

National Digital Learning Strategy for the Sierra Leone Ministry of Basic and Senior Secondary Education & Teaching Service Commission

2025-2030











Acknowledgements

The Ministry of Basic and Senior Secondary Education (MBSSE) extends its sincere appreciation to all stakeholders who contributed to the development of Sierra Leone's first National Digital Learning Strategy (NDLS) — a groundbreaking framework to enhance teaching and learning through the effective use of educational technology (EdTech). This strategy was initiated under the visionary leadership of the Honourable Minister, Mr Conrad Sackey, whose commitment to innovative and inclusive education laid the foundation for this milestone achievement.

Special recognition goes to the NDLS Steering Committee, led by Dr Yatta Kanu, Mr Lans Keifala, and Mrs Adama J. Momoh, as well as representatives from MTHE, TSC, PDU, and MoCTI, whose expertise ensured alignment with national priorities.

The Ministry is also grateful to our development partners — EdTech Hub, FCDO, UNICEF, the World Bank, and other collaborators — for their technical guidance and support throughout the process.

Grounded in evidence and shaped by insights from students, teachers, district leaders, and officials, the NDLS represents a collective commitment to transforming education through technology and building future-ready learners and educators.

MBSSE remains fully committed to the successful implementation of this strategic vision.

Signed:

Conrad O Sackey

Minister of Basic and Senior Secondary Education

Table of Contents

Abbreviations	4
1. Introduction and Vision	5
1.1 Context and Justification	5
1.2 Vision of the National Digital Learning Strategy	6
2. Situational Analysis	7
2.1 Context and Progress Made	7
2.2 Challenges in Sierra Leone	8
2.3 Conclusions moving forward	12
3. The National Digital Learning Strategy	13
3.1 Goals and Programmatic Approaches	13
Goal 1: Addressing the Digital Divide	15
Mapping of infrastructure and capabilities	15
Ensure equitable availability of EdTech across the country	16
Develop innovative approaches to reach to OOSC across the country and support student with disabilities	17
Establish partnerships with private sector and mobile operators	18
Goal 2: Improving teachers' capabilities to integrate technology in lesson	
delivery	20
Mapping of teacher capacity	20
Build teacher digital capacity through pre-service support	21
Build teacher digital capacity through in-service support	22
Goal 3: Strengthening learners' access to technology while ensuring the risafeguards.	ght 23
Ensuring safe access to technology for students	24
Develop digital literacy of students by developing the capacity of teachers.	24
Goal 4: Increased access to localized content aligned with the national	
curriculum	25
Mapping of existing digital content	25
Setting up content review and approval procedures	27
Develop digital content in local languages through partnerships	27
Goal 5: Improve coordination among government departments, developm partners, and relevant stakeholders to develop implementation, financing	,
and knowledge-sharing synergies.	29
Establish an EdTech working group	29
Develop NDLS review and implementation plan	30
5. Stakeholder Roles and Responsibilities	32
6. Budget and Funding	37
7. Key next steps to operationalize the NDLS	39

Abbreviations

Al	Artificial Intelligence
BEC	Basic Education Certificate
CAR	Content Approval Registry
DEO	District Education Office
DSTI	Directorate of Science, Technology and Innovation
ETRI	EdTech Readiness Index
FQSE	Free Quality School Education
JSS	Junior secondary school
KPI	Key Performance Indicators
LCEC	Local Council Education Committee
MBSSE	Ministry of Basic and Senior Secondary Education
MoCTI	Ministry of Communications, Technology and Innovation
MTHE	Ministry of Tertiary and Higher Education
NDLS	National Digital Learning Strategy
NPSE	National Primary School Examination
SEND	Special Educational Needs and Disabilities
SQAO	School Quality Assurance Officer
SSS	Senior secondary school
TSC	Teaching Service Commission
TWG	Technical Working Group

1. Introduction and Vision

1.1 Context and Justification

In the last two decades, Sierra Leone has made significant progress in expanding access to education despite experiencing multiple challenges, including an Ebola crisis and, more recently, the COVID-19 pandemic, which have hindered the delivery of education services. Consequently, the Ministry of Basic and Senior Secondary Education (MBSSE) and the Teaching Service Commission (TSC) have continued to explore ways to leverage technology to address the teaching and learning crisis in the country and deliver inclusive, quality education for all learners (Sengeh, 2021).

While Sierra Leone is yet to establish a dedicated EdTech or ICT in Education policy, there are several government legislations, policies, and plans outlining strategies for integrating technology into education. These include the 2023 Basic and Senior Secondary Education Act, the 2010 National Education Policy, the 2021 National Policy on Radical Inclusion in Schools, the forthcoming Education Management Information System (EMIS) policy, and the Sierra Leone Education Sector Plan (2022–2026). There are other policies and plans that discuss EdTech strategies, but these are not necessarily owned solely by the MBSSE. Examples include the 2009 National ICT Policy of Sierra Leone and the more recent National Innovation and Digital Strategy that lays out the plan for the next 10 years to develop the infrastructure and capacity of human resources to capitalise on available and newer technologies (DSTI, 2019). While the presence of these policies and plans is positive, the absence of a coherent, unified strategy or approach to integrating technology into education can lead to fragmentation in the EdTech landscape. It is difficult to effectively oversee and coordinate implementation and resource allocation of EdTech interventions if stakeholders work in silos. This could result in duplication of efforts or inadequate attention being given to priority areas (i.e., connectivity). Further, a 2022 EdTech Readiness Index survey, conducted by the World Bank, highlights key gaps in terms of capabilities, connectivity, and content for EdTech in the country. A cohesive EdTech strategy is needed to ensure that the gaps are addressed and that the existing interventions are complementary, addressing systemic issues holistically (Waziri et al., 2025).

With this aim in mind, the MBSSE and TSC are focused on developing Sierra Leone's first National Digital Learning Strategy (NDLS) that will address how technology-supported interventions can be leveraged to

meet and respond to the needs of stakeholders across the nation (Sengeh, 2021). The NDLS will focus on learners in the first 15 years of their education; three years of pre-primary education, six years of primary education, three years of junior secondary education and three years of senior secondary education (MBSSE, 2023). However, it is important to mention that the systematic and governance level improvements brought about in the system as a result of operationalization of the strategy will possibly have an impact on areas of higher education and non-formal education.

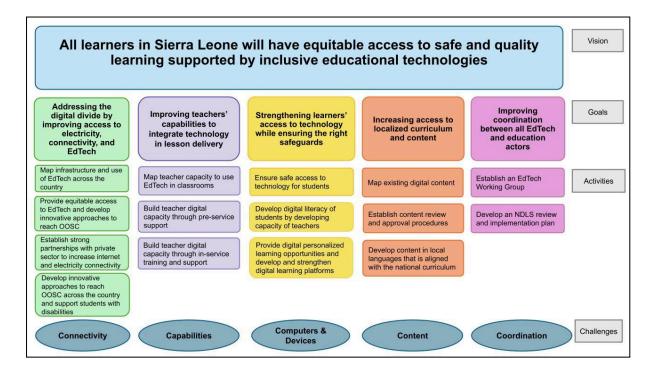
1.2 Vision of the National Digital Learning Strategy

The vision of the NDLS is that "All learners in Sierra Leone have equitable access to safe and quality learning supported by inclusive educational technologies."

