SABER

Systems Approach for Better Education Results

August 2014

SABER-Education Management Information Systems
Data Collection Instrument

WORLD BANK GROUP

Table of Contents

Acronyms

Acronym	Full Text
API	Application Programming Interfaces
EMIS	Education Management Information Systems
SABER	Systems Approach for Better Education Results

Background

WHAT IS THE PURPOSE OF THE SABER-EMIS INITIATIVE?

An education management information system (EMIS) provides systematic, quality data in a well-structured enabling environment that facilitates utilization of the information produced in planning and policy dialogue. SABER-Education Management Information Systems (SABER-EMIS) aims to help countries improve data collection, data and system management, and data use in decision making, thereby improving different elements of the education system and contributing to the end goal of improving learning for all children and youth.

SABER-EMIS is one of the sub-systems under The World Bank's Systems Approach for Better Education Results (SABER) initiative, led by the Education Global Practice. SABER produces comparative data and knowledge on education policies and institutions, with the aim of helping countries systematically strengthen their education systems. SABER evaluates the quality of education policies against evidence-based global standards, using new diagnostic tools and detailed policy data collected for the initiative.

WHY SHOULD YOU PARTICIPATE IN THIS INITIATIVE?

There are three principles that guide an effective EMIS, Sustainability, Accountability and Efficiency. Combined, the existence of these principles within an EMIS will result in an effective system that adds value across the entire education system. SABER-EMIS helps education policy makers and stakeholders reach more effective education management information systems.

The data collected under the SABER-EMIS initiative will be available to the public and to policy makers and education stakeholders, allowing them to make evidence-based diagnoses of the status of EMIS activities in their respective countries, learn about other countries' information systems, and make informed decisions. The data will be used to create country profiles, not to rank countries. Researchers also will have access to the data and will be able to conduct analyses that expand the pool of resources and knowledge on this important topic.

WILL YOUR RESPONSES BE KEPT CONFIDENTIAL?

Yes, all of your responses will be kept confidential and individual responses will not be identified. Aggregate data will be reviewed by The World Bank SABER-EMIS team and the country's government before information is uploaded to the SABER-EMIS website. Based on the information provided, the SABER-EMIS team at The World Bank will produce an objective country profile report indicating strengths and areas for improvement in the country's education management and information system and related policies. The report will be shared with the country for discussion and a finalized version will be made available on the SABER-EMIS website.

THANK YOU FOR PARTICIPATING IN THIS INITIATIVE.

SINCERELY,

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Education Global Practice	Education Global Practice	Education Global Practice	SABER-EMIS Team Lead
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Introduction

The SABER-EMIS Questionnaire is divided into four policy areas that encompass what matters most to the development of an effective EMIS:

1. <u>Enabling environment</u>: Assessment of intended policies in relation to a sustainable infrastructure and human resources that can handle data collection, management, and access.
2. <u>System soundness</u>: Assessment of the degree to which the processes and structure support the components of a comprehensive information management system.
3. <u>Quality data</u>: Assessment of the degree to which an EMIS system accurately collects, securely saves, and produces high-quality, timely information.
4. <u>Utilization for decision making</u>: Assessment of the reality of system implementation and utilization of EMIS information in decision making.

Each of the four policy areas contains levers and a series of indicators that are evaluated through the completion of a questionnaire containing questions specific to each indicator. Most of the questions in the questionnaire can be answered with either a "yes" or "no" (check the relevant box for each question). Some of the questions contain a checklist of items that need to be answered. For some questions, a 4-scale rating is used. The weights assigned to each question are: (1) Not at all; (2) A little; (3) Some; (4) A lot. It is important to answer every question (including all items in the checklist) so that the EMIS can be effectively benchmarked.

The questionnaire contains a column labeled, "Level". When relevant to the question, use this column to indicate at which level the answer pertains by indicating one of three options: 1) Local; 2) Sub-national; or 3) National. For example, if the answer to the question is a federal policy, the level would be federal. If the answer is specific to a classroom practice, the level would be local/district. When the answer does not pertain to any level, leave the column blank.

For some questions, it will be necessary to reference specific documents (e.g., policies/legislation, reports, websites, program documents, etc.), which can be included in the "Notes" column. For each question, there is also a "Comments" box to place additional information that you think might be relevant to evaluate the EMIS. Please include the specific documents referenced to answer the question (be specific and include numbers for the Article/Section, URL where government document can be found, etc.). This space can also be used to add relevant information that will be useful when assessing the strengths and weaknesses of the system.

This questionnaire can be conducted via semi-structured interviews with individual informants and desk review of relevant documents, but it is more efficient to conduct it in a small-group setting since there is a better likelihood of reaching consensus on some of the more subjective questions. Also, participating host country staff should be made familiar with the materials needed for the review in advance.

Guidelines
PLEASE NOTE BEFORE BEGINNING TO RESPOND

1. Answer every question.

2. All questions refer to assessment activities in *both* public and private schools in the focal country or education system.

3. For the purpose of this questionnaire, the system that manages education information is referred to as an EMIS. In some contexts, this system may be referred to by a different name (e.g., school management system, student information system).

4. The scope of the education system for an EMIS at the school level in this survey is limited to basic and secondary education for formal education in public and private schools. Tertiary education is beyond the scope of this survey. Available data at the school level for early childhood development and/or kindergarten may also be collected and included in the EMIS.

5. Use the Comments boxes to add additional information that you deem relevant to the topic. If you need additional space, please type in a separate sheet indicating the question to which the text pertains. If a tablet or portable computer is not available, please hand-write checklist and then transcribe to typed format. This reduces the risk of misinterpreting hand-written content.

Definitions

Administrative Data: All school and student data, including student management data, student learning data, school finance data, etc.

EMIS: An education management information system (EMIS) is the system that manages education information. As mentioned above, in different contexts, this system may be referred to by a different name. An EMIS can manage a wide range of data including: student information (demographics, enrollment, discipline and other functional elements); instructional/learning information (assessment and achievement data, teacher evaluations, curriculum effectiveness data and other elements related to progression through school); longitudinal data; and business intelligence (financial and human resource data, strategic metrics, etc.).

International Standard Classification of Education (ISCED): A statistical framework maintained by the United Nations Educational, Scientific and Cultural Organization (UNESCO) for organizing information on education.

ISO 9000: A set of quality management systems standards designed to help organizations ensure that they meet the needs of customers and other stakeholders while meeting statutory and regulatory requirements related to a product.

Local: This refers to all the administrative subdivisions that fall under the sub-national level. For example, municipalities, counties, districts, communes, etc.

Metadata: A set of data that describes and gives information about other data.

National: This refers to the whole country. In the survey, the national level refers to legislation mandated by the central government.

Sub-national: This refers to the administrative level that immediately follows the national level. For example: states in India, Mexico and the U.S.; provinces in Argentina, Indonesia, Thailand and Finland; regions in France; or zones in Nepal.

Summative Indicators: Variables derived from individual-level data such as administrative, financial, or human resources data.

Survey Information

Country: **State/ Province:**

Principal Investigator:
Please record the name, country, email, and phone number of the principal investigator.
    Name:
    Country:
    State/Province (if applicable):
    E-mail:
    Phone Number:

Respondent(s):
Please record the following information for the primary respondent who is answering the survey (in the first quadrant). Please also include information on any additional supporting respondents.

