## UNIVERSITY OF CAPE COAST



# COLLEGE OF HUMANITIES AND LEGAL STUDIES

# SCHOOL OF ECONOMICS

DEPARTMENT OF DATA SCIENCE AND ECONOMIC POLICY

**2024/2025 ACADEMIC YEAR** 

COURSE TITLE: DATA CURATION AND MANAGEMENT PLANS

**COURSE CODE: DMA820** 

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#### (A) Commentary on Data Policy of the Ghana Education Service (GES)

#### 1. Structure of Data Dissemination

The Ghana Education Service (GES) which is responsible for the implementation of Educational policies formulated by Ministry of Education operates under a hierarchical administrative structure that significantly influences how data is disseminated. Processed Data or Information flows from the Headquarters through regional, district, and finally to school levels. Typically, data is first compiled by district education offices from schools, which is then aggregated at the regional level before being forwarded to the national level. Final data is disseminated through official memos, annual reports, and stakeholder meetings

#### 2. Format of Data Dissemination

GES uses multiple formats for data dissemination depending on the target audience: Excel reports: For statistical summaries (e.g Students enrollment data, exam results, staffing). Printed documents: Shared during stakeholder engagements and internal reviews. Info-graphics: Occasionally used in policy briefs and press releases. PowerPoint presentations: For workshops, policy launches, and internal briefings.

#### 3. Data Sharing Protocols and Procedures

Data sharing within GES is regulated by internal data policies aligned with the Ministry of Education and National Data Protection Act (2012), Act 843. External requests for data, especially by researchers and NGOs, are subject to formal approval through a written application to the Director-General, followed by signing data use agreements. Internally, access to data is role-based. For example district directors, can access teacher deployment and school performance data, while Headteachers have access to only their school records.

#### 4. Data visibility

4. The Ghana Education Service has online platforms now which is an improvement in ensuring data visibility. Example is <a href="https://ges.gov.gh">https://ges.gov.gh</a> which is the official online page of GES and also Education Management Information System(EMIS) for storing school data

#### B. Ways by which the above mentioned areas of Data Curation can be improved in GES

## **\*** Encourage Open Data Policies (with Limitations)

GES could provide open access to non-sensitive datasets for public use. This can help policymakers, researchers, and NGOs support educational reforms easily and faster.

#### **&** Enhance Data Literacy among Staff

The Ghana Education Service must conduct regular training for district and school level staff on data entry, analysis, and interpretation to minimize errors and promote data driven decisions.

#### **Use Interactive Dashboards**

GES must incorporate platforms like Power BI or Tableau to visualize key indicators (e.g., school performance, teacher attrition) for faster decision making and proper understanding and appreciation of Educational data.

# **❖** Improve Timeliness and Feedback Loops

GES should introduce automated feedback systems to ensure that data provided by schools or districts is acknowledged, validated, and acted upon promptly.

#### **❖** Adopt Standard Metadata and Data Labeling Procedures

Using consistent variable definitions and metadata standards to enhance understanding and integration across regions and departments is something worth considering by GES.

This will enable working with data from different regions or levels of Education very easy and faster since the variables being analyzed are the same across board and coded same.

# References

Adjei, D. N. (2025, April 1). An article on Ghana's Data Protection Act. ResearchGate.

Data Protection Commission. (n.d.). *About us.* Ministry of Communications, Digital Technology and Innovations. <a href="https://dataprotection.org.gh/">https://dataprotection.org.gh/</a> <a href="Data Protection Commission">Data Protection Commission</a>

Ministry of Education. (2016). Education Management Information System: A short case study of Ghana. UNESCO Institute for Statistics.

https://uis.unesco.org/sites/default/files/documents/rws\_windhoek2016\_national-experience-sharing-on-emis\_ghana.pdf
UNESCO UIS

Wikipedia. (2025, August). *Data Protection Act, 2012 (Ghana)*. In *Wikipedia*. <a href="https://en.wikipedia.org/wiki/Data\_Protection\_Act%2C\_2012">https://en.wikipedia.org/wiki/Data\_Protection\_Act%2C\_2012</a> <a href="https://en.wikipedia.org/wiki/Data\_Protection\_Act%2C\_2012">wikipedia</a>

Wikipedia. (2025, August). *Ghana Education Service*. In *Wikipedia*. <a href="https://en.wikipedia.org/wiki/Ghana\_Education\_Service">https://en.wikipedia.org/wiki/Ghana\_Education\_Service</a> Wikipedia

World Bank. (2015). *EMIS Project Ghana: Education Management Information System design, best practices for decentralized planning and budgeting*. World Bank. <a href="https://documents.worldbank.org/en/publication/documents-reports/documentdetail/133081468031776923/education-management-information-system-a-short-case-study-of-ghana">https://documentdetail/133081468031776923/education-management-information-system-a-short-case-study-of-ghana</a> World Bank