The pathways to achieving this vision will be led by the MBSSE and the TSC and will focus on four key goals: (i) Addressing the digital divide; (ii) Strengthening learner and teacher capabilities to improve learning outcomes; (iii) Increasing access to localized content that is aligned with the national curriculum and; (iv) Improving coordination between various EdTech actors in Sierra Leone. This vision and these goals were developed through a consultative process that included key government bodies, development partners, teachers, school leaders, and learners. It was driven by an evidence-based approach that combined primary and secondary research on learning outcomes, the challenges and opportunities that exist in the education sector, and the potential of EdTech to increase access and improve the quality of education for all learners in Sierra Leone.

The NDLS is a five-year strategy designed to lay the foundation for achieving this vision through targeted interventions and coordinated efforts, which are in line with the SDG targets for 2030. While this strategy focuses on the next five years, the vision remains a long-term commitment that will guide future iterations of the strategy. As progress is made and new opportunities emerge, the vision will continue to inform and shape the next version of the NDLS.

Figure 1. National Digital Learning Strategy Theory of Change



2. Situational Analysis

2.1 Context and Progress Made

Sierra Leone has made significant progress in expanding access to education. In 2018, the MBSSE launched the Free Quality School Education (FQSE) initiative to provide free and compulsory education at both primary and secondary levels. The programme, which underscores the government's commitment to increasing access and improving the quality of education across the country, has resulted in a notable increase in schools and enrolment. For instance, since 2018, the number of schools in Sierra Leone has increased by 19%, and there has been a 9.6% increase in the number of schools receiving financial and material support from the government (MBSSE, 2023). Additionally, school enrolment increased by 69% between 2018 and 2022, and at all levels of education, more girls are enrolled than boys in both public and private schools despite significant barriers that disproportionately affect girls' schooling experiences in the country (MBSSE, 2023; Waziri et al., 2025).

The government has also introduced key policies to transform the education sector in the country, including the 2021 National Policy on Radical Inclusion in Schools, which is aimed at improving accessibility and inclusivity in schools for all children, particularly the most marginalized learners (i.e., girls, especially those who are pregnant in school or are parent

learners, children from low-income families, children with disabilities, and children from rural and underserved areas).

However, despite the notable expansion in education access, Sierra Leone is still facing a teaching and learning crisis. Early grade assessments from 2021 show that the majority of students are not achieving foundational-level literacy and numeracy (GPE Secretariat, 2024). Assessments conducted between 2014 and 2021 reveal that 64%–73% of pupils in Grades 2 and 4 cannot comprehend the texts they read, and only one-third are proficient in completing higher-order numeracy tasks (MBSSE, 2022). Furthermore, while pass rates have increased for all transition exams in basic and senior education, the 2024 West African Senior Secondary School Certificate Examination (WASSCE) results show a 19.7% pass rate in English language and a 46% pass rate in mathematics, highlighting significant challenges related to learning outcomes at the secondary schools level as well (The Satellite, 2024).

When it comes to teachers, greater attention needs to be paid to providing adequate training. Research shows that just 61% of primary school teachers are trained. Across the teaching workforce, approximately one-third of teachers are unqualified, with the number of unqualified teachers being higher in rural areas (Irish Aid & UNICEF, 2021). The MBSSE and TSC are actively exploring ways to address the challenges facing learners and teachers, including leveraging technology to improve the teaching and learning crisis and deliver on broader education sector goals and objectives.

2.2 Challenges in Sierra Leone

This section provides an overview of key challenges in the EdTech Landscape in Sierra Leone, categorized under the 4 C's—Connectivity, Computers (and Devices), Capabilities, and Content. These categories are the key EdTech necessities that facilitate students' access to digital learning opportunities and are critical to the development and implementation of EdTech interventions in Sierra Leone.

Figure 2. The 4 Cs: A snapshot of the EdTech landscape in Sierra Leone

The 4 Cs: A Snapshot of the EdTech Landscape in Sierra Leone (Source: Waziri et al., 2025)

Connectivity

Access to electricity and reliable internet services remains a major challenge in the country.

- Only 21.1% of households have access to electricity via the national grid or mini-grids
- 75% of schools do not have access to electricity
- Only 21.2% of people have internet access
- 99% of students in public pre-primary and primary schools do not have access to internet

Computers (and Devices)

Many households <u>do not have access</u> to the technological devices needed to support teaching and learning.

- Only 5.7% of households own a computer
- Although about 75% of households have at least one mobile phone, around 52% of adults own a basic phone without features such as internet.
- 90% of students attend schools without any computers

Capabilities

Many teachers have not received adequate training on integrating EdTech into their teaching practices

- Only 4% of surveyed teachers by the World Bank reported that their initial training included EdTech.
- Very few teachers are confident in their ability to use ICT (approximately 5% across different types of usage).



Content

There have been increasing efforts to provide students and teachers with quality digital learning content tailored to the national curriculum.



However, while digital learning content is important, teachers have emphasised the need to prioritise improved internet connectivity in schools, stable electricity supply, and increased availability of user-friendly devices.

Connectivity

Access to electricity and reliable internet services remains a major challenge in Sierra Leone. Current data shows that only 21.1% of households in the country have access to electricity, including 20.5% of households connected to the national grid and 0.6% using mini-grids, with significant disparities between rural and urban areas (Kemp, 2023). Additionally, 14.7% of households have off-grid access, primarily through solar products (Kemp, 2023). This challenge extends to educational institutions, where 75% of schools do not have access to electricity, including 61% of pre-primary schools, 85% of primary schools, 62% of Junior Secondary Schools and 48% of Senior Secondary Schools (MBSSE, 2023).

Similarly, most people in Sierra Leone do not have internet access (only 21.2% do) due to several factors, including the high cost of internet services, inadequate infrastructure, and unreliable electricity supply (Komminoth, 2023). Most pupils attend schools without internet connectivity (i.e., 99% of pre-primary and primary school students do not have internet access (MBSSE, 2023). According to a study conducted by the GIGA initiative on school connectivity, only 205 out of 11,200 schools had internet connectivity, although 80% of schools are within 3G or 4G coverage areas (GIGA & UNICEF, 2023). While several initiatives are underway to improve digital connectivity in Sierra Leone, much more needs to be done to ensure affordable access to electricity and internet services that will allow teachers and students to leverage technology to improve learning outcomes. In the

teacher surveys conducted by EdTech Hub, 83% of respondents ranked internet connectivity in schools as the highest priority, closely followed by electricity supply, which was ranked most important by 74% of teachers (Waziri et al., 2025).

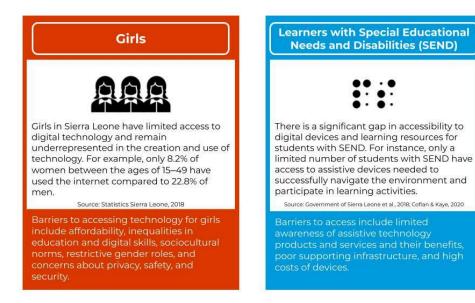
Computers (and Devices)

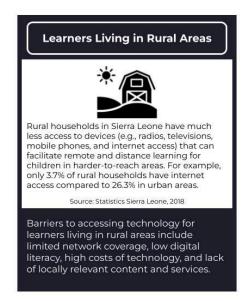
Access to computers and technological devices, which are needed to facilitate the integration of technology into education, is limited in Sierra Leone. Research shows that only 15% of households own a television, reflecting limited access to visual media, especially in rural areas, and an even smaller percentage of households (5.7%) own a computer (11.6% in urban areas and 0.8% in rural areas), highlighting significant barriers to accessing information technology and digital literacy (Kemp, 2023; Statistics Sierra Leone, 2018). While mobile phone ownership is high, with 75% of households having at least one mobile phone, recent reports show that around 52% of adults in Sierra Leone own basic phones without features such as the internet (Kemp, 2023).

