Institutional Capacity Assessment Framework (ICAF)

Muriel Poisson, Team Leader a.i., Knowledge Management and Mobilization (KMM), IIEP-UNESCO
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HLSC’s Functional Areas (FAs)

- HLSC promotes efficient and effective cooperation and harmonized actions at the global and regional levels through three FAs:

  1. Promote evidence-based policy formulation and implementation (FA1: Evidence & Policy)
  2. Monitor progress and improve the availability/use of data (FA2: Data & Monitoring)
  3. Drive financing mobilization and improve alignment (FA3: Financing)

- **FA1 (Evidence & Policy):** Strengthen the institutional capacities of education authorities to use data and evidence for policy, planning, and implementation

<table>
<thead>
<tr>
<th>Action</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Strengthen country capacity:</strong> support gov.s in using evidence</td>
</tr>
<tr>
<td><strong>Increase the accessibility of locally relevant research and evidence</strong></td>
</tr>
<tr>
<td><strong>Promote regional cooperation</strong> through peer learning &amp; collab.</td>
</tr>
<tr>
<td><strong>Support evidence-uptake through systematic mapping of actors</strong></td>
</tr>
<tr>
<td><strong>Produce global public goods</strong></td>
</tr>
<tr>
<td><strong>Advocate for evidence-based policy</strong></td>
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</tbody>
</table>

UNESCO Institute for Statistics
Gap between **availability of data and evidence** and their **use in policy formulation and implementation**
- particularly true for student learning assessment data (IIEP, 2021)

Root of the constraints to using data for improving policy partially lies in the **sub-optimal institutional capacities** of ministries of education at different levels

2022 Sustainable Development Goals Report:
- serious data use gaps persist in education
- need to strengthen the capacities of developing countries for using data and monitoring results and research findings
- ensure effective evidence-based decisions and results-oriented progs

IIEP-UNESCO and OECD combine their respective strengths and experience to address this gap:
- IIEP: Institutional analysis, ESA
- OECD: Use of research evidence and data for policy-making, PISA, and technical assistance
What is the Institutional Capacity Assessment Framework (ICAF)?

► A comprehensive Institutional Capacity Assessment Framework (ICAF) and corresponding methodological tools

► Aims to:
  ▪ Assess and help strengthen the capacity of ministries of education – at different levels of the system – in the effective use of data and evidence for informing policy making and planning
  ▪ Identification of strengths, challenges, and recommendations for improvement
    ▪ Translation into an implementation plan, together with stakeholders (“co-construction”)

► Tailored to countries’ needs
  ▪ Agencies/organisations - at different levels of the system
  ▪ Areas of focus

► Building on:

IIED-UNESCO’s framework for analyzing planning and management capacities

OECD’s framework for strengthening the impact of education research
ICAF Methodology

ICAF tested and refined in pilot countries through a mixed-method consisting of:

1. Desk study, including mapping of existing capacity development opportunities
2. Semi-structured interviews and online questionnaires
3. Peer learning event(s) with national and/or international stakeholders
In practice: Trialing of online questionnaires adapted to local contexts

Educational administration (system)

Organisation (MoE, local authority)

- Mandate, Roles, responsibilities, accountabilities
- Staffing
- Financing

Internal management:
- a. Data & research management (assessment evaluation)
- b. Data & info flow
- c. Organisational learning culture

Individual

- Roles & responsibilities
- Qualification Experience Professional development
- Incentives & motivation
- Job satisfaction & well-being

School improvement support

MoE and National Agencies / Local authorities

1. You and your job
   - role, educational background, clarity of roles and responsibilities

2. Your Organization's learning capacity

3. Use of data for education quality monitoring and school improvement support
   - types of data used, gaps, available tools

4. Your professional development
   - needs, barriers

5. Your job satisfaction and well-being
Pilot 1: Latvia

- Project title: Optimising the institutional capacity for education quality monitoring and school improvement support in Latvia
- Institutional capacity assessment focused on education quality monitoring (data and research evidence) and the provision of school improvement support provided by:
  - the Ministry of Education and Science
  - 4 national agencies
  - 43 municipalities
- Trailing of methodological innovations
- Expanding the ICA Framework: data and research, digital learning infrastructure, school improvement support, organisational learning culture.
Pilot 1: Latvia - Selection of preliminary findings and recommendations

► Education quality monitoring
  ▪ Need for a comprehensive strategy for standardized student assessments and exams
  ▪ Updating of MoES State Quality Education System -> data aggregation and visualization platform
  ▪ Lack of clarity on “what is a good school”? -> need for aligning different policies and tools
  ▪ Consolidation and strengthening of research capacity -> MoES