Primary Respondent (Required):	**Supporting Respondent (if applicable):**
Name:	Name:
Country:	Country:
State/Province:	State/Province:
Institutional Affiliation:	Institutional Affiliation:
Job Title:	Job Title:
E-mail:	E-mail:
Phone Number:	Phone Number:

Supporting Respondent (if applicable):	**Supporting Respondent (if applicable):**
Name:	Name:
Country:	Country:
State/Province:	State/Province:
Institutional Affiliation:	Institutional Affiliation:
Job Title:	Job Title:
E-mail:	E-mail:
Phone Number:	Phone Number:

Policy Area 1: Enabling Environment

Policy Area 1: Enabling Environment

Description of Best Practice: The system contains crucial components of a comprehensive enabling environment, which addresses related policy elements and enables the functioning of an effective and dynamic system.

1. Legal Framework

There is an existing legal framework to support a fully-functioning EMIS.

A. Institutionalization

EMIS is institutionalized as an integral part of the education system and the government.

		Yes	No	Level	Notes
1.	Is there a law/policy to create or establish an education management information system (EMIS), as a point of reference, that collects, processes, and disseminates education data on a regular basis?				
2.	Is there a law/ policy that calls for an institution, an agency or an official entity to manage the EMIS?				
3.	Is there a law/ policy that specifically mandates the collection, processing and dissemination of data?				
4.	Does a designated official entity exist that is responsible for managing the EMIS?				
5.	Is there a system in place, as the point of focus, where collected data is stored, processed and disseminated on a regular basis?				

Additional Comments:

B. Responsibility

The responsibility for collecting, processing, and disseminating education statistics is given to a clearly designated institution or agency.

		Yes	No	Level	Notes
1.	Is there a law/policy that **clearly specifies** responsibilities and **prohibits interference** between the official education statistics agency and external agencies to:				
	a. Collect education data?				
	b. Process education data?				
	c. Disseminate education data?				

	Yes	No	Level	Notes
2. Is there a law/policy that guides the processes and procedures for working with other units and/or other sources of data (examples below are illustrative and may not exist in some countries)?				

    a.   Population statistics (e.g., census bureau)?

    b.   Private sector information (e.g., information from private schools that feed into the EMIS)?

    c.   Poverty data (e.g., welfare data; data on individuals receiving government subsidies)?

    d.   Geographic Information System (GIS) data (e.g., referenced geographic location information for school buildings) in accordance with industry standards?

    e.   Financial data (e.g., government budget for education)?

    f.   Early childhood education data?

    g.   Tertiary education data (e.g., admission data)?

    h.   Disability/ Special needs data?

    i.   Health, medical and hygiene data (e.g., Ministry of Health and Mental Hygiene, vaccinations)?

    j.   Workforce development data (e.g., technical and vocational programs, workplace readiness)?

    k.   Legal/court system (e.g., juvenile court system)?

Additional Comments:

C.   *Dynamic Framework*

The legal framework is dynamic and elastic so that it can adapt to advancements in technology.

	Yes	No	Level	Notes
1. Does the legal framework highlight the technical specifications of the system?				
2. Do the technical specifications:				

    a.   Address the changes in technology?

    b.   Specifies the guidelines for procurement of the system?

    c.   Mandates that the framework be reviewed regularly?

	Yes	No	Level	Notes

d. If the answer to c. is 'Yes', how often is it reviewed (choose one range):
   i. From 0-2 years?
   ii. From 2-5 years?
   iii. From 5-10 years?

3. Is it mandated that EMIS undergo auditing through:
   a Internal reviews?

   b. External reviews?

4. When did the last audit/ review take place? By whom? (Internal or external) Please describe in comments.

Additional Comments:

D. *Data Supply*

The legal framework mandates that schools participate in the EMIS by providing education data.

	Yes	No	Level	Notes

1. Does the education statistics agency have the legal authority to collect data required to compile educational statistics?
2. Is there a legal mandate that ensures that schools provide their data to the EMIS?
3. Does the law specify measures to enforce schools to provide data **on time** (e.g., assign penalties to schools that do not provide the data on time)?
4. Are there penalties or warning systems against schools for lack of compliance with the legal mandate for schools to provide education data to the EMIS?
5. Are there means to make schools aware of penalties or warning systems for a lack of compliance with data-related legal mandates?
6. Does the penalty or warning system cover all schools (e.g., private schools; public schools)?
7. Does the law emphasize the importance of data and outline the necessary support to schools for compliance with the process of gathering the data supply?
8. Are schools aware of their role in this regard?

Comments:

E.   Comprehensive and Quality Data
The requirement for comprehensive, quality data is clearly specified in the EMIS legal framework.

		Yes	No	Level	Notes
1.	Does the legal framework (or other documents) require the data to exist within the EMIS, and the language of the framework to outline that data be comprehensive in nature and of specific quality standards?				
2.	Does the legal framework (or other documents) explicitly state processes and procedures to ensure security of materials during testing and storage during the entire process?				
3.	With regard to data handling, does the legal framework explicitly designate individuals at each local school to manage transfer of data between state and local school entities?				
4.	If data handling/administration policies are not followed in order to ensure data quality, does the legal framework include penalties?				
5.	Does the legal framework explicitly state that data need to be integrated from different data sources (e.g., population data, financial data, poverty data, early childhood data) into the EMIS?				
6.	Does the law specify the requirements and criteria from the data suppliers from sources outside of the EMIS?				
7.	Is there an established and known **monitoring** process within the EMIS for the following: a. Data collection? b. Data processing? c. Data dissemination of education statistics?				

Comments:

F.   Data Sharing and Coordination
The legal framework allows for adequate data sharing and coordination between the Ministry of Education and agencies and/or institutions that require education data.

		Yes	No	Level	Notes
1.	Does the legal framework spell out the processes to share data with agencies/institutions outside of the EMIS?				
2.	Is there a law that outlines the requirement that data needs to be shared on a timely basis with				

	Yes	No	Level	Notes
education stakeholders (e.g., parents, teachers, schools, policymakers, etc.)?				

3. If yes, whom is the data currently shared with (Check all that apply):
    a. Parents
    b. Teachers
    c. Schools
    d. Policymakers
    e. Open to all

Comments:

G.   *Utilization*
The legal framework emphasizes data-driven education policy.

	Yes	No	Level	Notes
1. Does the legal framework specify how data in the EMIS is going to be utilized (i.e., framework outlines that education policies should be informed by EMIS data and decision-making is data-driven)?				
2. Do schools receive reports/ feedback from the data for:	**Scale**			
a. Managing resources				
b. Planning				
c. Staffing				
d. Teaching/ learning				

Comments:

H.   *Budget*
The education system budget includes line items for the EMIS.

	Yes	No	Level	Notes
1. Does the education system's budget include line items for the EMIS?				
2. Does the legal framework specify a budget for each of the budgetary items of the EMIS (e.g., personnel and professional development, maintenance, reporting, physical infrastructure, and efficient use of resources)?				

Comments:

I.   Confidentiality
The legal framework guarantees that respondents' data are confidential and used for the sole purpose of statistics.

		Yes	No	Level	Notes
1.	Is there a law/policy ensuring that respondents' data is kept secure and protected from inappropriate access or unauthorized use?				
2.	If so, does the law/policy outline penalties for disclosing confidential information?				
3.	Does a law/policy exist that outlines specific actions to ensure confidentiality of respondents' data?				
4.	Is the confidentiality of data widely known to respondents?				
5.	Does a law/policy exist to safeguard information provided by the schools?				
6.	Does a law/policy exist which guarantees confidentiality of data collected from the school (e.g., teacher evaluation data, student behavior) and details the specific uses of data collected from the school?				
7.	Does a law/policy specify that respondents are required to provide a truthful response?				
8.	If so, are respondents informed of their obligation to provide a truthful response?				
9.	Does a law/policy specify when and how to remove student records (e.g., they no longer serve education purposes)?				
10.	Are there clearly stated penalties against EMIS staff that disclose confidential data for purposes other than the intended use?				
11.	Is the overall legal framework for collecting, managing and disseminating education statistics consistent with national freedom of information laws, if it exists?				
12.	Does a law/policy outline student rights in accessing and handling his or her personal records?				
13.	Does the legal framework outline rights of parents/guardians in accessing and handling student records?				
14.	Does the legal framework outline the process for correcting/updating student records?				
15.	Does the legal framework outline conditions for disclosure of information?				
16.	If yes, does it include the following conditions: a. Limitations on disclosure?				

