Liberia Education Management Information System (EMIS) Peer Review Report

Prepared for: Ministry of Education, Republic of Liberia
Facilitated by: AU-IPED and KIX Africa 19 Hub
Peer Review Conducted: September 1–2, 2025

Contents

Executive Summary

The Liberia Education Management Information System (EMIS) Peer Review was conducted on September 1–2, 2025, at the Ministry of Education (MoE) premises in Monrovia. Facilitated by AU-IPED through the KIX Africa 19 Hub, the exercise convened representatives from Liberia, Nigeria, Sierra Leone, and The Gambia, alongside development partners including UNESCO.

The review highlighted Liberia's transition from EMIS 1.0 (paper-based) to EMIS 2.0 (digitized and integrated). Political will is strong, but systemic challenges hinder progress. These include insufficient funding, weak policy and legal frameworks, inadequate ICT infrastructure, data gaps since 2022, and limited integration across sub-sectors. Interviews with MoE teams revealed shortcomings in data validation, staff capacity, and inter-departmental collaboration.

Peer countries shared practical lessons: Nigeria's EMIS mandates each state allocate 1% of its education budget, with penalties for non-compliance to EMIS activities; Sierra Leone has geo-mapped all schools, introduced digital learner IDs, and partnered with community Chiefs to protect ICT infrastructure; The Gambia relies on mobile apps and toll-free SMS for data in low-connectivity areas. These innovations demonstrate practical pathways for Liberia.

This report consolidates findings, identifies systemic challenges, and provides recommendations aligned with AU EMIS Norms and Standards. It proposes an action plan with clear responsibilities and a three-year budget of USD 4.5 million to strengthen EMIS, enabling evidence-based planning, monitoring, and reporting for Liberia's education sector.

1. Background

The Pan African Institute for Development (AU-IPED) is a specialised technical office of the African Union Commission (AUC), mandated to serve as the continental hub for education development, research, and innovation. Established in 1965 under the auspices of the Organisation of African Unity (OAU) and integrated into the African Union framework, the AU-IPED is headquartered in Kinshasa, Democratic Republic of the Congo.

Its primary mission is to provide policy guidance, capacity building, and technical expertise to African Union Member States in the field of education, with a view to harmonizing education systems, fostering innovation, and advancing the AU's development agenda. AU-IPED plays a central role in the implementation of the Continental Education Strategy for Africa (CESA 16-25) and contributes directly to the realisation of Agenda 2063, which envisions an integrated, prosperous, and peaceful Africa driven by its own citizens.

The Institute's activities include research, data collection, training, and the promotion of innovative practices in education. It also supports curriculum reforms, teacher development, and digital transformation in education systems. Through partnerships with governments, universities, and international organisations, AU-IPED promotes inclusive, equitable, and quality education as a cornerstone for Africa's human capital development and sustainable growth.

1. Introduction

The Education Management Information System (EMIS) is central to evidence-based planning, monitoring, and decision-making. In Liberia, EMIS has historically relied on paper-based systems, creating delays, inconsistencies, and gaps. The last national school census was conducted in 2022 for USD 1 million (funded by partners including the EU, UNICEF, World Bank and GPE). Since then, no new data has been collected due to financial constraints, leaving a significant evidence gap.

To address these weaknesses, the Ministry of Education has initiated reforms aimed at digitising EMIS and aligning it with continental frameworks such as AU EMIS Norms and Standards, as well as global commitments under SDG 4 and CESA 16-25. Liberia's EMIS serves approximately 1.5 million learners across 6,500 schools, with county-level EMIS hubs planned in all 15 counties.

The peer review, facilitated by AU-IPED and the KIX Africa 19 Hub, sought to:

- Evaluate Liberia's EMIS against AU EMIS Norms and Standards.

- Identify systemic challenges and institutional gaps.

- Capture best practices from peer countries.

- Recommend actionable strategies for EMIS 2.0.

Methodology included an opening plenary, peer country presentations, technical interviews with ministry departments (planning, ICT, teacher services, curriculum, WAEC, and finance), and consultations with partners such as UNESCO.

2. Proceedings of the Peer Review

Day 1: Opening Plenary and Peer Presentations

Remarks from Assistant Minister Thomas Parker emphasised Liberia's eagerness following the 2024 Addis Ababa KIX continental symposium. AU-IPED representatives underlined the timeliness of the review, while AU IPED's Lukman Jaji framed the exercise as a transition from EMIS 1.0 (paper-based) to EMIS 2.0 (digitized and integrated).