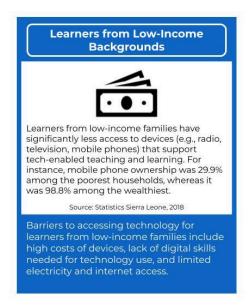
The limited access to devices also applies to schools, where 90% of students in the country attend schools without computers to facilitate teaching or student learning (MBSSE, 2023). The World Bank EdTech Readiness Index (ETRI) report for Sierra Leone also found that out of 295 schools in the survey, at least one or more devices were available in only nine schools, with eight having devices available to students for learning activities (World Bank, 2024). In the focus group discussions conducted as part of the landscape analysis for the NDLS, student participants shared how access to devices—or the lack thereof—has either improved or hindered their learning experiences. While students with devices highlighted how technology has improved their learning process, empowering them and giving them autonomy over their learning, students with limited access to devices in school or at home expressed how limiting it could be, particularly regarding not being able to visualize what they are learning or having to rely on others for support (Waziri et al., 2025).

Furthermore, the lack of access disproportionately impacts marginalized learners in Sierra Leone, including girls, learners with special educational needs and disabilities (SEND), learners living in rural areas, and learners from low-income backgrounds (see marginalized learner profiles below).

Figure 3. Marginalized Learners and their access to technology







Many teachers in Sierra Leone have not received adequate training on using digital tools and integrating EdTech into their teaching practices, and some educators may resist adopting new technologies due to a lack of familiarity or confidence (World Bank Group, 2024). According to the EdTech Readiness Index (ETRI), only 4% of surveyed teachers reported that their initial training included learning how to use EdTech. The ETRI indicates that very few teachers are confident in their ability to use ICT (approximately 5% across different types of usage) (World Bank Group, 2024). These statistics align with the findings from the teacher surveys, where very few respondents reported feeling very confident in their ability to use digital devices and resources (Waziri et al., 2025).

Similarly, students often have limited exposure to digital technologies, resulting in low levels of digital literacy, which can hinder the effective use of EdTech resources (World Bank Group, 2024). As the MBSSE and TSC plan an EdTech strategy, it is essential that both teachers and students receive training and support in improving digital literacy skills and capabilities.

Content

There have been increasing efforts to provide students in basic and senior secondary schools with quality digital learning content that is tailored to the national curriculum. These initiatives, such as the Sierra Leone Learning Passport, offer personalized learning pathways that meet the needs of each student and serve as teaching, learning, and exam preparation tools. The MBSSE's website also features various educational resources, including e-learning games and lesson plans for teachers, to support teaching and learning. While digital learning content is important, teachers have emphasized the need to prioritize improved internet connectivity in schools, stable electricity supply, and increased availability of user-friendly devices (Waziri et al., 2025).

2.3 Conclusions moving forward

- There is a need for a coherent digital learning policy or strategy that outlines specific benchmarks and deliverables across key Ministry focus areas. This will make it easier for EdTech stakeholders, including the government, non-governmental organizations, private sector partners and international partners, to understand what the national priorities are for the use of technology in education and will facilitate more effective coordination, allocation, and monitoring of resources for EdTech.
- Across various EdTech stakeholders, including teachers and students, limited connectivity (electricity and internet) and lack of access to technological devices are consistently highlighted as major challenges, underscoring the need to prioritize improving EdTech infrastructure and access in the country, particularly for marginalized learners.
- While there are growing efforts to strengthen the digital capabilities of teachers and learners in Sierra Leone, there is still room for more initiatives aimed at improving digital literacy for teachers and learners, with a focus on marginalized learners.
- There is a need for more digital education content that is specifically tailored to the local context and aligned with the

- national curriculum. Moreover, creating content in local languages and dialects is important for ensuring accessibility for all students.
- Lastly, there is an opportunity for **greater collaboration and coordination between government stakeholders and donor partners**. To do so, it might be important to consider whether a coordinating mechanism that specifically focuses on EdTech interventions might be useful in Sierra Leone. This can provide a practical and targeted governance framework bringing together different ministries, government institutions, and development partners, including the MBSSE, TSC, Directorate of Science, Technology and Innovation (DSTI), Ministry of Communications, Technology and Innovation (MoCTI), and even the Ministry of Finance, which can ensure that sustainable financing is available to continue key and impactful initiatives.

3. The National Digital Learning Strategy

3.1 Goals and Programmatic Approaches

The National Digital Learning Strategy 2025–2030 aims to provide strategic direction for all EdTech activities implemented by the MBSSE and the TSC. The vision of the NDLS is that "All learners in Sierra Leone will have equitable access to safe and quality learning supported by inclusive educational technologies." The NDLS is specifically focused on providing strategic direction for the MBSSE and the TSC.

This strategy outlines four key goals that align with broader education goals set by the Education Sector Plan 2022–26 (ESP) and aligned with the MBSSE and TSC's vision of harnessing the potential of EdTech to enhance and broaden learning opportunities for all teachers and learners in Sierra Leone. The goals have been informed by the findings of a situational analysis and the consultative workshops:

- Addressing the digital divide by improving access to electricity, connectivity, and EdTech for all learners and teachers;
- Strengthening learners' access to technology while ensuring the right safeguards;
- Improving teachers' capabilities to integrate technology in lesson delivery;
- Increasing access to localized curriculum and content;

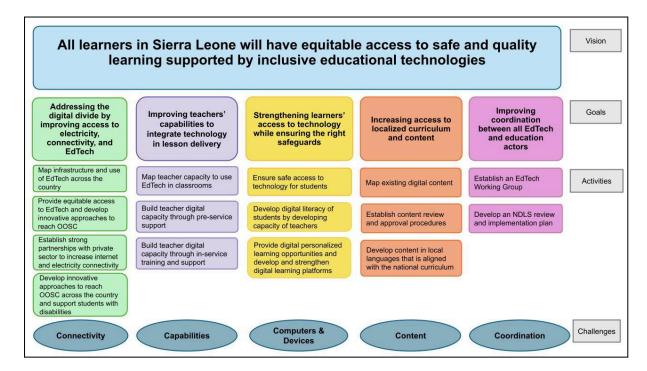
Improving coordination between all EdTech and education actors.

To achieve these goals, the MBSSE and TSC will prioritize the following activities:

- Mapping of EdTech infrastructure;
- Ensuring accessibility of technology across all schools that can be used to support lesson delivery in classrooms;
- Developing innovative EdTech solutions to reach Out of School Children (OOSC);
- Establishing partnerships between the public and private sectors;
- Strengthening the digital literacy of students and teachers;
- Developing safeguards to ensure cybersecurity and child protection from online threats, particularly to children;
- Supporting teachers to effectively integrate EdTech in pedagogy and subject content;
- Developing localized and digital learning content;
- Establishing clear processes for content review and simplifying approval procedures;
- Developing EdTech-specific working groups with clear governance structures and communication channels (for members of the working group as well as potential partners seeking to provide support in this space);
- Setting up systems to review and update the NDLS.

Each goal and corresponding activities are described in detail in the section below.