		Yes	No	Level	Notes
b.	Conditions for disclosure to officials of other schools and school systems?				
c.	Disclosure to certain federal and state officials for federal program purposes?				
d.	Conditions for disclosure in emergencies?				

Comments:

2.   *Organizational Structure and Institutional Processes*

The system is institutionalized within the government, has well-defined organizational processes, and has several functionalities beyond statistical reporting.

		Yes	No	Level	Notes
1.	Is there a policy that outlines the organizational structure and institutional processes within the EMIS?				
2.	Is the institutional structure of the EMIS a well-defined unit that includes:				
	a. A mission statement?				
	b. An organizational structure?				
	c. A structured workflow?				
	d. Designated staff roles and responsibilities?				
3.	Are there institutionalized processes in an EMIS that allow for the effective flow of information?				
4.	Are the institutionalized processes of an EMIS recorded in a document (e.g., operations manual, handbook)?				
5.	Are working processes periodically reviewed to ensure that they are efficient and are subsequently improved, as needed?				
6.	Are the core tasks of the EMIS at all levels of the process identified?				

Comments:

3.   Human Resources

Qualified staff operate the system and opportunities are available to improve their performance and retention.

A.   Personnel

The core tasks of the EMIS are identified and the EMIS is staffed with qualified people.

	Yes	No	Level	Notes
1. Is there a policy that outlines the need for qualified human resources within the EMIS?				
2. Is the EMIS staffed with qualified people in the following areas:				
a. Management?				
b. Database Specialists ((e.g., staff to develop, maintain and amend the system as needed)				
c. IT Specialists (e.g., computer engineers, staff to ensure that informational technologies operate)?				
d. Education Specialists (i.e., staff skilled in understanding the data needs of the education system)?				
e. Quality Assurance Specialists?				
f. Communications (i.e. staff to produce communications and/or dissemination materials)?				
g. Data analysts/ Statisticians (e.g., staff skilled in utilizing data analytic and statistical tools)?				
3. Is there an EMIS manager?				

Comments:

B.   Professional Development

Professional training is available for EMIS staff.

	Scale	Level	Notes
1. Does training exist to strengthen the technical skills of EMIS staff?			

	Scale	Level	Notes

2. Are the technical skills of staff up-to-date to be consistent with EMIS policies and technologies?

3. Are specialized courses (e.g., education indicators, security, quality, etc.) available to strengthen the technical skills of EMIS staff?

4. Are professional development materials available for staff (e.g., resources on statistics, manuals for database management, etc.)?

5. Are there training materials for capacity building to fulfill data management functions?

6. Are EMIS staff provided continuous on-the-job training?

7. If yes, how often are EMIS staff provided continuous on-the-job training(include specifics in the comments section):   **Yes   No**
   a. At least 1-3 times per year?
   b. No mentioning of professional training?

8. Do plans exist to retain staff within the system?

9. Has there been a loss of major staff members in the last 1-3 years?

10. Is there an internal personnel evaluation system?

11. Is there a defined career path for EMIS staff?

Comments:

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4.   Infrastructural Capacity

The system has a well-defined infrastructure to perform data collection, management, and dissemination functions in an integral manner.

A.   Data Collection Means
Tools for data collection are available.

	Yes	No	Level	Notes

1. Is there a law/policy that outlines the need for well-defined infrastructural capacity within the EMIS (e.g. hardware, software)?

2. Is there a school census done around the beginning of each academic year?

3. What are the available means of data collection:
   a. Technological (e.g., electronic)

	Yes	No	Level	Notes

    b.   Non-technological (e.g., paper-based)

3.   Does the school have a school-specific management database?

Comments:

B.   *Database(s)*

Databases exist under the umbrella of the data warehouse and have both hardware and software.

	Yes	No	Level	Notes

1.   Is there a data warehouse that hosts all databases?

2.   Does a policy exist to ensure that databases are archived on computer servers?

3.   Is the data archived? If yes, for how many years? Please specify in comments.

Comments:

C.   *Data Management System*

There is a system in place that manages data collection, processing, and reporting.

	Yes	No	Level	Notes

1.   Does the data management system have the capabilities to process and analyze collected data and report it systematically (e.g., Banner, PeopleSoft, Oracle, Concordance)? If yes, list name of software in comments.

2.   Does the data management system exist as a layer on the data?

3.   Does data management occur via a combination of database software and hardware including:

    a.   Data storage devices?

    b.   Dedicated servers for the EMIS?

    c.   Cloud-based?

4.   Does the office where the EMIS is housed have computer stations?

5.   Does a computer network exist that is utilized for the EMIS?
6.   Does the EMIS' data management system have a relational database structure?
7.   Does the EMIS include data warehouse architecture?
8.   Does the EMIS include analysis tools for statistical analysis and data management?
9.   Does the EMIS have email systems?
10.   Does the EMIS have a web interface?
11.   With regard to internet connectivity, is the EMIS:
       a.   Is the EMIS connected to the internet?
       b.   If yes, is bandwidth strong (detail bandwidth size in comments section)?
       c.   If yes, is internet access sporadic (detail connectivity in comments section)?
12.   Are data management software continually updated and adapted to perform existing and emerging tasks within the EMIS?

Comments:

D.   *Data Dissemination Means*

Data dissemination tools are available and maintained by the agency producing education statistics.

                                                    Yes   **No**   **Level**   **Notes**

1.   Are there policies to support the dissemination of data via:
       a.   Internet/websites/mass media?

       b.   Annual educational statistical yearbooks/handbooks?
       c.   Other hard copy materials (e.g., leaflets, pamphlets, student report cards)?
       d.   Other electronic/soft copy materials (e.g., leaflets, pamphlets, PowerPoint presentations, report cards)?
       e.   Electronic databases maintained by the agency producing education statistics and open to public?
2.   Are there policies to support the capacity to disseminate data?

Comments:

5.   Budget

The system budget is comprehensive, ensuring that the system is sustainable and efficient.

A.   Personnel and Professional Development

The EMIS budget contains a specific budget for EMIS personnel and their professional development.

	Yes	No	Level	Notes
1. Is there a regular budget assigned for staffing?				
2. Are the recurrent costs for the EMIS staff accounted for in the budget (e.g. seasonal employees, consultants)?				
3. Is there a budget for professional development for EMIS staff, including trainings, learning materials, performance reviews, etc.?				

Comments:

B.   Maintenance

The EMIS budget contains a specific budget for system maintenance and recurrent costs.

	Yes	No	Level	Notes
1. Does the education information system budget includes budgeting for system maintenance and recurrent costs of the system (e.g., license renewal fees)?				

Comments:

C.   Reporting

The EMIS budget contains a specific budget for reporting costs.

	Yes	No	Level	Notes
1. Does the education information system budget include financing for reporting including:				
a. Publishing reports?				
b. Printing and copying?				
c. Creating and maintaining websites?				

       d.   Creating, maintaining and updating
            accessible platforms?