Peer country lessons included: -

Nigeria: EMIS digitized since 2019; DHIS2 integrated in 2025. EMIS policy mandates federal and states allocate 1% of their education budgets to EMIS, with penalties (including delayed teacher salaries) for non-compliance. Challenges include late submission of data from some states. –

Sierra Leone: Operates an annual school census, supported by EMIS and ICT policies. Achievements include geo-mapped schools, a digital learner ID system, and integration of informal schools. Chiefs help protect ICT infrastructure. Challenges include verifying data for late-enrolling senior students. –

The Gambia: Uses paper-based data collection (16 years of continuous records). Plans digitization in 2025 with learner IDs and DHIS2. Employs toll-free SMS and mobile apps for data collection in low-connectivity areas. Faces challenges with budget sustainability due to annual negotiations.

Day 2: Technical Interviews

Focused discussions were held with MoE staff and partners, including the Chief Statistician, ICT unit, Teacher Education Director, Curriculum and Primary Directors, WAEC, the Financial Comptroller, county/regional managers, and development partners. These interviews provided detailed insights into EMIS governance, data processes, ICT infrastructure, staff capacity, and financial sustainability.

3. Key Findings from Interviews

Policy & Legal Frameworks

- While leadership commitment is evident, there is no strong legal enforcement of EMIS policy.

- Private schools are not penalised when they refused to share data, creating coverage gaps.
- EMIS integration into the Education Sector Plan (ESP) is central to evidence generation; however limited support has challenged proper operations, reducing policy relevance.
- Collaboration with LISGIS exists but lacks a formalised framework for data harmonisation.

Resource Availability

- Data collection has stalled since 2022 due to funding shortages.
- ICT infrastructure is limited and weak: no central dashboards, limited hardware at national and county levels, and high internet costs.
- Staff capacity is limited, with sporadic training and high turnover.
- Utilities such as electricity and internet are not consistently budgeted, disrupting EMIS operations.

Statistical Processes

- Data collection tools include ODK, but post-enumeration checks and validation are inconsistent.
- No integration with WAEC exam data or teacher service records.
- Unique learner/teacher IDs are absent.
- Coverage of tertiary and informal education is partial.
- Equity indicators such as gender and disability are collected but not comprehensive.

Information Reporting

- Reports are delayed and irregular; no new reports have been produced since 2022.
- EMIS data does not align with UIS or SDG 4 reporting timelines.
- Dissemination is weak, with limited use of dashboards and no systematic user feedback.
- Schools and local managers are not adequately engaged in data use.

4. Challenges

Policy and Legal Frameworks

- Weak policy environment; lack of legal mandates for data submission from all schools.

- Limited integration with LISGIS and other ministries.

- Absence of learner/teacher IDs limits longitudinal tracking.

Resource Availability

- Donor dependency for data collection (last census in 2022).

- Inadequate ICT infrastructure; lack of dashboards, servers, and secure networks.

- Shortage of trained personnel; no structured retention program.

- Operational disruptions due to lack of utilities and transport.

Statistical Processes

- Weak validation; no systematic error calculations.

- Coverage gaps in private, tertiary, and informal sectors.

- Disjointed databases: exams, curriculum, and teacher records not linked.

- Poor cybersecurity and data privacy safeguards.

Information Reporting

- Timeliness gaps undermine integration with planning cycles.

- Weak dissemination; no dashboards or digital platforms.

- Limited attention to equity and inclusion (disability, rural learners).

- Duplication of effort due to uncoordinated partner data requests.

5. Recommendations

Policy and Legal Frameworks

- Finalise and adopt a comprehensive EMIS policy mandating participation by all schools, public and private.

- Establish legal provisions for unique learner and teacher IDs in coordination with the civil registry.

- Formalise collaboration with LISGIS for harmonised national data systems.

- Embed EMIS targets in the ESP, with explicit attention to gender and equity.

Resource Availability

- Increase domestic budget allocation (target 1% of the education budget, as in Nigeria).

- Invest in ICT infrastructure: servers, dashboards, and connectivity.

- Institutionalise annual training in EMIS, digital literacy, and data analysis.

- Develop staff retention strategies, including professional development and incentives.

