



Mapping the existing Education Management Information System in Sierra Leone

Research Summary

October 2022

Introduction

In collaboration with the Ministry of Basic and Senior Secondary School Education (MBSSE) and the Sierra Leone Union on Disability Issues (SLUDI), Sightsavers conducted a study to assess how data on disability is included in the Education Management Information System (EMIS). The study also assessed the strengths and weaknesses of the system and identified the opportunities that exist for improvement. The study was conducted in two districts, Bombali and Karetina in northern Sierra Leone, where Sightsavers is currently implementing an inclusive education project.

This assessment utilised the World Bank Systems Approach for Better Education Results (SABER) framework. Results and learning will contribute to the education sector in Sierra Leone in several ways.

This study was funded by Sightsavers

Why is this issue important?

An effective EMIS, and the production of quality disability data, will enable the government and its development partners to formulate sound policies to improve practices in the education sector. Overall, this study will contribute to improving the lives of children with disability in schools.

What do the research findings tell us?

Key messages

1. The annual school census (ASC), which provides data for EMIS is well planned and supervised to ensure methodological soundness.
2. Although EMIS is supported by the government of Sierra Leone, it does not have a national policy or operational guidelines.
3. Data generated by the ASC is not complemented by any real-time data to update it. Considering the rapid changes taking place in the education sector, especially increasing enrolment in schools, education data on EMIS becomes outdated a few months after publishing the ASC report.
4. Disability data on EMIS is limited, focusing on a few disability domains, often the visible types of impairment, and does not support effective planning for children with disability in schools.
5. EMIS in Sierra Leone require significant strengthening to meet the standards defined in the SABER EMIS framework.

Summary

Background - Millions of children live with disabilities worldwide and many of them are at risk of being excluded from education, particularly in low- and medium-income countries (LMIC). For children with disabilities enrolled in schools, learning outcomes and completion rates are often lower than those for their peers without disabilities.

The effective delivery of education requires a robust education database to monitor inputs and processes, and to assess the extent to which equity targets are being met. For this reason, EMIS have been established in many LMICs, with varying degrees of effectiveness. EMIS was established in Sierra Leone in 2006 and has mainly been utilised as a repository of education data collected from schools during the Annual School Census (ASC). The inclusion of disability data on EMIS has been limited to a few indicators and specific categories of disability. Since its establishment, Sierra Leone's EMIS has not benefitted from any review to determine its effectiveness and relevance for the education sector. With the government's increased focus on providing free and inclusive education, and the corresponding increase in enrolment rates in schools, the need for greater support to strengthen EMIS cannot be over-emphasised.

This study set out to review the status of EMIS in Sierra Leone and to assess its current capacity to collect, analyse and disseminate disability data by answering the following research questions:

- a) What are the strengths and weaknesses of the existing EMIS with specific reference to disability inclusion?
- b) How does the Sierra Leone EMIS reflect the World Bank System Approach for Better Education Results (SABER) EMIS framework, and where and in what ways does it converge and diverge from the framework?
- c) What are the key opportunities for strengthening EMIS and making it more disability inclusive?

Methods - The assessment used the SABER EMIS framework, which has been used in many countries to measure the performance of EMIS. SABER-EMIS examines four components of EMIS: the enabling environment, system soundness, data quality and data utilisation. Each component is scored on a four-point scale running from latent to advanced. For the purpose of this study, the SABER-EMIS framework was adapted to reflect a disability lens.

This qualitative study was conducted in Bombali and Karene districts in northern Sierra Leone, where Sightsavers has been implementing an inclusive education project in 45 schools since 2016. Data was also collected in Freetown from officials in the Ministry of Basic and Senior Secondary Education (MBSSE) and other institutions operating in the education sector. This enabled the study team to document EMIS as it operates in these districts, as well as to understand aspects of the national system and the interactions between these levels.

The study reviewed available documents and collected information from purposively selected respondents through in-depth interviews and focus group discussions (FGDs), which were conducted between September and November 2021. The qualitative data generated from these processes was transcribed and analysed using Nvivo 12. Ethical approval for the study was granted by the Sierra Leone Ethics and Scientific Review Committee.

Results – below are the summary of the strengths and weaknesses of EMIS.

| SABER EMIS Policy area | Strengths | Weaknesses |
|-----------------------------------|---|--|
| Enabling environment | <p>EMIS was established in 2006 to house education data to be used for strategy development and planning within the structure of MBSSE.</p> <p>MBSSE has policies supporting the inclusion and collection of disability data.</p> | <p>The level of understanding of disability among teachers in schools is limited to visible and severe forms of functional challenges.</p> <p>Data collection guidelines are not circulated widely enough to enable all teachers to access them.</p> |
| System soundness | <p>Data collection during ASC has evolved from paper-based census forms to an electronic platform using SurveyCTO.</p> <p>Every school in the country has been allocated a unique identifier EMIS code, which is linked to the GPS coordinates of the school.</p> | <p>Disability data within EMIS is limited to a few categories of disability.</p> <p>There is limited information on factors in the school environment that may create barriers to children with disabilities.</p> |
| Data quality | <p>Planning of the ASC is rigorous and MBSSE has instituted several data quality-control measures to ensure methodological soundness.</p> <p>Training is provided for enumerators, supervisors and principals in junior secondary schools before data collection to ensure high-quality data.</p> | <p>Some quality-control measures instituted by MBSSE are circumvented by enumerators, which affects the quality of data gathered.</p> <p>Data is collected from schools annually and cannot be updated during the school year, limiting the use of data for planning purposes.</p> |
| Data utilization | <p>The ASC report is published on the MBSSE website where it can be accessed by the public.</p> <p>Disability data, including facilities to support children with disabilities, is included in the ASC report.</p> | <p>Education data is published online and cannot be accessed by people or organisations with limited ICT capacity.</p> <p>Education data is not disseminated in formats accessible to people with disabilities.</p> |

Limitations and suggestions for future research

This study was limited to EMIS used by MBSSE and excluded other education databases in the country. For example, the Education Datahub of the Directorate of Science, Technology and Innovation (DSTI) is also funded by the government and employs more advanced techniques to analyse and present the same annual school census data. However, it operates as a separate entity in the Office of the President. Towards the end of 2021, another education database, the Executive Management Information System (also known as EMIS), was established as a collaborative project between MBSSE and the Ministry of Technical and Higher Education. This database is not covered by this study either.

This study was conducted in Bombali and Karene districts, interviewing teachers in the schools that have been supported by Sightsavers since 2016. Teachers in these schools, therefore, may have higher levels of disability awareness and may not be representative of other schools in Sierra Leone.

Learn more about

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