► School improvement support
  ▪ Mandate/mission “creep”
  ▪ Explicit allocation of responsibility for school leadership development support -> National Centre for Education
    ▪ Latvia’s conceptualization of its school improvement support system
Pilot 1: Latvia - Selection of preliminary findings and recommendations

- Optimising the organisational capacity of municipalities
  - Matching the clarification of roles and responsibilities with strengthening of municipalities’ organisational capacities
  - Including by optimizing the staffing for school improvement support
    - Establish “guiding” (i.e. not mandatory) standards for the number(s) of school improvement officers
    - Develop common job profiles

Municipality “A”

Municipality “B”
PILOT 2: Pakistan

- **IIEP-UNESCO Research project on ‘Leveraging the potential of the middle tier’**
  - Conducted in the framework of the GLSEP programme
    - Enhancing girls’ access to quality lower secondary education
    - Need to assist District Education Officials (DEOs) in effective school supervision, data management and community engagement
  - First phase includes:
    - Interviews with central level authorities
    - Focus group discussion with officials at province and district level on roles and bottlenecks
Next steps

- Development of an Institutional Capacity Toolkit for Using Data and Evidence to Address the Learning Crisis
- Mapping of partners’ capacity development activities on the use of data/evidence for policy, planning and implementation
- Further pilot tests planned for 2024 - 2025
- ICAF methodology and tools to be refined and made available as a global public good
Pre-Conference Engagement Day
6 FEBRUARY 2024

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7 - 9 FEBRUARY 2024
UNESCO HEADQUARTERS, PARIS, FRANCE
Supporting MoEs to use data and information on risks of crises: guidelines and toolkit for the inclusion of EiE data into the EMIS

Diogo Amaro, Programme Specialist, d.amaro@iiep.unesco.org
Crisis- and climate-sensitive educational planning

The planning cycle

How can EiE data be used throughout the planning cycle?

► Target policies and resources (e.g. identify groups more at risk of being left behind and the barriers to equity)

► Monitor and evaluate policy results (e.g. track progress and learn from what works and what does not)

► Advocacy (e.g. call for action, resource mobilization)
The Global Public Goods

1. EiE data conceptual framework
   - Build a shared understanding around definitions, concepts and processes on EiE.
   - Provide a conceptual foundation for a series of UNESCO-IIEP guidelines on EiE data.

2. EiE data diagnosis tools
   - Approaches and tools for identification of EiE data needs, data availability, stakeholder analysis and quality assessments.

3. Guidelines for EiE data institutionalisation
   - Compilation of good practices to build institutional awareness and develop national capacities to strengthen the EiE data landscape.
1. EiE data conceptual framework

- Build a **shared understanding** around definitions, concepts and processes that underpin and guide work on data for EiE and resilience.
- Bring together existing work on EiE data, as well as on coordination across the **humanitarian-development nexus**.
- Provide a conceptual foundation for a series of **guidelines and tools developed by UNESCO**, as well as the remaining Global Public goods.
1. EiE data conceptual framework
## 2. EiE data diagnosis tools

<table>
<thead>
<tr>
<th>Diagnosis phase</th>
<th>Tool</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Identification of EiE normative data needs</td>
<td>Tool 1. Risk analysis of hazards</td>
</tr>
<tr>
<td></td>
<td>Tool 2. Identification of data needs and data coverage</td>
</tr>
<tr>
<td></td>
<td>Tool 4. Questionnaire to review the coordination of data production</td>
</tr>
<tr>
<td></td>
<td>activities within the EiE data ecosystem</td>
</tr>
<tr>
<td>3. Quality assessment of the most relevant EiE data</td>
<td>Tool 5. EMIS Data Quality Assessment (EMIS_DQA) matrix</td>
</tr>
<tr>
<td>sources</td>
<td>Tool 6. Education in Emergencies Data Quality Assessment (EiE_DQA)</td>
</tr>
<tr>
<td>4. Coverage of information needs and data gaps</td>
<td>Tool 2. Identification of data needs and data coverage</td>
</tr>
</tbody>
</table>

[Click here to download the tools which are also available via the tool icon.]
2. EiE data diagnosis tools – Ecosystem mapping in Jordan

► MoE
- Open EMIS (includes GIS data) WebGIS school maintenance module
- National assessments
- Emergency school planning
- Evaluation report

► Other government data
- Household Expenditure and Income Survey
- Labour force survey
- Unemployment survey
- National budget
- Technology in school survey
- Census
- JRGC spatial data

► International organizations
- Humanitarian Data Exchange (HDX) UNHCR Operational Data Portal OCHA
- HNOs and HRPs contain information on populations in need by sector and contextual information
- The Emergency Events Database (EM-DAT), ACLED
- EGMA / EGRA TIMSS / PIRLS
- UNICEF (national diagnosis assessment)
- CPIMS Child protection information management system
- Bayanati ('My data'), Three stars approach (WASH) DHS
- IDMC, Physical Assessment Survey, IOM DTM
- UNHCR: proGres (registration data base), RAIS population census (Refugee Assistance Information System) and demographic data, VAF (Vulnerability assessment framework), Resilience assessment framework
### Tool 3. Mapping of data producers and data sources relevant for EiE - Examples

In blue in this table: examples provided to facilitate the understanding on the type of information to be recorded.