Figure 4. National Digital Learning Strategy



Goal 1: Addressing the Digital Divide

The MBSSE and the TSC will focus on the following activities to tackle the digital divide in Sierra Leone:

- Map the current infrastructure and use of EdTech across the country, both at the school and district levels;
- Provide equitable access to EdTech for all school-going children in the country, and develop innovative approaches to reach OOSC;
- Establish strong partnerships with the private sector and mobile operators to increase internet and electricity connectivity across the country.

Mapping of infrastructure and capabilities

The MBSSE will conduct a mapping of the existing infrastructure and use of technology across the country in schools and at the district level.

■ Conduct a landscape mapping of all existing EdTech infrastructure needs, including internet and electricity connectivity needs. This mapping will be done by collating information from existing literature and statistics, and through primary data collection to fill the gaps. The MBSSE and TSC will coordinate with institutions such as the DSTI, MoCTI, and

development partners to minimize data duplicates and ensure new and updated data that can be used for all future activities. The mapping will focus on collecting data from all the districts in the country to develop a comprehensive picture that will then be shared with all the relevant stakeholders for project planning purposes. The mapping exercise will also include a gap analysis of the Annual School Census (ASC) in terms of the data on EdTech that is missing and add questions related to that data in the ASC.

- Build capacities of education officials to conduct self-assessments of digital needs. Understanding the current practices and potential barriers to the adoption of technology is a necessary first step before introducing EdTech. The MBSSE will continue to work with local and community school leaders, via School Quality Assurance Officers (SQAOs) and the FQSE district officers, to identify school needs and support teachers and school leaders to conduct digital needs self-assessments.
- Continue effective implementation of existing MBSSE activities that focus on increasing access to both internet and electricity connectivity in Sierra Leone. The MBSSE will continue implementing interventions such as the UNICEF GIGA project, which aims to support the government of Sierra Leone to connect every school to the internet and every young person to information, opportunity, and choice by providing meaningful connectivity. By leveraging innovative mapping technologies, GIGA identifies unconnected schools and regions and plots them on a map, providing governments and partners with data-driven insights to prioritize investments to improve internet connectivity in pockets of areas with low connectivity. GIGA also supports the government in identifying potential public-private partnerships to finance connectivity solutions, ensuring cost-effective and sustainable outcomes; this includes supporting the government in negotiating affordable internet rates and wider coverage across the country (DSTI, 2019).

Ensure equitable availability of EdTech across the country

MBSSE and its partners will take the following steps to continue providing equitable access to various EdTech services for all learners and teachers in Sierra Leone.

- The MBSSE will continue to expand on initiatives that seek to increase access to EdTech devices and electricity for all learners in Sierra Leone. The MBSSE will continue building on initiatives such as the One Tablet per School programme supported by the World Bank, which aims to equip all government and government-assisted primary schools with tablets, and provision of tablets under the **Secondary School Education Improvement Programme** (SSEIP)/Leh Win Lan, which has already provided Android tablets to 179 SQAOs and 1,197 school principals and continues to support school principals in secondary schools. Recently, the Government of Sierra Leone has granted a licence to **StarLink**, a satellite internet service provider, to ensure wider connectivity nationally. The initiative aims to expand the coverage of the internet across the country. Starlink will enhance connectivity in the country by providing high-speed internet access to remote and underserved areas. bridging the digital divide. This provides an opportunity to connect schools to the internet. However, it is important to mention that StarLink packages are priced higher than those of other service providers. A financial plan is needed to ensure that schools can take advantage of the service.
- Create mechanisms for community involvement and regular monitoring to address disparities and maintain accountability in resource distribution. The MBSSE will utilize School Management Committees (SMCs) at the primary school level and Boards of Governors (BOGs) at the Secondary level, ensuring that community members are actively participating. These groups will provide support in identifying the resource needs of the schools and monitoring the distribution of resources. SMCs and BOGs will regularly gather input from parents/guardians, teachers, and students. The MBSSE will also implement transparent reporting systems to track resource allocation and address any disparities. This may include the training of SMC and BOG members to oversee the maintenance and proper use of distributed infrastructure and devices. The MBSSE will also conduct regular audits and publicly share findings to ensure accountability and build trust in the resource distribution process.

Develop innovative approaches to reach OOSC across the country and support students with disabilities

■ Explore the use of EdTech to facilitate multiple learning pathways. The MBSSE will explore how EdTech can be used to provide learning

pathways for out-of-school children (OOSC) and learners with disabilities. In addition, the MBSSE will explore pathways and work with partners to leverage digital technologies to support the non-formal learning of both pupils and educators.

■ Supporting students with disabilities through technology: The MBSSE will work with TSC to develop the capacities of teachers on the proposed learning pathways and integrate technology in their teaching practice to better support students with disabilities in the classroom. The MBSSE and TSC, alongside the support from the Leh Wi Lan (LWL) project, have made significant efforts to identify and cater to students with impairments and disabilities at the secondary school level. The MBSSE and TSC have also developed the capacity of teachers and principals at the secondary level to integrate more inclusive practices in the schools to cater to students with disabilities. Similar efforts need to be replicated at the primary level. Existing accelerated learning programmes will also be strengthened through the use of technology.

Establish partnerships with the private sector and mobile operators

The MBSSE will continue to foster multi-stakeholder partnerships with the international development community and the private sector, which is crucial to improving school connectivity and device procurement.

- MBSSE and TSC will form a multi-stakeholder Steering Committee (SC) to oversee collaboration, ensure accountability, and maintain alignment with strategic priorities. The NDLS SC will define roles, responsibilities, and decision-making processes for all partners. The SC will form subcommittees for more technical tasks, such as the review and development of new EdTech content and the development of digital platforms.
- Work with other government organizations to develop and offer incentives to the private sector to offer subsidized infrastructure and devices to schools and teachers. The MBSSE and TSC will collaborate with government organizations and other development partners, such as the Finance Ministry, the DSTI, and the Ministry of Commerce, to design incentive programmes, such as tax breaks and public recognition, to encourage private sector investment in subsidized infrastructure and devices for schools and teachers. They will establish public-private partnerships that align corporate social responsibility goals with education priorities and facilitate

co-financing models where governments and private firms share the costs of providing affordable technologies. The MBSSE will offer regulatory support to streamline the process for private sector contributions. Additionally, the MBSSE will design innovative financing models, such as public-private partnerships (PPPs), pooled funding, and in-kind contributions from private sector entities, to ensure shared investment in infrastructure, devices, and digital content. Finally, the MBSSE will ensure incentives are tied to measurable outcomes, such as increased access to technology in underserved schools.

Develop comprehensive protocols on data sharing and cybersecurity that are agreed on by all partners. The MBSSE will work with partners on creating a standardized data governance framework that outlines the types of data to be collected, shared, and used, ensuring alignment with local and international data protection laws. The process to develop the protocols will be led by the SC, overseeing the development and implementation of the National Digital Learning Strategy. The protocols will establish robust cybersecurity measures, including encryption, secure storage, and access control, to safeguard against breaches and unauthorized use. Roles and responsibilities for data handling will be clearly defined, alongside mechanisms for monitoring compliance and managing data breaches. Regular training for stakeholders on best practices and updates to the protocols will ensure they remain effective and relevant. By fostering transparency and accountability, these protocols will build confidence among partners and protect the integrity of collaborative efforts.