- Secure utilities through dedicated funding and community partnerships.
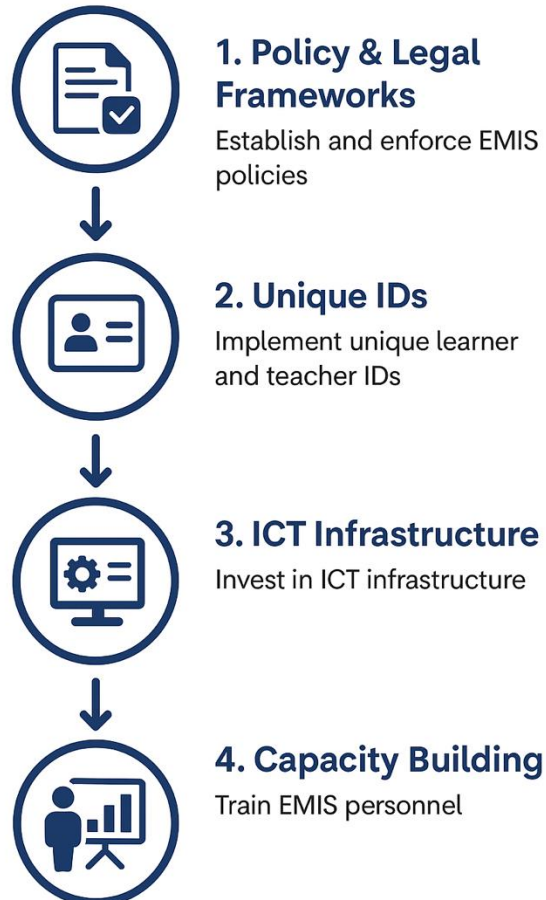
Statistical Processes

- Implement a validation framework with post-enumeration checks.

- Adopt mobile apps and SMS tools for schools without internet access.

- Integrate EMIS with WAEC exam results, teacher data, and curriculum databases.

- Strengthen data privacy through formal cybersecurity policies.

Information Reporting

- Align EMIS timelines with planning cycles, collecting data at the start of the school year.

- Introduce dashboards and user-friendly platforms for dissemination.

- Engage schools, regions, and communities in data feedback workshops.

- Expand indicators for disability, rural/urban gaps, and over-age learners.

- Coordinate partner data requests through a central MoE mechanism.

6. Intervention Flow

EMIS Strengthening Flow

1. Policy & Legal Frameworks
Establish and enforce EMIS policies

2. Unique IDs
Implement unique learner and teacher IDs

3. ICT Infrastructure
Invest in ICT infrastructure

4. Capacity Building
Train EMIS personnel

6. Action Plan

Priority Area	Action	Responsible Institution	Timeline	Resources Needed
Legal & Policy	Finalise and adopt the EMIS policy establishing institutional framework and mandating data from all institutions	MoE + Legislature	2025	Workshops, drafting support
Unique IDs	Establish a national learner and teacher ID system	MoE + NIR + Teacher Service	2025–2027	ICT systems, funding
ICT Infrastructure	Procure servers, connectivity, dashboards; integrate DHIS2	MoE + Partners (UNESCO, MasterCard etc)	2025–2026	$1M; mobile tools
Capacity Building	Annual training for EMIS staff in digital literacy and validation	MoE + AU-IPED + UNICEF	Annual	$200k/year
Data Quality	Institutionalize validation framework; align with SDG4/CESA	MoE + LISGIS	2025–2026	$150k; post-enumeration tools
Integration	Link teacher/exam/curriculum data; coordinate with partners	MoE + WAEC + Health Ministry	2025–2027	Workshops, database software
Funding Sustainability	Negotiate 1% budget allocation; reduce donor dependency	MoE + Finance Ministry	2025–2026	Advocacy, peer learning
User Engagement	Conduct feedback workshops; disseminate reports to regions/schools	MoE + Regional Managers	Annual	$100k/year; dashboards

7. Proposed Budget for EMIS Strengthening

Category	Year 1	Year 2	Year 3	Total
Legal/Policy Development	$150,000	$50,000	$50,000	$250,000
ICT Infrastructure & Software	$500,000	$300,000	$200,000	$1,000,000
Capacity Building & Training	$200,000	$200,000	$200,000	$600,000
Data Collection & Validation	$400,000	$300,000	$300,000	$1,000,000
Unique Learner/Teacher IDs	$250,000	$400,000	$350,000	$1,000,000
Dissemination/Dashboards	$150,000	$100,000	$100,000	$350,000
Monitoring & Evaluation	$100,000	$100,000	$100,000	$300,000
TOTAL	**$1.75M**	**$1.45M**	**$1.30M**	**$4.5M**

Funding Assumptions: 60% government, 40% donors (EU, UNICEF, others). Includes 10% contingency for inflation.

8. Conclusion

Liberia is at a pivotal moment in the evolution of its EMIS. With strong political will and lessons learned from Nigeria, Sierra Leone, and The Gambia, Liberia has a clear path forward to modernise its EMIS and integrate it into education planning and accountability. The challenges are significant, but so are the opportunities. By adopting the recommendations, implementing the action plan, and allocating resources, Liberia can establish a robust, digitised, and sustainable EMIS that aligns with AU standards and SDG 4. This will strengthen evidence-based decision-making and ensure equitable education opportunities for all learners.

Annexes

- Annex 1: Peer Review Agenda
- Annex 2: Interview Guides
- Annex 3: List of Participants
- Annex 4: EMIS Norms and Standards Framework Extract