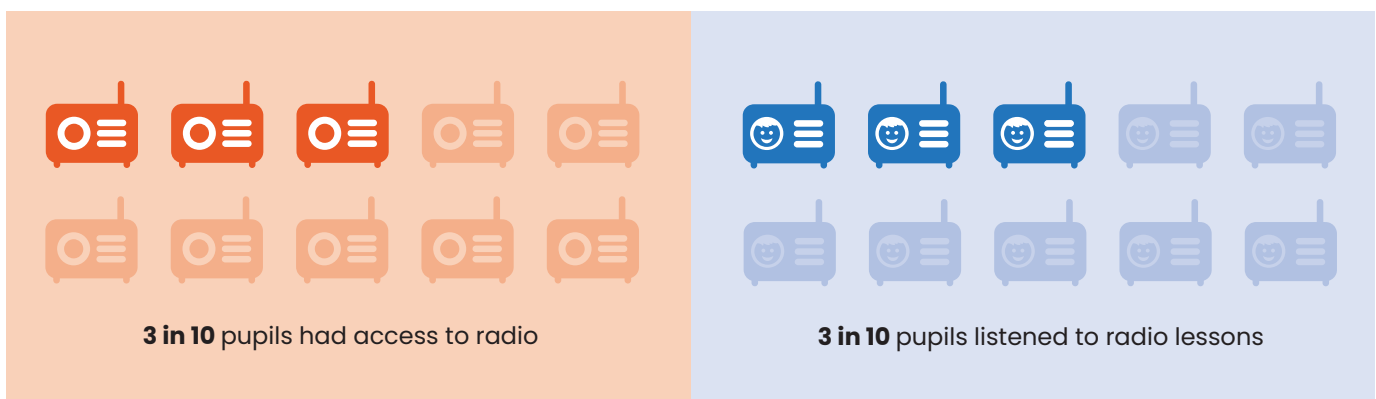
Just under 50 per cent of pupils used pupil handbooks during school closures. Limited use of pupil handbooks was driven by limited access due to the hesitation of parents to sign an undertaking that the handbooks would be returned in the same condition. In addition, it appears that as per policy, most schools collected the second term pupil handbooks back from children before school closed. In some cases, the collection of results was made conditional on this return. Since the following term's handbooks had not been distributed, it meant many children did not have access to pupil handbooks during school closure in the first place. However, those who used the handbooks found them helpful and clear, though there were mixed reviews on the ease of understanding. The usage of pupil handbooks was not correlated with pupil learning outcomes discussed later.

“I was fortunate to take my pupil handbook home even though the principal told us to leave them in school when schools closed. I used to find it difficult to pronounce some words from the pupil handbook and I use to write these words in a note book. I brought the notebook to school when schools reopened for my teachers to teach me how to pronounce these words. I can pronounce all those difficult words now.” (Boy JSS3 pupil, Eastern Province)

Only a small number of pupils listened to radio lessons while they were home, and often this was not a regular engagement. This programme was introduced as a distance learning resource during the COVID-19 school closure.³ About 30 per cent of pupils used the radio teaching programme during school closures, and it was mentioned during discussions that this was not a regular activity (once or twice a week). More boys reported listening to radio lessons than girls (32 per cent compared to 25 per cent), and a larger proportion of richer pupils reported listening to the programme than poorer pupils (41 per cent compared to 15 per cent). In general, however, there were challenges in accessing the radio teaching programme as only one-third of pupils mentioned having access to a radio. There were also challenges with batteries, signal and frequency especially for pupils in more rural and remote areas. The TSC had also identified coverage issues early on and involved more partners to expand reach. In addition, the radio programme was said to air during the morning and afternoon hours when many pupils were engaged with other chores inside the house or in the market trading. This made it difficult for them to listen to the radio programme.

“The only children that had access to radios were those from the elite who have the financial support... other children may want to listen to the radio programme but they wont have a radio or have anyone to motivate them... the programme was not tailored to everyone, because not everyone had access to radio, and the frequency is also not clear and sometimes the topics taught may be too advanced and not taught in an incremental way, so it becomes very difficult to cope.” (Principal, SSS School, Western Province)

Pupils and the radio teaching programme



³ When schools closed in March 2020, the MBSSE launched a remote radio teaching programme that aired lessons on the radio across the country, with a 'dial-in' option once the lesson is over for pupils to reach out and ask questions.



