



AN EMIS SHIFT FOR EQUITABLE AND INCLUSIVE EDUCATION

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[DHIS2 for Education](#) takes advantage of decades of experience using [DHIS2](#) for public-sector information management in more than 70 countries across the world. 6 Ministries of Education are involved in the global research project: Eswatini, Mozambique, The Gambia, Sri Lanka, Togo and Uganda.



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Summary

The Gambian Education Sector has made progress in providing educational services, increasing enrollment numbers and reaching gender parity in basic and secondary education. The Gambia has also made significant efforts to address quality challenges in areas such as teacher qualifications and deployments, integrating public school curricula in madrassas, and piloting technology-informed teaching approaches. The Ministry of Basic and Secondary Education (MoBSE) has made equitable, inclusive and quality education a top priority in the Education Policy 2016–2030 with the improvement of learning outcomes a major objective.

The current EMIS is highly centralized; characterized by an aggregated and paper-based data system, with the Annual School Census (ASC) as the primary data source. The ASC is distributed to schools, with manual data entry leading to an annual statistical yearbook as a tool for monitoring and evaluation of the education sector. Fragmented databases for HR, examinations and infrastructure exist, with an absence of a comprehensive database bringing together different data sources for cross-analysis and planning.

There has been a critical EMIS shift, which saw an alignment of EMIS to the Education Policy 2016–2030 and the Monitoring and Evaluation Framework, with an aim to increase awareness on equity, inclusion and quality educational and social services. This entails closing the data gap to ensure EMIS is able to focus on individual teachers and learners, moving from aggregate to include individual teacher and learner tracking to better understand who learners are, the environment around them and how this impacts the learning experience in order to plan and respond.

In 2021 a national student registration exercise launched the individual student identification number, marking the start of the potential for longitudinal tracking of students.

DHIS2 for Education has been introduced in The Gambia to respond to this shift, leveraging existing health-sector DHIS2 capacity and facilitating a move to ensure equity, inclusion and quality educational services through digitization of EMIS and collection of individual-level data.

Leaving no one behind

Among the world's most disadvantaged groups are children and youth with disabilities, with stigma and discrimination often leading to increased exposure to neglect and reduced access to services such as education.

Learners experience challenging journeys to schools due to remote terrain, rural areas that are not accessible to wheelchairs, busy roads in capital cities and lack of accessible transport. Once learners are in school, teachers are generally not trained or supported in adapting the curriculum to learners with different types of disabilities. In ten low- and middle-income countries, children with disabilities were found to be 19% less likely to achieve minimum proficiency in reading than children without disabilities.¹

The availability of disability data is highly uneven across countries and disability rates vary. Data on children with disabilities is particularly sparse, but they are thought to account for around 1% of the under-17s worldwide.²

Covid-19 highlighted the shortcomings and risks in the education of learners with disabilities. The lack of disaggregated data (by disability, gender, age and other characteristics) make it impossible to determine the precise number of students with disabilities who have received inadequate educational support as a result of the Covid-19 pandemic. EMIS must increasingly be capable of storing data at individual level in order to disaggregate by a wide range of socio-economic factors.

Current EMIS reforms in The Gambia have seen establishment of a Special Needs Directorate under MoBSE, the development of instruments to elicit data from schools, based on the [Washington Group Short Set on Functioning](#) (WG-SS) and the use of the Child Functioning Module as a screening tool used by newly instated special needs focal points at school level.

¹ Global Education Monitoring Report, 2020: [Inclusion and Education: All means all](#)

² [UNICEF, Seen, Counted, Included](#): Using data to shed light on the well-being of children with disabilities, January 2022



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How to represent equity and in-equity at different levels of the education system is critical as understanding can vary. While national level indicators can impact policy formulation, at school the data needs to be operational to support frontline data users to respond on the ground. The use of DHIS2 for Education has facilitated cross department and cross-level collaborations. Dashboard workshops have included a review of indicators, data captured and data visualizations. All regional focal points across 7 regions were involved in this workshop which allowed opportunity to share challenges around targeting for resource mobilization and leveraging relationships between parents, children and youth.

Cascading DHIS2 implementation approach

Every DHIS2 for Education implementation has its unique approach depending on the needs, size and strategy of the country. The approach taken in The Gambia was to begin with training at the central level and building of the system together with MoBSE. This was key to develop a good sense of orientation and understanding of the value of digitizing EMIS, the flexibility of the platform and to transfer historical data to show the capacity and potential of the visualization tools. With a mature API, the DHIS2 platform allows for data for multiple sources to be brought and presented in ways that are appealing and tailored to the various users at national level. The current phase of the implementation is seeing a strengthening of regional levels to interact and use data for improved decision making. The final stage will see the progression of training to district and community levels, making it possible for stakeholders to enter and analyze school-level data. Currently user-friendly attendance apps, a DHIS2 digitized School Report Card are ongoing innovations that support improved school engagement at district, school and community levels.

Local innovations - DHIS2 School Report Card Initiative

Research shows that providing local communities with educational information can lead to improved quality of education. School Report Cards (SRCs) are school-level information systems, often used to promote community participation in student learning and the learning environment.

The first version in The Gambia was created in 2008 using Microsoft Excel and Microsoft Access and while the tool is available in a digital format, sub-national levels mainly used it in analogue. This meant centralized printing and distribution after each update, which was both cumbersome and resource intensive. In partnership with MoBSE, [HISP WCA](#) and the University of Oslo contributed to customizing the analogue SRC into the DHIS2 platform. This has improved the frequency of use of the tool at sub-national and school level. The custom SRC app is also configurable, making it easy to revise, for example to include Gender Equality and Social Inclusion (GESI) indicators, and the design features accessible ways of presenting these data to engage community members.



Action Research

DHIS2 for Education is an action research project coordinated by The University of Oslo. [Action research topics](#) from dedicated PhD and Master students focusing on The Gambia implementation have included:

- ➊ Jallow, S. and Sanner, T. (2022): *Education Information System Decentralization: The Introduction of Digital Learner Records in The Gambia*, available at: <https://bit.ly/3ShQQxd>
- ➋ Dodaj, G. (2022): *Representing gender equity through dynamic indicators: Participatory re-design of School Report Cards in the Gambia*, available at: <https://bit.ly/3MiMdBp>
- ➌ Knudsen, Ø. (2021): *School Report Cards in The Gambia: Exploring perceived opportunities and challenges of digitization*, available at: <https://bit.ly/3BqDWXc>
- ➍ Halilaj, A. and Udnesseter Johnson, L. (2021): *Developing and testing for usability within a low resource context: An action case study of the School report card in the Gambia*, available at: <https://bit.ly/3RWKt2H>



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