Box 1. Artificial Intelligence and its impact on education in Sierra Leone

Findings from the situational analysis show that Artificial intelligence (AI) shapes the experiences of teachers and learners in Sierra Leone (Waziri et al., 2025). With regulation and structured adoption, AI has the potential to provide personalized learning experiences tailored to the unique needs and abilities of students. In particular, it can help address challenges such as large class sizes, limited teacher availability, and diverse learning needs. In this context, where infrastructure and resources are constrained, AI can also be used to automate administrative tasks, optimize resource allocation, and support teacher training by providing adaptive professional development programmes. Additionally, AI-powered language processing tools also offer opportunities to bridge linguistic barriers, making education more inclusive for students in multilingual communities. Globally, AI is revolutionizing

education systems, and as part of the NDLS, efficient and scalable solutions can be designed around this technology to expand educational opportunities, improve learning outcomes, and build a workforce ready for the demands of a rapidly evolving global economy. While the current version of the NDLS does not have an AI-specific activity, the MBSSE and TSC are keen on building internal capacity to explore the potential of AI to increase access and equity to educational resources for all learners and teachers in Sierra Leone

Goal 2: Improving teachers' capabilities to integrate technology in lesson delivery

MBSSE and TSC will focus on the following activities to improve teachers' capabilities in Sierra Leone:

- Map teacher capacity;
- Build teacher digital capacity through pre-service support;
- Build teacher digital capacity through in-service support.

Mapping of teacher capacity

- Conduct baseline assessments to evaluate teachers' current skills, confidence, and experience in using technology for teaching. The TSC will use surveys, interviews, and classroom observations to gather insights into teachers' proficiency and training needs. The TSC will then identify teachers' gaps in knowledge and access to digital tools, particularly in underserved areas. The data gathered as part of the baseline will be used to assess teachers against the parameters of UNESCO's digital competency framework for teachers. Findings from the report will be shared with development partners that work and support teachers in Sierra Leone. Before the mapping exercise is conducted, a review of the existing studies to better understand teacher capacities will be done to avoid duplicating efforts. The World Bank's recent ETRI survey provides key statistics on teachers' use of technology.
- Explore the use of technology for both pre-service and in-service teacher training. Working closely with the Ministry of Tertiary and

Higher Education (MTHE), the TSC will continue to build evidence on the use of EdTech to increase access to teacher training in the country. Technology has the potential to address issues of scale, equity, and quality in teacher continuous professional development (TCPD). It can facilitate the scaled provision of teacher professional development (TPD) to teachers (e.g., through Massive Open Online Courses (MOOCs) such as the programme for educators made available by Harvard University or Education world), it can aid teaching in the classroom (e.g., through communicative technologies allowing teachers to share lesson plans and resources), and it can help improve teachers' reflective practice (e.g., through videos recording classroom practice and giving and receiving feedback on this). The TSC will continue to explore pathways in which EdTech can support teacher training practices that are rooted in key evidence and data. It is also important to note that there are existing programmes being implemented in Sierra Leone by partner organizations of the MBSSE that can be scaled based on an impact assessment. One such programme is Teacher.AI, an AI-driven chatbot that offers 24/7 support to teachers, using machine learning to cater to diverse educational needs. It leverages WhatsApp's global reach for easy accessibility, enhancing pedagogical skills, and fostering continuous professional development.

■ Build effective monitoring and evaluation practices to make informed decisions about teacher training programmes. To ensure better management and gather data on teachers, the TSC has implemented a Teacher Management Information System (TMIS) to enhance digital information management across its departments and the broader education sector. The data from the TMIS can be used to better understand teachers' capacity to use technology. The TSC will also regularly reassess progress through evaluations and feedback to ensure the continuous improvement and effectiveness of training initiatives.

Build teacher digital capacity through pre-service support

The Teaching Service Commission (TSC) will work with the Ministry of Tertiary and Higher Education (MTHE) to take the following measures to develop the capacities of teachers to use digital resources in schools.

■ Focus on integrating EdTech skills into the pre-service teacher training curriculum. In collaboration with the TSC, the MTHE will

work to integrate digital literacy modules into teacher education programmes, covering topics such as basic computer skills, using educational software, navigating digital content, and online communication tools. This will also include hands-on learning such as interactive sessions with real-world applications, creating lesson plans using digital tools, managing virtual classrooms, and incorporating multimedia in teaching. The TSC will adapt the in-service teacher training curriculum on the basis of the pre-service programme to ensure alignment of the ongoing support with initial support to teachers.

- Ensure that pre-service training on EdTech is aligned with existing pedagogical standards. The MTHE will ensure that all pre-service training emphasizes how to integrate EdTech effectively into teaching practices, with examples of subject-specific applications and strategies for fostering student engagement. Further, the mapping will also be used by TSC to develop in-service training content to ensure the coherence of pre-service and in-service training programmes. The TSC will also update the Classroom Observation Tool to better facilitate teacher observation on newer skills related to EdTech.
- Ensuring that all TSC teacher training centres are equipped with all required EdTech tools. The MTHE will work with TSC to equip teacher training institutions with the necessary digital tools, internet access, and resources to support practical learning experiences. This will be done through partnerships with other government agencies and development partner support.

Build teacher digital capacity through in-service support

The TSC will take the following measures through in-service training to develop the capacities of teachers to use digital resources in schools.

■ TSC will ensure quality training of teachers on all newly developed digital applications and platforms. Programmes such as One Tablet per School supported by the World Bank are designed to equip primary schools with tablets. These tablets will be given to the head teachers of each school, and will have pre-installed applications to capture salient information about attendance, classroom observations, and school management. There is a need to train head teachers on using applications designed for these devices to ensure widespread adoption and use of technology. Similarly, at the

- secondary level, Leh Wi Lan will work with TSC to ensure that all teachers are trained on any new applications introduced to the already present tablets in the schools.
- learning by teachers as they use EdTech in their classrooms. The TSC will create or mobilize local/in-person or virtual groups, in the form of Communities of Practice (CoPs), where teachers can share experiences, challenges, and best practices related to integrating technology in teaching. The TSC will facilitate regular meetings, webinars, or discussion forums to promote collaboration and learning. In addition, they will implement peer-mentorship programmes, pairing experienced teachers with those needing additional support to foster skill-sharing and confidence in using digital tools. The CoPs and other such platforms will also be used as an opportunity to acknowledge active participation through certifications, rewards, or professional development credits to sustain motivation.
- The TSC will continue to provide coaching and monitoring support as teachers use EdTech tools in classrooms. The TSC will build on the existing teacher coaching programme, developed and implemented by TSC with in-country support from the World Bank, to offer personalized feedback, guidance, and troubleshooting for teachers as they use technology in classrooms. The TSC will also update the Classroom Observation Tool, developed by TSC using the World Bank's Teach tool, to integrate indicators on the use of technology in the classroom and link with coaching to provide support to the individual needs of teachers.
- Use data for decision-making on the type of training and support required by teachers in Sierra Leone. The TSC will continue to use online platforms or mobile apps to connect teachers, provide access to resources, and enable continuous interaction among peers and mentors. The TSC will also continue to implement programmes such as Leh Wi Lan, which is providing training and peer support to utilize dashboards through tablets in order to effectively collect data and strengthen accountability and data collection practices at the district and national levels.

Goal 3: Strengthening learners' access to technology while ensuring the right safeguards

The MBSSE and the TSC will focus on the following activities to improve the digital skills of both learners and teachers in Sierra Leone:

- Ensure safe access to technology for students;
- Develop students' digital literacy by developing the capacity of teachers;
- Provide digital personalized learning opportunities and develop and strengthen digital learning platforms.