“When they were teaching, they were for every child to understand. Even if you are in the remote part of the country, once you are having access to a radio and the child has the ability to listen, the child will understand; because they really take their time to explain. They explain a topic well; define all definitions in that topic before going to the next topic.” (CTA member, JSS School, Western Province)

Generally, pupils had no problems with the content of the lessons, and the subject matter was in accordance with their textbooks. Out of the pupils who had access and who had listened to the radio programme, most reported that they were able to clearly hear the radio lessons. A large majority of pupils who listened to the radio lessons reported that they could understand the radio lessons and use it to keep up with their lessons when schools were closed. However, many pupils complained that the pace of teaching was too slow and at times unfamiliar pronunciation and grammar was used. Children were said to get bored of the programme. Significantly more boys than girls listened to the programme regularly and found the lessons easier to understand which may be the result of boys having more uninterrupted study time.

“For me the Radio Teaching Program was giving me two problems. The first was that the frequency was not clear and the second one was the kind of English that they were speaking, the English was too big and not all of us were brilliant enough to understand them.” (Girl JSS3 pupil, North Western Province)

During discussions, pupils also reported that learning via radio teaching was challenging for subjects that needed visual aids such as maths and science as it was one-sided teaching method with audio only. Similar to pupil handbooks, pupils' uptake of the radio teaching programme had no correlation with learning outcomes.

Although just over one in ten (13 per cent) pupils reported having access to private tutors, this had a slight correlation with improved pupil performance.

While traditional learning in schools was discontinued during COVID-19 closures, pupils who had the support and financial means found ways to continue learning through private classes and tuitions. More SSS3 pupils reported using external tutors than JSS3 (18 per cent versus 11 per cent respectively) possibly because they were in more advanced classes with upcoming WASSCE exams where they needed extra support. Expectedly, pupils from the richest households were 11 percentage points more likely to have private tuitions compared to those from the poorest households. Private tuitions were most common among pupils in the Western region, many of whom mentioned during discussions that they were attending tuitions five times per week, even while schools were closed. Other than private tuitions, a majority of all pupils interviewed (88 per cent) received support from someone within the household in the form of guidance, financial assistance, or tuitions from elder siblings.



Pupils from the **richest households** were **11 percentage points** more likely to have private tuitions compared to those from the **poorest households**.

What is the level of English and maths skills demonstrated by JSS3 and SSS3 pupils post-school closure?