Comments:

D.   *Physical Infrastructure*

The EMIS budget contains a specific budget for physical infrastructure costs.

	Yes	No	Level	Notes
1. Does the budget highlight categories for the following components of the EMIS' physical infrastructure:				
a. Hardware (e.g., computers, networking, data collection devices)?				
b. Software (e.g., tools for data collection, analysis software, reporting software)?				
c. Technical support (e.g., maintenance of databases, hardware and software)?				
d. Renting space, if applicable?				

Comments:

E.   *Efficient use of Resources*

Processes and procedures are in place to ensure that resources are used efficiently.

	Yes	No	Level	Notes
1. Are processes and procedures in place to ensure that resources are used efficiently?				
2. Are audits of the budget performed?				
3. Are there action plans to incorporate feedback from audits to identify areas to amend the budget?				
4. Is the budget reallocated after audits are conducted?				

Comments:

6. Data-driven Culture

Data-driven culture prioritizes data as a fundamental element of operations and decision-making, both inside and outside of the education system.

	Yes	No	Level	Notes
1. Generally, does the government promote the collection and utilization of data within and beyond the education system (e.g., national census, funding to research institutes that use data, population statistics, etc.)?				

	Yes	No	Level	Notes
2. If yes, is the data central to decision-making for the following stakeholders/ users? (Check all that apply):				
a. Governments (central/ regional/ local)				
b. Schools (Principals and headmasters)				
c. Teachers				
d. Parents/ Students				
e. Research Institutions				
3. Do nongovernmental institutions exist that support the collection and utilization of data? If yes, list names of organizations in comments section.				

Comments:

Policy Area 2: System Soundness

Policy Area 2: System Soundness

Description of Best Practice: The processes and structure of the EMIS are sound and support the components of an integrated system.

1.	Data Architecture

The data architecture is well-defined to ensure full system functionality.

	Yes	No	Level	Notes
1. Is the EMIS constructed based on a well-defined wireframe (or blueprint)?				
2. Is there a table of specifications guiding the structure of all databases?				
3. Is there a mechanism to bring data from different sources together?				
4. Is the database:				
a. Structured according to relational standards and compatible with table of specifications (e.g., a database structured by tables comprised of rows/records/columns/fields/attributes)?				
b. Well-documented (e.g., organized database that stores procedures, scripts, schemas, rollouts, etc.; document-oriented database that contains encoded documents which contain a unique key and can be located by specific retrieval language or key-document lookup)?				
c. Secure (according to current security architecture standards)?				
5. Does the EMIS have Application Programming Interfaces (APIs) that specify how software components within the database interact?				
6. Is the system designed to ensure data security and confidentiality?				
7. Have there been incidences of system violations in the last two years? (Hacking databases, phishing and cyber-attacks)				
8. Is the system tested/audited regularly to ensure data security and confidentiality and amended as needed?				
9. Is hardware installation distributed adequately to ensure efficient processing of data and management of the databases?				
10. Which best describes how the EMIS was built:				
a. Built as an in-house system?				

	Yes	No	Level	Notes

b. Purchased off the shelf and customized?

c. Built and primarily managed by a vendor?

13. If an outside firm was selected, was a thorough due diligence process conducted before selection of that firm? (Please provide a detailed selection criteria)

14. If an outside firm manages the EMIS, was it clearly stated that the data is owned by the designated government agency, not the firm?

15. If an outside firm was contracted, to what degree were you happy with their work? (include firm name and feedback in notes column) **Scale**

Comments:

2.   Data Coverage

The data in the system is comprehensive and covers administrative (student & school), financial, human resources, and learning outcomes data.

A.   Administrative Data

The EMIS contains administrative data at student and school levels.

		Yes	No	Level	Notes

1. Is there essential **student-level** data in the EMIS, including (answer yes/no for the list below and add additional categories in the comments section):

   Demographic Data
   - a. Age?
   - b. Gender?
   - c. Ethnicity?
   - d. Family economic data (e.g., low-income family data, single-family household data, poverty data)?
   - e. Early childhood development data?
   - f. Tertiary education data (e.g., did student progress to tertiary level?)?

   Health Data
   - g. Immunization records?
   - h. Health/illness history?
   - i. Pregnancy history for females?
   - j. Special needs population data (e.g., learning needs, physical needs/disabilities)?

   Learning Data
   - k. Enrollments?
   - l. Transitions (progression to next grade)?
   - m. Repetitions (repeating a year)?
   - n. Drop-outs?
   - o. Failures by class?
   - p. Behavioral data (e.g., absenteeism, late arrivals)?
   - q. Student-level course completion (transcript) data, by grade?

2. Is there essential **school-level** data in the EMIS, including (answer yes/no for the list below and add additional categories in the comments section):
   - a   School performance and efficacy data:
     - i.   Student to teacher ratios?
     - ii.   Student to classroom ratios?
     - iii. Student to school ratios?
     - iv.   Graduation rates for school by grade per year?

    v.   If school plan exists, is there data on achieving milestones in that plan?

    vi.   Are there progress reports to track school performance?

    vii.   Data on student learning objectives (if applicable)?

    viii.   School Ranking?

b.   Financial assistance data (e.g., school-feeding programs)?

c.   School improvement program data:
   i.   School assessment?
   ii.   Curriculum?
   iii.   Audits?
   iv.   Infrastructure?

d.   Infrastructure (use averages if answering at National/Sub-national levels)
   i.   Total school size?
   ii.   Number of classrooms?
   iii.   Number of students per classroom?

e.   Service delivery indicators (includes indicators that determine the minimum resources essential for a well-functioning school system), including:
   i.   Textbooks?
   ii   Computers?
   iii.   Printers?
   iv.   Electricity?
   v.   Water?
   vi.   Bathrooms?
   vii.   Internet access?
   viii.   Phone?
   ix.   Medical supplies or medical support room (e.g., nurse, dispensary, etc.)
   x.   Provider ability/qualifications (e.g., minimum knowledge, math and English scores, pedagogy training for teachers)
   xi.   Provider Effort (e.g., time spent teaching, absence from classroom, absence from school)

	Yes	No	Level	N

3. Is there a mechanism to flag or issue early warning reports on the performance of the following:
    a. Teachers?
    b. Students?
    c. Schools?
4. Does the system link pre-school, primary, secondary, and higher education data, at the student level?

Comments:

B.   *Financial Data*

The EMIS contains financial data.

	Yes	No	Level	Notes
1. Is data available on conditional cash transfers (if applicable), including the following:				
a. Meal Plans?				
b. Subsidies on learning materials (e.g., calculators, workbooks, pencils, etc.)?				
c. Other cash / in-kind transfers?				
2. Is data available on the breakdown of funding per school from the following sources:				
a. Government?				
b. Tuition Fees?				
c. Donations?				
d. Grants?				
e. School Revenue?				

3. Does the system track how the money received (from the above sources) is spent?
4. Does the system track data on the financial value of the land occupied by the school and the school infrastructure?
5. If the building/ land is not owned by the school, what is the rental cost of the building?
6. Is it possible to estimate the unit cost per student at the:
    a. School level?

    b. Sub-national level?

    c. National level?

Comments:

C.   Human Resources Data
The EMIS contains human resources data.

	Yes	No	Level	Notes
1. Does the EMIS track data on teachers, substitute teachers, contractual teachers, non-teaching staff and part-time staff for the following categories:				

General Demographics
a. Teaching Staff (e.g., qualifications, experience, etc.)?

b. Non-teaching staff?

c. Contractual teachers?

d. Substitute teachers?

e. Part-time support staff?