Ensuring safe access to technology for students

While the use of technology has many benefits, it is also important that necessary safeguards are put in place to ensure the protection of children against cybercrime and access to damaging material online. In this regard, the MBSSE will take the following step.

■ Develop clear protocols to safeguard primary school children from cybercrime and harmful online content by implementing strict access controls, monitoring digital activities, and training teachers and parents on online safety. The MBSSE will ensure that schools integrate age-appropriate cybersecurity education into the curriculum, ensuring students understand risks like phishing, cyberbullying, and inappropriate content. Conduct regular audits of school networks, collaborate with cybersecurity experts, and ensure the use of child-friendly filtering software to create a secure digital environment. Additionally, clear reporting mechanisms will be established to empower children to seek help if they encounter threats online.

Develop students' digital literacy by developing the capacity of teachers

Digital literacy is a growing part of any approach to skills development. Interventions to support this programmatic priority are multifaceted and interconnected. Key interventions that the MBSSE and TSC will undertake include the following.

- Developing tools to guide and assess digital literacy. A number of digital competency frameworks have been developed and can be contextualized for the Sierra Leone context. Frameworks are a necessary starting point as they define the boundaries of what constitutes digital literacy and inform curricula and assessments. Despite using a range of labels (e.g., digital literacy, skills, citizenship), they broadly converge around the idea of a set of competencies that include technical as well as transferable skills, such as communication and problem-solving skills. Implementing digital literacy programmes effectively requires more than simply importing a good programme from elsewhere. The MBSSE will work with development partners to create a digital literacy framework that will guide the implementation of EdTech programmes across the country.
- Harness the potential of EdTech to provide more and better personalized learning opportunities, especially for those who are the farthest behind.¹ Digital tools can be leveraged to support adaptive teaching to meet students' individual learning needs and build foundational numeracy and literacy skills. Efforts to develop high-quality content are already being undertaken in the country. Through programmes such as the 'One Billion' tablets initiative, Imagine Worldwide has been working with Rising Academies to provide tablets to 16,000 children across Grades 1–6. The initial pilot is designed to test delivery models to inform future national scaling. MBSSE will expand this programme based on an impact analysis and explore further partnerships to develop high-quality programmes and content that can be used to support teachers in delivering personalized learning.

Goal 4: Increased access to localized content aligned with the national curriculum

The MBSSE and the TSC will focus on the following activities to improve both access and quality of digital content in Sierra Leone.

¹ Digital Personalized Learning can be defined as any technology that enables or supports learning based on particular characteristics of relevance or importance to learners.

- Mapping of existing digital content;
- Setting up of content review and approval procedures;
- Develop content in local languages that is aligned with the national curriculum.

Mapping of existing digital content

MBSSE will carry out a mapping exercise that takes stock of all the digital content developed and used in the country by the government, development partners, and private sector organizations.

- The NDLS SC will set up a subcommittee of technical experts to review existing digital content for school-aged learners, and set up a repository for all digital education content. This subcommittee will include government agencies, private content providers, NGOs, and EdTech organizations to gather insights and access existing repositories.² The subcommittee will then set up a digital platform or an inventory as a central location where all existing digital content can be accessed. The working group will develop a comprehensive catalogue of digital content, including e-books, video lessons, educational apps, and platforms currently in use across schools and regions. The critical first step in this direction will be taken by Leh Win Lan through the formation of a Knowledge Platform that makes available a vast range of materials—policies, guides, templates, and research—to support the work of organizations and individuals working at the school, district or national levels. The Knowledge Platform will host all the relevant documents on the EdTech landscape, along with the Situational Analysis and the NDLS.
- The MBSSE and TSC will focus on building the capacity of teachers and school leaders so that they can access any new content or content from the central repository for their lessons while also supporting the development of new content or adaptation of existing content to local languages. The TSC will include guidance on how teachers can access both online and offline content for their daily use in classrooms. It will include training local educators, developers, and content creators in digital production techniques and ensuring they have the tools needed to sustain content development in their languages.

² This task can be undertaken by the current Steering Committee overseeing the NDLS as it has members from all key stakeholders.

- The NDLS SC's subcommittee on content review and evaluation will conduct a quality assessment of all existing curriculum-aligned digital content. This will include evaluating the relevance, alignment with the national curriculum, language inclusivity, cultural appropriateness, and accessibility of the identified resources.
- The technical subcommittee will collect data on various aspects of digital content. This will include identifying platforms hosting digital content, such as online portals, mobile apps, or broadcast channels, and assessing their reach and usability. The working group will also analyse data on the adoption, frequency of use, and feedback from teachers, students, and parents to understand the effectiveness and popularity of the resources.
- The technical subcommittee will conduct a gap analysis. This analysis will help highlight gaps in content availability, such as subjects, grade levels, or underserved regions, and identify areas for new content development or improvement.

This mapping exercise will serve as a foundation for designing targeted interventions to improve and scale digital education in the country.

Setting up content review and approval procedures

As part of the content mapping process, the MBSSE will also set up standardized content review and approval procedures that will be approved by the NDLS SC. Establishing clear approval procedures will assist in ensuring a strong level of quality and consistency for all digital content that learners and teachers access in the classroom. To achieve this, the MBSSE will:

- Set up a framework to define review standards. The MBSSE will develop clear criteria for evaluating content, including alignment with the national curriculum, pedagogical quality, cultural and linguistic appropriateness, accessibility for diverse learners, and alignment with data privacy standards. The MBSSE will assemble multidisciplinary teams of educators, subject-matter experts, instructional designers, and technology specialists to set up a framework and evaluate content from multiple perspectives.
- This NDLS SC will create a guideline for content review. This will include the creation of step-by-step guidelines for assessing digital content, including the submission process, review timelines, quality benchmarks, and feedback mechanisms. They will also help classify

content based on its type (e.g., videos, apps, e-books), target audience (e.g., grade levels, subjects), and intended learning outcomes for efficient review and prioritization.

■ The MBSSE will maintain a Content Approval Registry (CAR). This will include the creation of a database of approved content with detailed metadata (e.g., subject, grade, developer) to ensure transparency and accessibility for educators. Along with the CAR, the MBSSE will schedule regular reviews to ensure content remains relevant, up-to-date, and compatible with evolving educational needs and technological advancements.

These structured procedures will ensure digital content meets the highest educational standards and effectively supports teaching and learning.

Develop digital content in local languages through partnerships

Based on the gaps identified from the mapping of the existing content and as per the needs of ongoing and upcoming programmes, MBSSE will work with development partners and the private sector to develop localized content to be disseminated through EdTech platforms.

- The MBSSE will engage local language and curriculum experts to adapt and create any required new content to respond to learning needs. This will include fostering a collaboration with linguists, educators, and cultural experts to create and adapt content that reflects local contexts, traditions, and learning needs. This process will also include engaging local communities in the development process to ensure relevance and ownership, which will enhance adoption and usage. It is important to note the programmes created by development partners with high-quality content that can be adapted to the local context and then implemented across the country which already exist. For example, the Learning Passport, developed by UNICEF is a digital education platform designed to provide students with access to quality learning resources, especially in remote and underserved areas. There are also programmes specifically for EdTech, for example, Imagine Worldwide, EducAid, and Leh Wi Lan have developed content for programmes that focus on learning through technology.
- Any new content will have a Whole Child approach as the main focus. Special focus will be on building strong foundational literacy and numeracy skills, social and emotional skills, and other 21st

century skills. The MBSSE and TSC will also focus on developing interactive content, which will include the creation of new digital resources, interactive lessons, videos, e-books, and quizzes, specifically designed in local languages to address gaps in subject-specific content. The MBSSE will also focus on making content that is available in various formats (text, audio, video) to cater to diverse learning needs, including learners with disabilities. Online and offline modalities will be integrated.