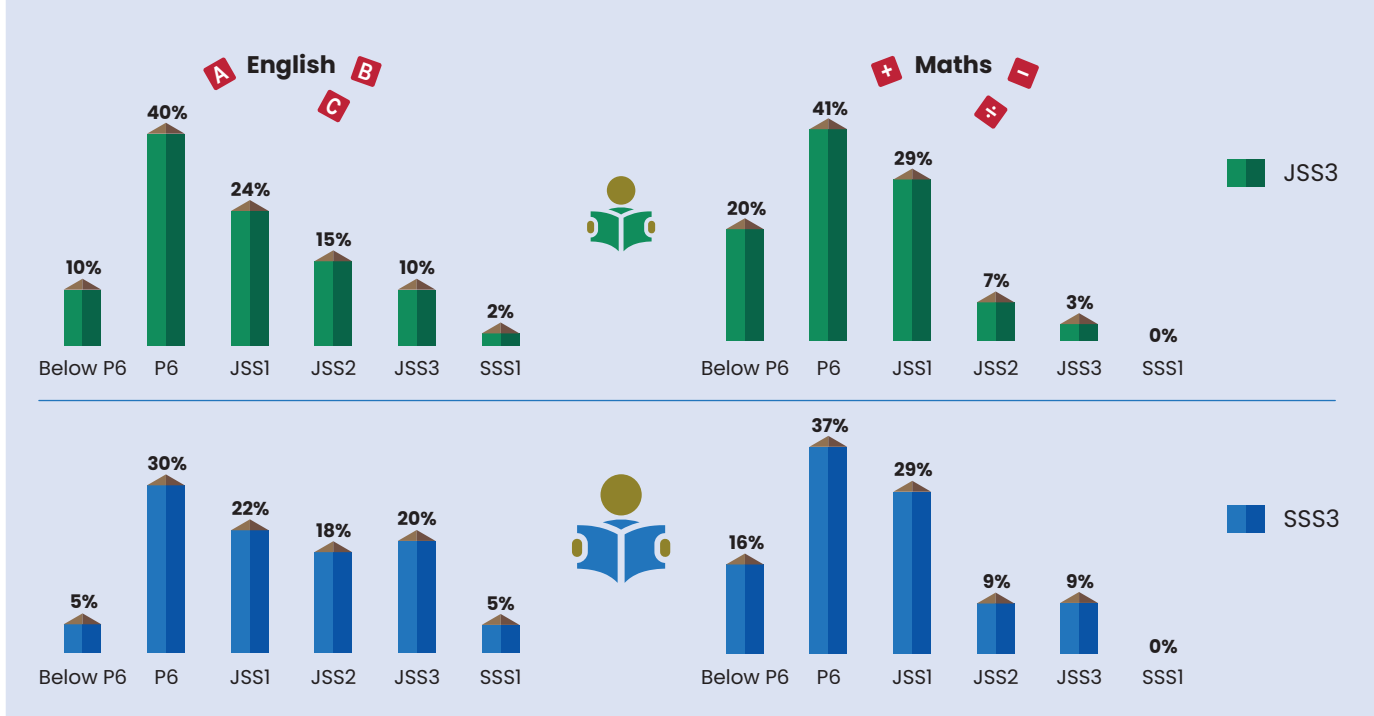
The BTS results confirm that pupil learning levels in secondary grades in Sierra Leone continue to be low. For a majority of pupils there is a large gap in actual skills and curriculum expectations.

Most pupils are performing at levels much lower than the grade they attend. As Figure 2 shows, in maths, only 3 per cent of JSS3 pupils are able to demonstrate skills expected from a pupil at the JSS3 level or above, whereas no SSS3 pupils are able to demonstrate maths skills at senior secondary level. Less than 10 per cent of SSS3 pupils achieve JSS3 level or above competency in maths.

There is also very little progression in pupils' math learning outcomes as they move up the grades. A majority of pupils – 61 per cent of JSS3 pupils and 53 per cent of SSS3 pupils – are performing at a level expected at Primary 6 (P6) or below in maths. Even though more SSS3 pupils achieve higher performance bands compared to JSS3 pupils, none of the SSS3 pupils were able to demonstrate maths skills any higher than JSS3.



Figure 2: Distribution of JSS3 and SSS3 pupils across grade-level performance bands



Pupil performance in English is marginally better. More JSS3 pupils are performing close to their expected level than SSS3 pupils. In English, 12 per cent of JSS3 pupils are performing at grade (JSS3) or above, and a further 15 per cent have fallen behind by one year. This means that one in four JSS3 pupils are within a years' difference of their expected performance. For SSS3 pupils, even though more pupils achieve higher performance bands in English, the top 5 per cent still achieve at SSS1 level at best.

Despite this, as with the maths scores, there is a long 'tail' to the English results with a large proportion of JSS3 and SSS3 pupils bundled at the bottom. One in two JSS3 pupils and just over one in three (35 per cent) of SSS3 pupils are still performing at primary levels (P6 or below) despite three and six additional years of schooling respectively.

In general, pupils who self-reported having studied daily during the school closure perform better. On average, 32 per cent of pupils said they studied every day (i.e. 5 or more days a week), and these pupils performed significantly better in English, and slightly better in Maths, at the JSS and SSS level.

The following sub-sections further disaggregate pupil learning performance by gender, school location and family background characteristics.

How does pupil learning vary by gender?

Boys perform better than girls on average across both grades and subjects covered in the BTS study. The performance gap between the two genders also widens substantially from JSS3 to SSS3. This is shown in Figure 3. The gender difference is possibly driven by the fact that a significantly higher proportion of boys (81 per cent) reported studying at least 3 days a week during school closure compared to girls (70 per cent). Almost double the proportion of girls as boys (48 per cent vs 26 per cent respectively) also reported having extra work at home when schools were closed. In discussion with respondents, it appears that girls were also more likely to be engaged in 'petty trading' during the school closure and were more vulnerable and subject to sexual harassment.⁴ These factors are likely to explain the difference in performance between boys and girls.