Salaries
f. Teaching staff?

g. Contractual teachers?

h. Substitute teachers?

       i.   Non-teaching staff (e.g., administrative staff, management staff, security and janitorial staff, transportation staff)?

       j.   Part-time support Staff?

       k.   Other benefits/ allowances?

Performance Evaluation

       l.   Data from classroom observations?

       m.   Procedure to track staff attendance and absenteeism?

       n.   Inspection data on teachers?

Professional Development	Yes	No	Level
o. Training and certifications?			
n. Tracking number of trainings completed?			

Comments:

D.   *Learning Outcomes Data*
The EMIS contains learning outcomes data.

	Yes	No	Level	Notes
1. Does the system track learning outcome data, including:				
a. Grades?				
b. National assessments?				
c. Classroom assessments (at the student level)?				
2. Are student learning outcomes linked to their respective teacher through assessment data?				
3. Are student learning outcomes linked to their respective school through assessment data?				
4. Do parents have direct access to student performance data? (in the form of student report cards)				
5. If yes, how often can they access student performance:				

        a.   Live data (they can access it anytime)

        b.   Periodically?

        c.   Once a year

6.   Do students have direct access to their own performance data?

7.   Are teachers able to track student performance in various subjects/classes?
8.   Does the system track data on students that need remedial help?

Comments:

3.   *Data Analytics*

Tools and processes are available to perform data analytics at different levels on a regular basis.

	Yes	No	Level	Notes

1. Are there processes to perform different levels of analysis generally, and for the below listed tasks?
   a. Descriptive data analysis (e.g., describing specific features of information)?
   b. Data tabulations (e.g., summarizing data based on different indicators such as teacher-student ratio by region, relationship between school attendance and learning)?
   c. Data associations (e.g., relations between data indicators or different data fields such as behavioral issues and school leadership)?
   d. Correlations (e.g., determining causality and effects across different parameters)?				

2. Are there tools to perform different levels of analysis (e.g., SPSS, STATA, R and open source statistical analysis tools)?
3. Is the system capable of producing:
    a. Projections (e.g., population projections)?
    b. Predictive models (e.g., estimation and prediction techniques)?
    c. Scenario analysis (what-if analysis)?
4. How often does the system produce outputs of these data analytics (choose one "yes" answer below)
    a. Once a year?
    b. Twice a year?
    c. More frequently?
5. Can data analytics be performed within the EMIS to inform decision-making?

Comments:

4. Dynamic System

The system in place is elastic and easily adaptable to allow for changes/advancements in data needs.

A. Quality Assurance Measures

The system is dynamic and maintains quality assurance measures.

	Yes	No	Level	Notes
1. Does the EMIS follow internationally recognized quality assurance measures such as the Total Quality Management Approach or ISO 9000? (The ISO 9000 focuses on the framework for quality management, providing guidance on how to manage for quality and perform internal audits)				
2. Has the EMIS been reviewed internally for quality assurance measures? If yes, detail frequency in comments section.				
3. Has the EMIS been reviewed externally such as by an auditing agency or quality management agency?				

		Yes	No	Level	Notes
4.	Are there well-defined procedures documenting quality assurance regularly in the following areas (Please provide detailed process in the comments section):				
	a. Data collection?				
	b. Data processing?				
	c. Data dissemination of education statistics?				

Comments:

B. Data Requirements and Considerations

There are mechanisms for addressing new and emerging data requirements.

			Level	Notes
1.	Are meetings with stakeholders and other data users held periodically to:	Scale		
	a. Review the existing portfolio of education indicators?			
	b. Review the existing education reports?			
	c. Identify any emerging data requirements?			
2.	Can data be aggregated or disaggregated without any difficulties?	Scale		
3.	To what degree is the system able to adapt to new data requirements (e.g., ability of the system to integrate any new student demographic data such as family data into the existing system)?	Scale		

Comments:

C. System Adaptability
The EMIS is elastic and easily adaptable to allow for changes and/or advancements in data needs.

		Yes	No	Level	Notes
1.	Is the EMIS adaptable to changes in:				
	a. New school arrangements (e.g., redistricting)?				
	b. Added functionalities (e.g., new reported data specifically for that school)?				
	c. New technologies?				
	d. Able to work with current legacy systems if needed?				

Comments:

5. Serviceability

Services provided by the system are valid across data sources, integrate non-education databases into the EMIS, and archive data at the service of EMIS clients by ensuring the relevance, consistency, usefulness, and timeliness of its statistics.

A. Validity across Data Sources
Information brought together from different data and/or statistical frameworks in the EMIS is placed within the data warehouse using structural and consistency measures.

		Yes	No	Level	Notes
1.	Is information that is brought together from different data sources placed within the data warehouse?				
2.	Are data collection instruments carefully designed to avoid duplication of information and lengthy processes in compiling data?				
3.	Are key variables reconciled across the databases in the data warehouse?				
4.	Are data compilation procedures managed in a way that minimizes processing errors such as coding, editing, and tabulation errors?				
5.	Are the total statistics calculated by summing the components of the total?				
6.	Are the final statistics consistent or reasonable within a dataset and over time?				
7.	Are consistent time series data available for an adequate period of time (at least five years)?				

8. Are historical series reconstructed as far back as reasonably possible when changes in source data, methodology, and statistical techniques are introduced?
9. Is the emphasis for consistency placed on the final statistics instead of the preliminary publications?
10. Are electronic databases validated by data-producing units?
11. Are pre-existing or other data collection and management systems (i.e., not considered part of the EMIS) compatible with similar functions for the EMIS?
12. Does the system include the following unique identifiers that link databases across years:
    a. Student Identifiers?
    b. Teacher Identifiers?
    c. Course Codes/ Information Systems?

13. Is there a system in place that links the following:
    a. Teachers with students?
    b. Teachers with students by course and classroom?
14. Is there any roster verification by which the list of an individual teacher's students is reviewed by the teacher for accuracy before being used to link teachers and students?
15. Is the following non-education data collected, integrated and linked in the EMIS:
    a. Workforce data?
    b. Labor and Unemployment Insurance wage records?
    c. Apprenticeship data? (e.g., internships)
    d. Clearinghouse data? (Clearinghouse is an independent non-profit research center that conducts research to inform and guide education stakeholders on policy decisions affecting student outcomes)
16. How easy is it to move data on students/subjects from one school to another?

Comments:

### B.	Integration of Non-education Databases into EMIS

Data from sources collected by agencies outside of the EMIS are integrated into the EMIS data warehouse.

	Yes	No	Level	Notes
1. Are data from sources that are collected by other agencies outside of the EMIS (e.g. administrative data, census data, and socio-demographic data) integrated into the EMIS data warehouse?				
2. Do manual operations (e.g., data collected via non-technological means) still exist?				
3. If yes, are they integrated effectively into the system as well?				

Comments:

### C.	Archiving Data

Multiple years of data are archived, including source data, metadata, and statistical results.

	Yes	No	Level	Notes
1. Are databases archived on computer servers, beyond those at the Ministry of Finance?				
2. Are multiple years of data archived including:				
a. Source data?				
b. Metadata?				
c. Statistics?				

Comments:

D.   Services to EMIS Clients

Services provided by the system to EMIS clients include ensuring the relevance, consistency, usefulness, and timeliness of its statistics.

	SCALE	**Level**	**Notes**

1.   Do services provided by the system to EMIS clients ensure:
(Note: Utilize common sense and consider the specific context when answering these questions. The comments box is available for further explanation.)
    a.   Relevance?
    b.   Consistency?
    c.   Usefulness?
    d. Timeliness?			