- Existing content focused on distance learning will be reviewed and adapted (if needed) to be used to support student learning. The MBSSE took key steps during the Ebola epidemic and the COVID-19 pandemic to ensure continuity of student learning. Programmes such as the Radio Teaching Programme (RTP) and Rising on Air were implemented to ensure continuity of learning during the 2014 Ebola outbreak and the 2020 COVID-19 pandemic. The NDLS SC subcommittee on content will review the content of these programmes and make necessary changes to use it for national-level distance learning programmes.
- The MBSSE and TSC will set up strong quality assurance and maintenance protocols. The MBSSE and TSC will set up a standardized process for reviewing and approving local language content, ensuring alignment with the curriculum and pedagogical standards. The MBSSE will also regularly update and revise content to reflect curriculum changes, technological advancements, and evolving language practices.

Goal 5: Improve coordination among government departments, development partners, and relevant stakeholders to develop implementation, financing, and knowledge-sharing synergies.

The MBSSE and the TSC will focus on the following activities to improve coordination between all education and EdTech actors in Sierra Leone:

Establish an EdTech working group;

Develop an NDLS review and implementation plan.

Establish an EdTech working group

Promoting EdTech in the country requires strategic planning and inclusive stakeholder engagement. A key step in this regard is setting up a national-level Technical Working Group (TWG) on EdTech that oversees all matters related to EdTech in the country.

- The MBSSE and TSC will collaborate with other government agencies and development partners to set up a ministerial-level **EdTech working group.** Members of this working group will clearly outline the purpose, goals, and expected outcomes of the working group (e.g., improving digital learning tools, integrating EdTech into curricula, supporting teacher training). The working group should include representatives from the government (e.g., education ministries), the private sector (EdTech companies), NGOs, donor agencies, academic institutions, and teacher associations. The TWG will prioritize diversity in expertise, including technologists, educators, curriculum developers, and policymakers. The TWG will define roles and responsibilities, such as a chairperson, a secretary, and working group members. The group will provide oversight on the work of the NDLS SC and its subcommittees for specific focus areas like content development, infrastructure, or teacher training. In addition, the TWG will draft terms of reference (ToR) detailing the group's mandate, decision-making processes, and reporting structures and set clear timelines for meetings, deliverables, and milestones.
- The TWG will be responsible for mobilizing resources from government budgets, private sector contributions, or development partner funding to support activities. It will also ensure logistical support, such as meeting spaces, technology platforms, and administrative assistance for conferences and dialogue around EdTech in the country. The TWG will facilitate regular meetings, workshops, and brainstorming sessions to encourage dialogue and the exchange of ideas. It will use digital platforms to share updates, resources, and best practices among members.
- The TWG will develop key performance indicators (KPIs). This will help to track the group's impact and effectiveness. Conduct regular evaluations and refine the group's strategy based on feedback and changing needs.

- In addition to setting up an NDLS SC, the MBSSE will also coordinate with other education bodies that oversee key education-related programmes and activities. MBSSE will integrate EdTech as a key agenda point in the ToRs of these bodies to make EdTech conversation more mainstream in the country. The coordination bodies are:
 - Education inter-ministerial and partner group meetings. This group is made up of the ministers of MBSSE, MTHE, and Finance, the TSC Chair, the Chief Minister, and other heads of agencies.
 - Local council/district coordination meetings. These will include representatives from the Local Council Education Committees (LCEC), District Education Offices (DEOs), and other district stakeholders.
 - Education Development Partners Group Meeting. This group is composed of ministers and technical heads of the MBSSE and representatives of development partners, NGOs, and civil society organizations (CSOs) involved in education delivery.

Develop NDLS review and implementation plan

The development of the NDLS is the first step in the integration of EdTech into the learning process in schools across the country. A robust implementation plan for the NDLS that focuses on the following must be developed.

- The MBSSE will collaborate with other stakeholders to set a clear action plan for the implementation of the NDLS. This will include the creation of short-, medium- and long-term action plans with clear milestones and timelines. This phased approach will make the strategy more implementable and allow the MBSSE and its stakeholders to build capacity across the system. The implementation plan should also assign clear tasks to relevant stakeholders, including government ministries, private sector partners, and NGOs, while also ensuring funding for each phase, with detailed budgets and provisions for resource mobilization.
- The MBSSE and TSC will work together to set up a robust monitoring framework and KPIs aligned to the strategy's goals (e.g., number of schools connected, teachers trained, or students accessing digital content). The MBSSE and TSC will use real-time data collection tools to track implementation progress and identify

bottlenecks. Finally, the MBSSE and TSC will conduct periodic progress reviews and publish reports to maintain transparency and accountability.

5. Stakeholder Roles and Responsibilities

The table below summarizes the NDLS goals by activity, the government bodies responsible for leading each activity, and the development partners currently or previously involved in these goal-related initiatives. Funding is not necessarily associated with the development partners listed in the table.

Table 1. Key stakeholders of the National Digital Learning Strategy

Goal	Activity	Description	Responsible Bodies	Development Partners
Goal 1 : Addressing the digital divide	Map the current infrastructure and use of EdTech across the country, both at the school and district levels.	The MBSSE will conduct a mapping of the existing EdTech infrastructure and use of technology in schools across the country and at the district level by collating information from existing literature and statistics, carrying out primary data collection to fill the gaps, and building the capacities of education officials to conduct self-assessments of digital needs.	Directorate of Planning and Policy, MBSSE Ministry of Communication, Innovation and Technology	UNICEF Innovation Team EdTech Hub
	Provide equitable access to EdTech across all school-going children in the country, and develop innovative approaches to reach OOSC.	The MBSSE and its partners will continue to expand on initiatives that seek to increase access to EdTech devices and electricity for all learners; identify resource needs and maintain accountability in resource distribution, and explore the use of EdTech in facilitating multiple learning pathways for OOSC and learners with disabilities.	Directorate of School Quality Assurance, MBSSE Directorate of Non-Formal Education, MBSSE ICT Department, MBSSE ICT Department, TSC	FCDO UNICEF Innovation Team World Bank