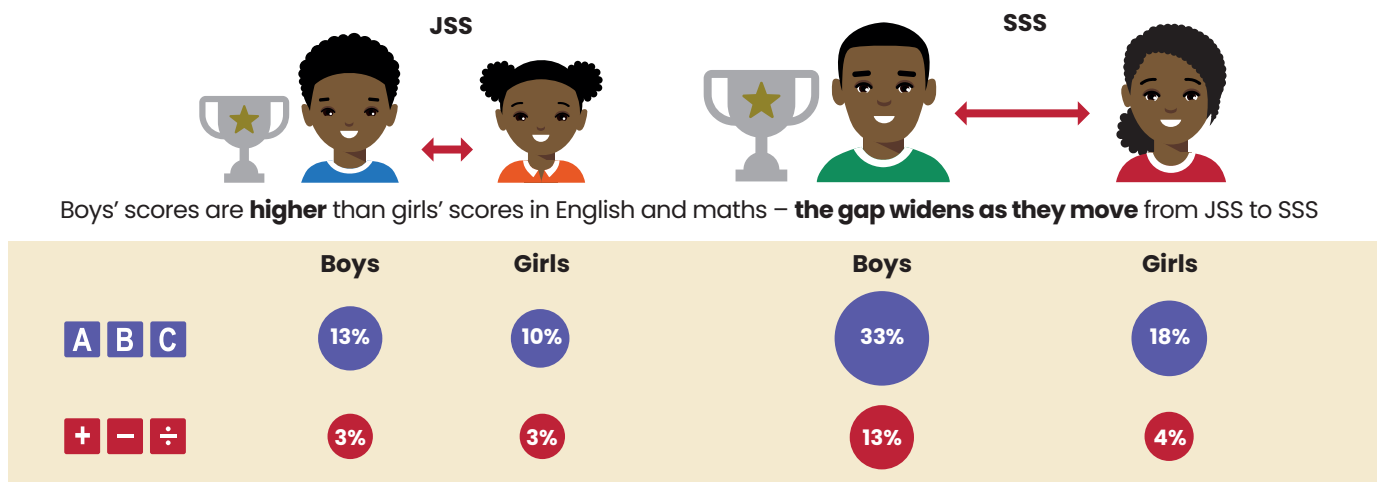
“Girls are faced with a lot more workload [in the house] than boys. Boys are able to do more [physical] hard work than girls, but girls are always working, taking care of the homes and making sure that things are well organised.” (Girl SSS3 pupil, Eastern Province)

“Girls were more affected [by the school closure]. I don't know if this is natural, but we have observed that girls were not reading their books compared to the boys. Maybe it is because of the distractions that they [girls] have around. They have to see their boyfriends and all the other stuff.” (Teacher, JSS School, Western Province)