Comments:

Policy Area 3: Quality Data

Policy Area 3: Quality Data

Description of best practice: The system has the mechanisms required to collect, save, produce, and utilize information, which ensures accuracy, security, and timely, high-quality information for use in decision making.

1.   *Methodological Soundness*

The methodological basis for producing educational statistics from raw data follows internationally accepted standards, guidelines, and good practices.

A.   *Concepts and Definitions*

Data fields, records, concepts, indicators and metadata are defined and documented in official operations manuals along with other national datasets, and endorsed by the government.

		Yes	No	Level	Notes
1.	Is there an official operations manual that defines and documents:				
	a. EMIS concepts (e.g., terminology of specific concepts that relate to the collection, management and dissemination of education data)?				
	b. Data fields?				
	c. Indicators?				
	d. Metadata?				
	e. Archival of data records?				
	f. Service delivery indicators?				
2.	Are the concepts and definitions that govern the EMIS in accordance with other national datasets?				
3.	Are the concepts and definitions that govern the EMIS endorsed by the government?				
4.	Does documentation exist on national concepts and definitions that govern the EMIS?				
5.	Are the concepts and definitions that govern the EMIS easily accessible?				
6.	Do the overall structure, concepts and definitions for the EMIS follow regionally and internationally accepted standards, guidelines, and good practices?				
7.	Are data collectors and data engineers aware of differences in concepts and definitions used in the source data from those required of education statistics?				

Comments:

B.   Classification

There are defined education system classifications based on technical guidelines and manuals.

	Yes	No	Level	Notes

1. Are the documented education system classifications defined based on technical guidelines and manuals (UNESCO Institute for Statistics (UIS) technical guidelines and manuals and OECD Glossary of Statistical Terms)?
2. Is the classification of educational expenditure based on UIS technical guidelines and/or United Nations System of National Accounts (SNA)?
3. Are classification systems in accordance with nationally and internationally accepted standards, guidelines or good practices such as:
    a. National classification programs and applications in public and private institutions?
    b. UIS-ISCED mapping and reporting data according to recent ISCED codes?

Comments:

C.   Scope

The scope of education statistics is broader than and not limited to a small number of indicators (e.g., measurements of enrollment, class size, and completion).

	Yes	No	Level	Notes

1. Is the scope of education statistics limited to a small number of indicators such as enrollment, class size and completion?
2. Is there a national handbook on education statistics?
3. Are these education statistics linked with the overall education strategy?
4. Does a longitudinal data system exist?
5. If not, has the desire to create a longitudinal data system been articulated?
6. Is the scope of education statistics in accordance with international standards, guidelines and/or good practices?
7. Does the scope of the dataset assess data overlaps to avoid redundancies (e.g., its scope does not overlap with other datasets)?
8. Is metadata considered as part of the education statistics in the EMIS as evidenced by its inclusion in the data warehouse?

9. Are all relevant educational institutions and programs covered in the EMIS (e.g., formal and non-formal educational institutions)?
10. Are relevant geographical boundaries (e.g., cities, towns) used to classify geographic-specific data (e.g., schools, district offices)?

Comments:

D.   Basis for Recording
Data recording systems follow internationally accepted standards, guidelines, and good practices.

		Yes	No	Level	Notes
1.	Does the data recording system follow internationally accepted standards, guidelines, or good practices?				
2.	Are students' age recorded according to a specific reference period/date?				
3.	Are graduates' data attributed to the academic year in which the graduates are enrolled?				
4.	Does expenditure data (i.e. public expenditure on education as a percentage of GDP) refer to actual expenditure (not estimated or projected)?				

Comments:

2.   Accuracy and Reliability
Source data and statistical techniques are sound and reliable, and statistical outputs sufficiently portray reality.

A.   Source Data
Available source data provide an adequate basis for compiling statistics.

		Yes	No	Level	Notes
1.	Do administrative school censuses (or the aggregate from local government) collect information on:				
	a. The structure of the education system (e.g., education cycles)?				
	b. Students?				

      c.   Teachers?

      d.   Principals/school management?

      e.   Educational expenditure?

2. Does the design of data collection instruments allow for easy completion and provide a template that is appropriate for computer processing?
3. Is there a registry of all schools, and is it used to identify schools that respond and do not respond to the EMIS for data reporting?
4. Does the registry cover all schools (e.g., public and private)?
5. Are source data obtained from comprehensive data collection programs that take into account country-specific conditions (e.g., limited technological means for data collection, difficulties in obtaining data from remote areas)? (Please describe)

6. Do statistics describe the structural and normative characteristics of the education system and are they aligned with the most recent ISCED standards to the extent possible?
7. Is data produced from the EMIS compatible with:
      a.   Official nationally reported data?
      b.   Official internationally reported data?
8. Does the data collection system provide for the timely receipt of source data?
9. Are source data providers aware of the deadlines set for the reporting of education statistics?
10. Does the education statistics agency employ systematic follow-up procedures to ensure the timely receipt of source data?
11. Are source data from the school census on enrollments and teachers provided to the area responsible for producing statistics no later than 6 months after the end of the school year?
12. Are source data on educational expenditures collected from within the ministry of education and other ministries and institutions no later than 6 months after the end of the school year?

Comments:

B. Validation of Source Data

Source data are consistent with definition, scope, classification, as well as time of recording, reference periods, and valuation of education statistics.

	Yes	No	Level	Notes
1. Are source data consistent with the definitions, scope, and classifications of education statistics?				
2. Are source data consistent with the time of recording, reference periods, and valuation of education statistics?				
3. Are administrative data audited to check the accuracy of source data (e.g., field collection inspection, random post-enumeration checks)?				
4. Are professional development actions taken (e.g., continuing education for data collectors) to improve accuracy of source data?				
5. Is accuracy of data from all sources used to compile statistics routinely reviewed in terms of:				
a. Monitored events?				
b. Population coverage?				
c. Timeframes (i.e., data is reviewed in the necessary timeframe to compile statistics and perform other required EMIS functions such as the dissemination of report cards)?				
6. Is information compiled on coverage, sampling errors, non-response errors (e.g., non-response rates for socioeconomic groups), and percentage of missing or imputed data by methods of imputation?				
7. Is the use of school registration promoted and is accuracy periodically monitored by assessing:				
a. Whether students dropping out are removed from the register or identified as no longer enrolled?				
b. Whether students moving or changing schools are removed from the register or identified as no longer enrolled?				
c. Whether the registry includes all students currently enrolled?				
8. In terms of expenditure data, are data form different government agencies incorporated and counted only at the level where actual expenditure occurs? (Please indicate where actual expenditure occurs in the comments box.)				

Comments:

	Yes	No	Level	Notes

9. Are institutions and programs for reporting education expenditure data the same as the institutions for the reporting of staff and enrollment data?

Comments:

### C.	*Statistical Techniques*

Statistical techniques are used to calculate accurate rates and derived indicators.

	Yes	No	Level	Notes

1. Are there imputation methods and estimation techniques in place (e.g., sampling weights, calibration weights) that employ sound statistical techniques?
2. Are imputation and estimation methods appropriate for dealing with missing, valid or inconsistent data from administrative records, population censuses, or schools, and assessments of student achievement?
3. Are statistical projection (including population projections) computed according to sound methodological procedures?
4. Where compensation for missing data is not feasible (e.g., data not collected from private schools), is reason for missing data described?
5. Are problems regarding non-responses, recall errors, reporting errors, respondents' effects, interviewer effects, and inappropriate instrument design addressed?
6. Are adjustments made if there is a sizeable part of the population that is not covered by sources used for regular compilation of statistics?
7. Are revisions to statistical methodology reviewed regularly?