			Monitoring and Evaluation Directorate, TSC Ministry of Communication, Innovation and Technology	
	Establish strong partnerships with the private sector and mobile operators to increase internet and electricity connectivity across the country.	The MBSSE will continue to foster multi-stakeholder partnerships with the international development community and the private sector, which is crucial to improving school connectivity and device procurement.	Delivery Team, MBSSE Ministry of Communication, Innovation and Technology	World Bank
Goal 2: Improving teachers' capabilities to integrate technology in lesson delivery	Map teacher capacity to use EdTech in classrooms.	Understanding existing teacher capacity will help identify key gaps in current teacher training systems and provide insight into existing challenges and opportunities. The MBSSE and TSC will collaboratively evaluate teachers' current skills, confidence and experience in using EdTech and explore how technology can be used for both pre-service and in-service teacher training.	TSC MTHE	UNICEF Education Team World Bank
	Build teacher digital capacity through pre-service support.	The TSC will work with the MTHE to develop teachers' capacities to use digital resources in schools by integrating EdTech skills in the pre-service training curriculum, ensuring the training on EdTech is	MTHE Teacher training department, TSC	FCDO/Leh Wi Lan World Bank

		aligned with pedagogical standards, and equipping all TSC training centres with the required EdTech tools.		
	Build teacher digital capacity through in-service training and support.	The TSC will implement several in-service training measures to develop the capacities of teachers to use digital resources in schools, including ensuring quality of training of teachers on newly developed digital applications and platforms, creating various ways to encourage peer-to-peer learning by teachers, providing coaching and monitoring support as teachers use EdTech in classrooms, and using data to make decisions on the type of training and support required by teachers in Sierra Leone.	Teacher training department, TSC	World Bank EducAid
Goal 3: Strengthening learners' access to technology while ensuring the right safeguards	Ensuring safe access to technology for students.	The MBSSE and TSC will develop clear protocols to safeguard primary and junior secondary school children from cybercrime and harmful online content by implementing strict access controls, monitoring digital activities, and training teachers and parents on online safety.	ICT Department, MBSSE	FCDO/Leh Wi Lan World Bank UNICEF Innovation Team
	Develop digital literacy of students by developing the capacity of teachers.	Digital literacy is a growing part of any approach to skills development. Interventions to support this programmatic priority are	Directorate of Science, Technology and Innovation Ministry of Communication,	UNICEF Education Team UNICEF Innovation Team

		multifaceted and interconnected, including developing tools to guide and assess digital literacy and leveraging EdTech to provide more and better personalized learning opportunities.	Innovation and Technology	
Goal 4: Increasing access to localized content aligned with the national	Map existing digital content.	MBSSE will carry out a mapping exercise that takes stock of all the digital content developed and used in the country by the government, development partners, and private sector organizations.	Directorate of School Quality Assurance, MBSSE	UNICEF Rising Academies
curriculum	Set up of content review and approval procedures.	As part of the content mapping process, the MBSSE will also set up standardized content review and approval procedures. Establishing clear approval procedures will assist in ensuring a strong level of quality and consistency among all digital content that learners and teachers access in the classroom.	Directorate of School Quality Assurance, MBSSE	UNICEF FCDO Rising Academies Leh Wi Lan
	Develop content in local languages that is aligned with the national curriculum.	Based on the gaps identified from the mapping of the existing content and as per the needs of ongoing and upcoming programmes, MBSSE will work with development partners and the private sector to develop localized content to be disseminated through EdTech platforms.	Directorate of School Quality Assurance, MBSSE Directorate of Science, Technology and Innovation	UNICEF Innovation Rising Academies

Goal 5: Improving coordination between EdTech actors	Establish an EdTech working group.	Promoting EdTech in the country requires strategic planning and inclusive stakeholder engagement. A key step in this regard is setting up a national-level Technical Working Group (TWG) on EdTech that oversees all matters related to EdTech in the country.	Steering Committee Directorate of Planning and Policy, MBSSE Chair, TSC	UNICEF World Bank FCDO
	Develop an NDLS review and implementation plan.	The development of the NDLS is the first step in the integration of EdTech into the learning process in schools across the country. A robust implementation plan and monitoring framework are needed to ensure the strategy is implementable and to monitor progress and maintain accountability.	Steering Committee	

6. Budget and Funding

Context

In Sierra Leone, the Ministry of Finance (MoF) allocates resources to the education sector through bilateral discussions and parliamentary approval, guided by budget ceilings. These ceilings reflect government priorities, the macro-fiscal framework, domestic and donor resources, and global development benchmarks. Education budgets are executed at central and local government levels. Centrally, the Ministry of Basic and Senior Secondary Education (MBSSE), the Ministry of Technical and Higher Education (MTHE), and the Teaching Service Commission (TSC) are key players. The MBSSE primarily receives funds for administrative and operational purposes. Payments for educational goods and services initiated by MBSSE are processed through the Integrated Financial Management Information System (IFMIS) and executed by the Accountant General's Department, ensuring direct payments to suppliers.

Annual spending on education

The government of Sierra Leone's actual expenditure on education has increased from 19% in 2019 to 20% in 2022. Table 2 shows the actual and committed budget on education in the country from 2019–2022) (Ministry of Finance, 2023). This is in line with the Global Partnership for Education, who recommends that governments commit 20% of the total national budget to education (GPE, 2018).

Table 2	Overview	of the ac	<i>ducation</i>	budget in Sierra	Lanna from	2019_2022
Table 2.	COVELVIEW	0111100	11111	DUOGELIII SIELIO I	геоне пот	/(//9-/(///

	2019		2020		2021		2022	
	Budget	Actual	Budget	Actual	Budget	Actual	Budget	Actual
Total public Expenditure	21%	19%	22%	20%	22%	18%	21%	20%
% of GDP	3%	4%	3%	4%	3%	3%	3%	3%

Support of development partners

Most of the Education Budget is covered through the support of development partners. In 2021, 45% of education spending for primary and

secondary education was provided through resources from development partners for both capital and recurrent expenditure needs. Through the MBSSE, the government is implementing the Free Education Project, a five-year International Development Association (IDA)-funded project with a US\$50 million credit. The project is co-financed through a grant of approximately US\$16 million from the European Union (EU), the Foreign Commonwealth and Development Office (FCDO), and Irish Aid through a World Bank-administered Sierra Leone education multi-donor trust fund (MDTF). The GPE also provided a grant amount of US\$6.85 additional financing for the COVID-19 Response under the FREE Project. FCDO is also a major development partner that invested £62.4 million from 2016 to 2024 under the Leh Wi Lan project. Phase II of the project is currently being implemented with a budget of £34.6 million until 2029. There has also been support from the Education Above All (EAA) Foundation that has committed US\$13 million for out-of-school children under the free education project. The World Bank has also approved additional IDA funding of US\$20 million to support the education reform agenda in Sierra Leone

No dedicated budget for EdTech

The MBSSE does not dedicate any budget specifically for EdTech in the annual budget. This acts as a key challenge in the development of EdTech in the country as it results in unsustained financing. To ensure operationalization of the NDLS, it is important that a budget head specific to EdTech is developed in the MBSSES's annual budget and the required finances are committed to ensuring the success of the activities mentioned in the NDLS.

7. Key next steps to operationalize the NDLS

The NDLS is a key step in developing an environment in the country where technology can play a key role in supporting the learning of students in the classroom. The NDLS has been developed in two phases:

- 1. The detailed situational analysis that maps the existing landscape of Edtech in the country.
- 2. The NDLS document that defines the strategic framework and the key goals for the strategy.

The next phase is to operationalize the strategy, so progress can be made towards achieving the goals defined in the NDLS. However, before work on the implementation of the strategy, there are a few steps that need to be taken. These are listed below.

- Development of an operationalization plan that breaks down the goals of the strategy into actionable steps, along with timelines, while assigning roles and responsibilities for each of the steps. This is critical as, without a concrete operationalization plan, mobilization of resources, government departments/agencies, and development partners towards a common goal will not be possible.
- The second key step is to develop a detailed budget that calculates the finances needed to carry out each step, defines the source of those finances, assigns the roles and responsibilities within the relevant stakeholders to ensure the financial resources are made available, and defines the necessary protocols of overseeing the spending that supports the work done under the NDLS.

These steps are critical in ensuring an effective implementation of the NDLS.