4 The Back to School Study briefing note 2 on child well-being and safety covers this issue in greater detail.



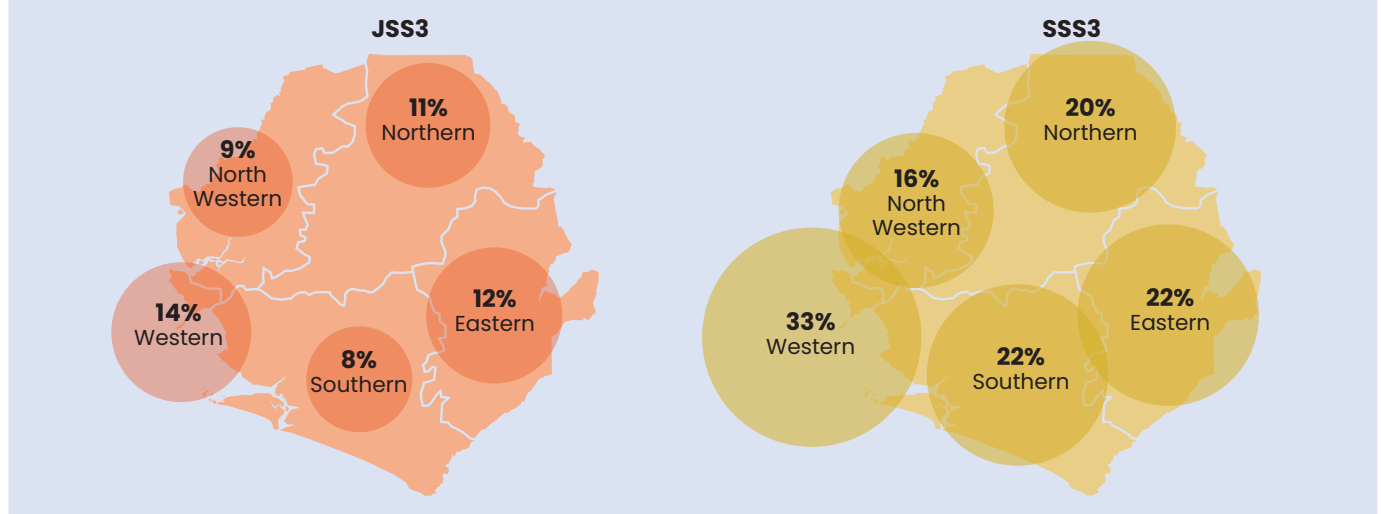
Figure 3: Proportion of pupils (by gender) performing at the JSS3 level or above



How does pupil learning vary by school location?

Regional differences in pupils' performance are significant, with schools in the Western region performing better than the national average in both English and maths. For instance, for English, schools in the Western region have a higher proportion of JSS3 pupils performing at grade or above compared to the national average. This difference is even more apparent at the SSS3 level where 33 per cent of pupils achieve JSS3 level or above competency in English compared to the next best regions, Eastern and Southern, where only 22 per cent of pupils are performing at this level (see Figure 4).

Figure 4: Proportion of pupils performing at the JSS3 level or above in English



More pupils self-reported studying during the school closure in the North-Western region, closely followed by the Western region. In addition, both regions had the one of the lowest proportion of pupils reporting challenges during school closures, with the Western region also having the lowest proportion of pupils reporting extra work or chores at home. This is perhaps a key driver of the regional differences in the results mentioned above. Although four in every five pupils in the North-Western region reported studying during school closures, pupils here also reported having the least help while studying, which might be driving the lower than average learning performance in this region.

There were significant differences in pupil behaviour during school closures between less and more remote schools. A higher proportion of pupils in less remote schools reported studying daily (five or more times a week). They were also more likely to have used alternative learning sources such as the internet and private tuitions, and also had help while studying, mostly from members of their household. Despite these behavioural differences, school location did not translate significantly into predicting test results.



Pupils with special needs

Pupils with special needs face multiple forms of discrimination, which leads to their exclusion from society and school. COVID-19 is likely to compound the challenges that pupils with special needs face in accessing education and performing well in school. This section presents findings from a subsample of 678 pupils from the BTS survey who reported some form of special needs.⁵

The type of difficulty most commonly reported by pupils was challenges with remembering (21 per cent) and walking (12 per cent). When comparing learning outcomes of pupils reporting some form of difficulty to those pupils without any difficulty, evidence suggests that difficulties in walking and remembering bear a negative correlation with pupils' performance. Pupils reporting these difficulties more commonly perform at the primary level (P6 or below) and a smaller proportion are performing at higher levels for both English and Maths.