Comments:

3. Integrity

Education statistics contained within the system are guided by principles of integrity.

A. Professionalism

EMIS staff exercise their profession with technical independence and without outside interference that could result in the violation of the public trust in EMIS statistics and the EMIS itself.

	Yes	No	Level	Notes
1. Is staff protected by a code of professional ethics supported by the Ministry of Education and/or the national statistical agency?				
2. Is professionalism promoted by:				
a. Publishing methodological papers?				
b. Encouraging participation in conferences and meetings with other professional groups?				
3. Are research and analysis undertaken by the data-producing agency for publication subject to internal review and other processes to maintain the agency's reputation for professionalism?				
4. Are the selection methods for choice of source data and statistical techniques publicly documented?				
5. Is the agency producing education statistics maintaining the public trust by commenting publicly on erroneous interpretations or misuse of education statistics?				
6. Does the agency seek to prevent misinterpretation or misuse of education statistics by providing explanatory materials and briefings to the public?				
7. Does the education information system have a recruitment and promotion system where positions are filled according to qualifications required?				
8. Is access to data restricted to EMIS staff that require the information to perform their duties?				
9. Does EMIS staff review all data ready for dissemination to ensure there is not indirect disclosure of confidential data?				
10. Are there mechanisms to enforce penalties against EMIS staff that disclose confidential information for other purposes?				

Comments:

B.   Transparency

Statistical policies and practices are transparent.

	Yes	No	Level	Notes
1. Does publicly available information exist about the terms and conditions regarding:				
a. How educational statistics are collected?				
b. How educational statistics are compiled?				
c. The confidentiality of individual responses?				
d. The security measures taken for storing individual data?				
2. Is there information about where the education statistics agency and its products outside of its EMIS functions can be found?				
3. Does awareness exist on how to access publications about the education statistics agency and its products?				
4. Is there public awareness that some government agencies have access to education statistics prior to when they are publicly released?				
5. Is the public aware at what point internal government access is granted during the process of data compilation?				
6. Are data released to the public clearly identified as a product of the agency in charge of education statistics (e.g., by name, logo)?				
7. In the case of joint publications, are the contributions of the education statistics agency clearly identified?				
8. Does the education statistics agency request attribution when its statistics are used or reproduced?				
9. Is there documented evidence that users of education statistics are made aware in advance of major changes in methodology, source data and statistical techniques (e.g., online circular to parents about changes in how data is collected at the school-level)? Please provide an example, if applicable, in the comments box.				

Comments:

C.   Ethical Standards

Policies and practices in education statistics are guided by ethical standards.

	Yes	No	Level	Notes
1. Are there clear guidelines for identifying what constitutes unethical behavior (e.g., the misuse of statistics, the use of public property to conduct private business, the alteration of statistics in exchange for money)?				
2. Are there clear guidelines outlining correct behavior when the agency or its staff is confronted with conflicts of interest?				
3. Is the reputation of the agency and its management tied to compliance of ethical standards?				

Comments:

4.   Periodicity and Timeliness

The system produces data and statistics periodically in a timely manner

A.   Periodicity

The production of reports and other outputs from the data warehouse occur in accordance with cycles in the education system.

	Yes	No	Level	Notes
1. Is the administrative school census conducted at least once a year?				
2. Are learning achievement surveys regularly conducted according to a periodicity responding to the country monitoring needs?				
3. Are financial data (e.g., expenditure, earnings, etc.) published annually (e.g., financial statements)?				

Comments:

B.   Timeliness

Final statistics and financial statistics are both disseminated in a timely manner.

	Yes	No	Level	Notes
1. Are final statistics derived from the administrative school census disseminated within 6 - 12 months after the start of the school year?				
2. Are financial statistics (inclusive of expenditure, earnings, etc.) disseminated within 6 - 12 months of the end of the financial year?				

Comments:

Policy Area 4: Utilization in Decision Making

Policy Area 4: Utilization in Decision Making

Description of best practice: The system is wholly utilized by different users for decision making at different levels of the education system.

1.   Openness

The system is open to education stakeholders in terms of their awareness and capacity to utilize the system.

A.   EMIS Stakeholders

EMIS primary stakeholders are identified and use the system in accordance with the legal framework.

	Scale	Level	Notes

1.   To what degree is the education information system used in core operations by:
    a.   Ministry of Education?
    b.   Other government agencies?
    c.   Directors of Regional Education Offices?
    d.   Directors of Metropolitan Education Offices?
    e.   Directors of Municipal Education Offices?
    f.   Directors of District Education Offices?
    g.   National Education Service Office (Deputy Directors and Scheduled Officers)?
    h.   Metropolitan/ municipal/ district Assemblies?
    i.   Municipal Assemblies?
    j.   District Assemblies?
    k.   Schools (via Headmasters/Headmistress and Head teachers)?
    l.   Teachers?
    m.   Parents?
       .
    n.   Students?
    o.   Non-Governmental Organizations (NGOs)?
    p.   Researchers?
    q.   Multilateral agencies (e.g., World Bank, UNESCO) and/or bilateral agencies (e.g., donor agencies)?
    r.   Civil Society Organizations?

Comments:

B.   User Awareness
Current and potential EMIS users are aware of the EMIS and its outputs.

	Yes	No	Level	Notes
1. Is the existence of the EMIS publicized so that stakeholders know about it? If yes, what is the medium of communication used:				
a. Websites				
b. Leaflets/ Pamphlets				
c. Regular announcement via emails and other electronic means				
d. Other means (Please describe in comments)				
2. How often is it publicized?				
a. Monthly?				
b. Quarterly?				
c. Yearly?				

Comments:

C.   User Capacity
EMIS users have the skills to interpret, manipulate, and utilize the data produced by the system in order to ultimately disseminate findings.

	Scale	Level	Notes
1. Do education stakeholders have the required capacities to:			
a. Interpret data produced by the EMIS?			
b. Manipulate data produced by the EMIS?			
c. Utilize data produced by the EMIS?			
d. Produce materials related to this analysis (e.g. reports, score card, etc.)?			
2. Are regular trainings available to current EMIS users on how to perform these activities and utilize these statistics to inform decision-making at all levels within the education system?			

	Yes	No	Level	Notes

3. If Yes, what kind of training is provided:
   a. Webinar/Online/Video?

   b. Face to Face?

Comments:

2.   Operational Use

Data produced by the system is used in practice by the main education stakeholders.

A.   Utilization in Evaluation

Data produced by the EMIS is used to assess the education system.

	Scale	Level	Notes

1. Does the data produced by EMIS generate the following data/ reports:
   a. School Performance?
   b. Student Performance (e.g., dropouts, failures, etc.)?
   c. Special Groups Performance
   c. Growth Reports? (for schools and students)
   d. Diagnostic Reports? (for schools and students)
   e. Graduation rates?
   f. Transition rates (e.g., transition to college)
   g. Teacher performance?

3. Are statistics provided by EMIS used for evaluating the overall education system?   **Scale**

Comments:

B.   Utilization in Governance

Data produced by the EMIS is used for governance purposes.

	Scale	Level	Notes

1. Does the government use EMIS statistics to inform and support decision-making process in:
    a. Education policy decisions?
    b. **Accountability:**
        i. Local governments?
        ii. Schools?
    c. **Planning:**
        i. Resource allocation?
        ii. Staffing?
        Iii Budgeting?
    d. Management of projects?
    e. Monitor intervention?
    f. Monitor special education programs?
2. Is the data actively used to improve the quality and equity of education?   **Scale**

Comments:

C.   Utilization by Schools

Data produced by the EMIS is used by schools.