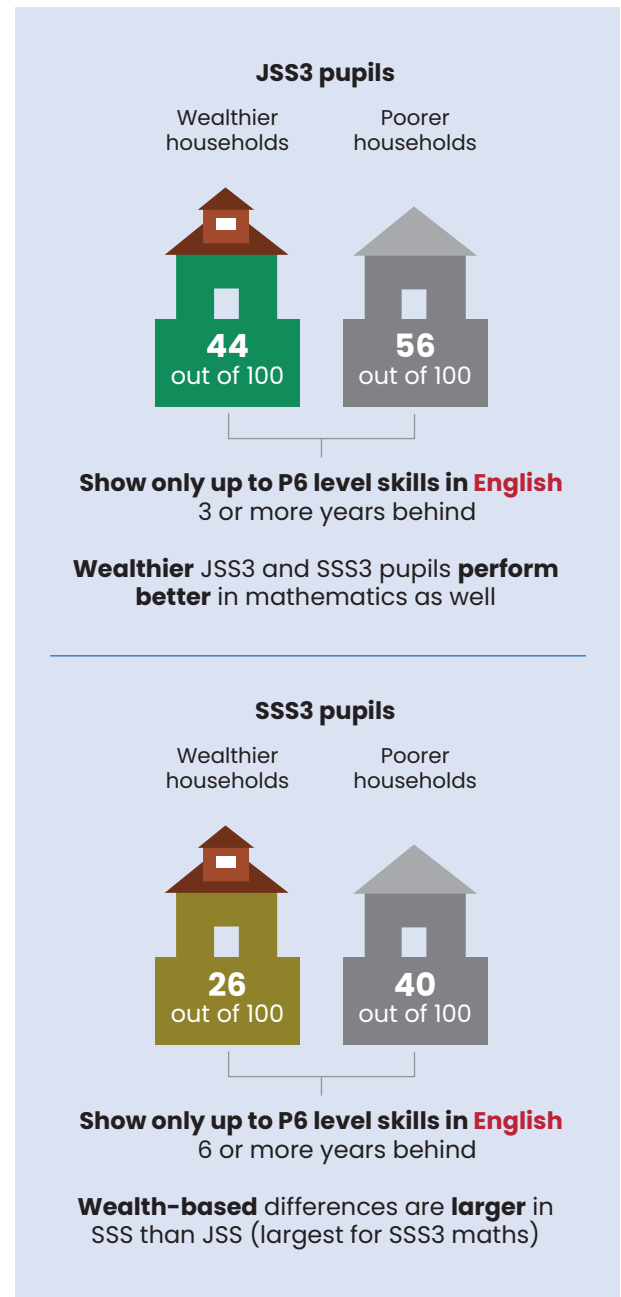
How does pupil learning vary by family background?

Family wealth, and parental involvement and education, play a significant role in determining pupil performance. The performance gap between pupils from the richest and the poorest households⁶ held across both grades and subjects. The largest performance gap between richest and poorest households was observed for SSS3 pupils in maths. 20 per cent of richest SSS3 pupils were performing at the JSS3 level or above in maths, while only 4 per cent of the poorest SSS3 pupils were performing at the same level.

A higher proportion of richer pupils reported studying during closures as well as studying daily. More children from well to do backgrounds were said to study in private schools, which were often said to have better facilities and quality of learning. Richer pupils were also more likely to have access to resources and support such as help from a parent or sibling while studying, having a tutor, or access to a radio to listen to the radio teaching programme. On the other hand, pupils from the poorest households reported facing financial challenges, difficulties while studying when schools were closed, and a lack of access to necessities (electricity, required technology for learning, and washing and sanitation facilities), all of which disturbed the amount and quality of time spent studying.

“Well there is a great difference between children ...whose parent are well to do compared to those who don't have access to all those facilities. In our community especially, you will hardly find any parents at home in the morning because they will all go out to find their living. The children are left alone at home and the only thing they will do is to play instead of studying. But for pupils from well to do families, the parents engaged their children at home during the period of lockdown with private teachers to teach them at home... those in the rural areas didn't have that opportunity.” (CTA Chairman, JSS School, Southern Province)

Pupils from wealthier households perform better than pupils from poorer households



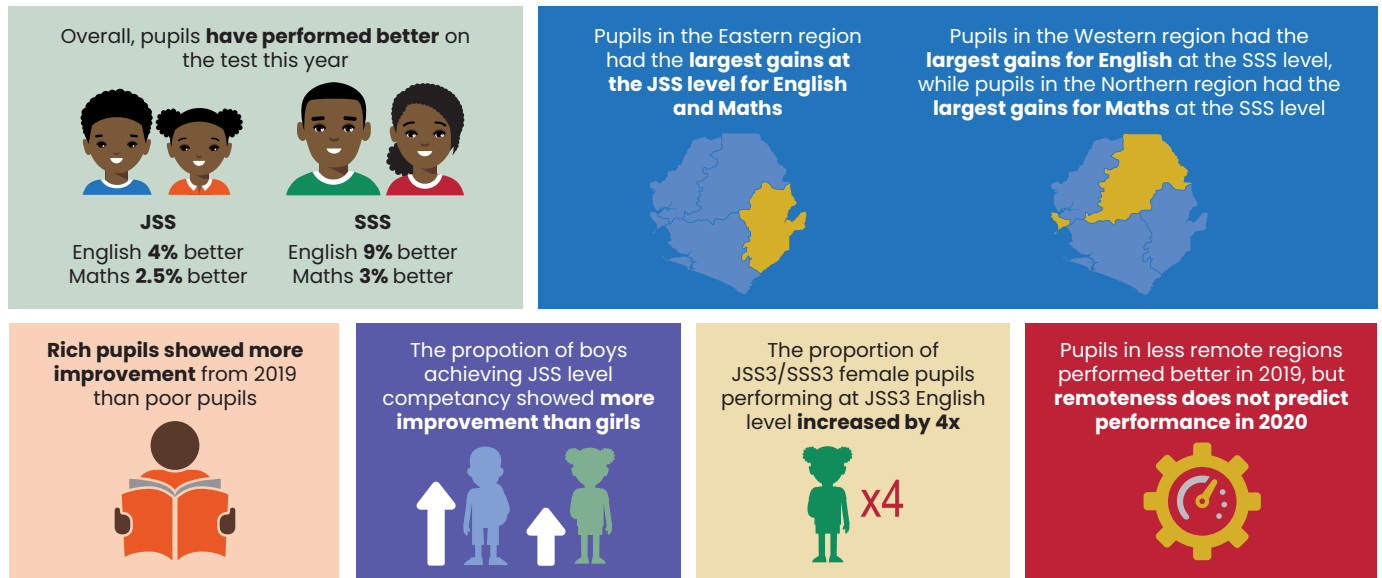
⁵ In the BTS, special needs are broadly defined as referring to any physical, mental or learning impairments that affected the full and effective participation of a pupil in learning. These included six core functional domains: seeing, hearing, walking, cognition, self-care, and communication.

⁶ The richest and poorest households refer to the top 20 per cent and bottom 20 per cent of households in terms of assets.



How do the BTS (2020) results compare with SGLA (2019) results?

Even though more pupils are performing at higher levels in 2020 compared to 2019, performance is still poor and well below expected standard levels as per the national curriculum. While comparisons between BTS 2020 and SGLA 2019 are difficult to make given that the tests were administered to different grades, and at different times of the academic year, more pupils in 2020 are performing at the JSS3 level or higher for both English and Maths, and at both JSS3 and SSS3 levels. To help situate the findings, the figure below captures the main differences and also the key drivers of the BTS results.



Concluding remarks

The main overarching observation from the BTS study is that secondary grade learning levels in Sierra Leone continue to be low, further adversely affected by school closures due to COVID-19. Large proportions of pupils do not demonstrate more than basic English and maths skills despite completing eight to eleven years of formal education. There is also very little progression in pupils' learning outcomes as they move up the grades. Although pupils have performed slightly better on the test this year, this was partially driven by focussing on pupils in BECE and WASSCE grades (JSS3 and SSS3). A comparison with further SGLA results can help ascertain whether pupil performance has indeed increased.

School closures due to COVID-19 had the most impact on girls and pupils from the poorest homes. In the midst of household chores and other income-earning activities, these children found limited time, if any, to study. Those from wealthier households were also more likely to have access to learning resources like pupil handbooks, radio lessons and tuitions.

Despite a number of new distance-learning resources being made available to pupils, there were challenges with accessing these technologies and children prefer to use resources they are familiar with from school. Teacher notes and textbooks remain the most commonly used self-study materials. Pupil handbooks are used more than radio teaching, but in both cases for the children who use them, usage of pupil handbooks and radio teaching does not appear to impact their learning outcomes. The main challenge in accessing handbooks was the hesitation of parents to sign an undertaking with the school, and also the policy in many schools to collect the handbooks back from pupils before school closure. In contrast, access to radio was limited by financial constraints such as not being able to afford a radio, batteries, or electricity to keep it running as well as signal and network coverage issues.

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. For more details please contact: **Diana Ofori-Owusu at +232 76803741**