	Scale	Level	Notes

1. To what degree do schools utilize the information provided by the EMIS to evaluate the academic performance of its school relative to other schools?   **Scale**
2. Do schools utilize the teacher data (e.g., evaluation, demographics) to inform instructional teaching and decision making?   **Scale**
3. Do schools utilize the information provided by the EMIS to:
    a. Manage its financial activities?
    b. Compare financial performance of its school relative to other schools?

4. To what degree does the school utilize the information produced by EMIS for school management purposes: **Scale**
   a. Allocate resources?
   b. Plan for the specific needs of each school?
   c. Organize work/schedules?
   d. Expedite requests for education statistics by education stakeholders?
   e. Make decisions (e.g., growth projections, forecasting?)
   f. Faculty evaluation?
   g. Progress of students?
   h. School improvement?

Comments:

D.   *Utilization by Clients*

Data produced by the EMIS is used by clients (including parents, communities, and other actors).

	Scale	**Level**	**Notes**
1. Do EMIS clients have access to school-level information contained in the EMIS?	**Scale**		
2. Based on the data provided by the EMIS, are clients able to:			
a. Obtain information about school performance?			
b. Make choices about where to attend school?			
c. Demand school improvements to both the schools and national authorities?			

Comments:

E.   Utilization by Government:

The system is able to produce summative indicators (derived variables) to monitor the education system.

	Scale	Level	Notes

1.   To what degree is the system able to produce the following summative indicators (derived variables) to monitor the education system (at local, sub-national and national levels)?

Ratios

a.   Student-teacher ratio
b.   Student-staff ratio
c.   Student-space ratio (e.g., square footage per student in classroom)

Infrastructural Capacity

d.   Average classroom size
e.   Number of classrooms

Quality/Outcome Indicators

f.   Enrollment rates, by cycle
   i.   Pre-Primary
   ii.   Primary
   iii.   Secondary
   iv.   Tertiary
   v.   Post-Secondary

g.   Transition rates
   i.   Pre-primary to Primary
   ii.   Primary to Secondary
   iii.   Secondary to Higher

h.   Completion rates, by cycle
   i.   Pre-Primary
   ii.   Primary
   iii.   Secondary
   iv.   Post-Secondary
   v.   Tertiary

i.   Success Rates (measured by percentage of students achieving national benchmarks)

j.   Drop-out rates
   i.   Pre-Primary
   ii.   Primary
   iii.   Secondary
   iv.   Tertiary
   v.   Post-Secondary

Efficiency in spending

			Level		**Notes**

       k.   Education expenditure, by cycle
          i.   Pre-primary
          ii.   Primary
          iii.   Secondary
          iv.   Tertiary
          v.   Post-Secondary
       l.   Teacher salaries, by qualifications
       m.   Teacher salaries, by years of experience
       n.   Teacher salaries, by cycle
          i.   Pre-primary
          ii.   Primary
          iii.   Secondary
          iv.   Tertiary
          v.   Post-Secondary
       o.   Administrative Salaries

Equality Indicators (most of the above indicators are also calculated at the following levels:
       p.   Region
       q.   Gender
       r.   Race/ethnicity groups

2.   How easily and frequently can the system produce the above indicators?

	Yes	**No**	**Level**	**Notes**

       a.   Real time (immediately)
       b.   Several days?
       c.   Several weeks?
       d.   More?

Comments:

3.   Accessibility

Education statistics are presented in an understandable manner and are widely disseminated using clear platforms for utilization, complemented by user support.

A.   Understandable Data

Data are presented in a manner that is easily digestible.

		Level	**Notes**
1. Is education data published in a manner that is easy to understand?	**Scale**		
2. Are charts and tables disseminated with the data to facilitate the analysis?	**Scale**		

3. Do education data offer useful comparisons over time?	**Scale**
4. Is analysis of current period estimates available?	**Scale**
5. Is the public aware of data dissemination products?	**Scale**
6. Are data presented for different degrees of aggregation and sub-components (e.g., by gender, by level of education, by age, private and public, full-time and part-time)?	**Scale**
7. Are data first released via an information release, and then followed by the release of a more comprehensive publication?	**Scale**
8. Can data recently released and longer time series be accessed through an electronic database maintained by the agency producing education statistics?	**Scale**

Comments:

B.   Widely Disseminated Data

Education statistics are disseminated beyond the Ministry of Education and/or the education statistics-producing agency to other EMIS stakeholders.

	Yes	No	Level	Notes
1. Are up-to-date and pertinent metadata made available?				
2. Are metadata (including information on definitions, classifications, methodology, data sources, and statistical techniques) prepared and disseminated to the public?				
3. Is metadata disseminated effectively- can EMIS users easily access disseminated metadata?				
4. Is the availability of metadata well-publicized?				
5. Has a brief publication (e.g., leaflet, brochure) been prepared to inform general users about the statistical series?				
6. Is there a pre-announced schedule for disseminating statistics?				
7. Are statistics released according to a pre-announced schedule?				
8. Are non-published (but non-confidential) specialized tabulations (e.g., sub-aggregates of units of analysis) made available upon request?				
9. Are dissemination of media and formats compatible with existing systems?				
10. Are data categories/fields adapted to the needs of the intended audience?				

11. Are non-confidential micro-data files (e.g., with information permitting the identification of individual respondents removed) available to permit analytical use by researchers and other users?

12. Are the availability of non-published statistics and data, and the terms and conditions on which they are made available publicized?

13. Is data downloadable from EMIS platforms?

Comments:

C. Platforms for Utilization

Platforms are standardized across the EMIS and are customizable to user needs.

	Yes	No	Level	Notes
1. Are EMIS users able to access a comprehensive set of data that they require via:				
a. Standardized platform (e.g. dashboard system)?				
b. Customized platform based on specific user needs?				
2. Do users produce materials related to their analysis (e.g., graphs and charts) using the data platforms?	**Scale**			
3. Are EMIS users able to access statistics through data platforms without the assistance of the education statistics agency?	**Scale**			

Comments:

D. User Support

Assistance is provided to EMIS users upon request to help them access the data.

	Scale	Level	Notes
1. Does documentation exist that is produced and updated regularly to inform EMIS users about how statistics are compiled?			
2. Is prompt and knowledgeable support service available for users?			

3. Is the schedule for data requests known to EMIS users?   **Scale**

4. Are procedures concerning requests clearly defined and assistance to users is monitored?   **Scale**

5. Are requests for extra queries monitored?   **Scale**

6. Are there clear and available instructions for stakeholders on how to find information in the EMIS?   **Scale**

Comments:

4.   Effectiveness in Disseminating Findings

Dissemination of education statistics via an EMIS is strategic and effective.

A.   Dissemination Strategy

National governments have an information dissemination strategy in place.

	Yes	No	Level	Notes
1. Does the national government have an information dissemination strategy for education statistics that includes distribution materials such as:				
a. Leaflets and brochures?				
b. Bulletins and newsletters?				
c. Annual reports?				
2. Are dissemination materials downloadable from a website?				
3. Do education stakeholders have the ability to communicate the findings of data produced by the EMIS?	Scale			

Comments:

B.   Dissemination Effectiveness

The education management information system's dissemination of education statistics is effective.

	Scale	Level	Notes
1. Is the government satisfied with the dissemination of EMIS information?			
2. Is there an established systematic process to obtain feedback from users on data collection, processing or dissemination issues?			

Comments:

Please ensure that you have answered all questions and that your responses are consistent and accompanied by supporting evidence. Make sure to save the document and to keep a backup copy for yourself.

-- End of survey --
Thank you for your time.

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