<table>
<thead>
<tr>
<th>Data source characteristics</th>
<th>Options and comments to fill in the table</th>
<th>Data source 1</th>
<th>Data source 2</th>
<th>Data source 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name of data producer</td>
<td>Name of data source</td>
<td>National School Census</td>
<td>Multipurpose national household survey</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Agencies responsible for definition of survey objectives, collection, analysis, and dissemination of data (list primary agency first, if more than one); include agencies and groups both within the country and outside, as applicable.</td>
<td>National Ministry of Education</td>
<td>National Statistical Office</td>
<td></td>
</tr>
<tr>
<td>Type of data producer</td>
<td>Government agency</td>
<td>Government agency</td>
<td>Government agency</td>
<td></td>
</tr>
<tr>
<td></td>
<td>National NGO</td>
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<tr>
<td></td>
<td>International NGO</td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>International organization</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Type of data source</td>
<td>Humanitarian education response data</td>
<td>Educational development data</td>
<td>Education development data</td>
<td></td>
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<tr>
<td></td>
<td>Educational development data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Contextual data</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data collection sample</td>
<td>Census.</td>
<td>Census</td>
<td>Probabilistic sample</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Probabilistic sample</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Non-probabilistic sample</td>
<td></td>
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</tr>
</tbody>
</table>
2. EiE data diagnosis tools

Figure 6. Presentation of DQA results

- **6. Relevance**
  - 6.1 Data are relevant to EiEPC needs
  - 6.2 Appropriate contact with data users on their needs

- **7. Periodicity and timeliness**
  - 7.1 Periodicity and timeliness follow intended schedule

- **8. Consistency**
  - 8.1 Statistics consistent over time
  - 8.2 Statistics consistent with other data sources

- **9. Accessibility and clarity**
  - 9.1 Statistics are presented
  - 9.2 Up-to-date and pertinent metadata
  - 9.3 Prompt technical

Source: Extracted from the EMIS_DQA matrix (Tool 5), based on a hypothetical example.
3. EiE data institutionalization

Guidelines and compilation of good practices to:

- Build institutional awareness and commitment
- Support the development or adaptation of relevant policies and frameworks
- Strengthen EiE data harmonization through improved communication, coordination, data sharing protocols and data dissemination platforms
- Support national capacity strengthening across the data value chain (e.g. production, use, re-use for planning, monitoring & evaluation...)

Source: Authors, based on existing models of institutionalization, including Kuchemüller et al. (2022), IEP-UNESCO (2022), Maeda et al. (2012), USAID (2000).
How were the tools used in real life?

- **Ecuador**
  - Provision of a series of recommendations in terms of data management and data coordination
  - Identification of key data gaps, in particular concerning preparedness and prevention
  - Development of a roadmap for implementation of the findings from the diagnosis
How were the tools used in real life?

► Ecuador recommendations

<table>
<thead>
<tr>
<th>Área</th>
<th>Faltante de datos</th>
<th>Sistema de información</th>
</tr>
</thead>
<tbody>
<tr>
<td>Desastres naturales</td>
<td>Bienestar de los alumnos y del personal educativo</td>
<td>AMIE (módulo estudiante)</td>
</tr>
<tr>
<td></td>
<td>Estructuras de las instalaciones y equipos escolares</td>
<td>AMIE (módulo infraestructura) y GIEE</td>
</tr>
<tr>
<td></td>
<td>Esquema de virtualidad</td>
<td>GIA</td>
</tr>
<tr>
<td></td>
<td>Trayecto entre casa y escuela</td>
<td>GIA y GIEE</td>
</tr>
<tr>
<td></td>
<td>Identificación de los peligros en el camino de la escuela</td>
<td>AMIE en interoperabilidad con fuentes externas</td>
</tr>
<tr>
<td></td>
<td>Características topográficas</td>
<td>AMIE en interoperabilidad con fuentes externas</td>
</tr>
<tr>
<td></td>
<td>Proximidad de la escuela a centros de prevención y de cuidado</td>
<td>AMIE en interoperabilidad con GeoSalud</td>
</tr>
</tbody>
</table>
How were the tools used in real life?

- Jordan
  - Development of joint report with UNESCO Amman
  - Recommendations to enhance the EiE data ecosystem
    - Establishment of a Risk Management section to coordinate and share EiE data
    - Alignment of external sources of data with OpenEMIS
    - Common identifiers for students
  - CRM data diagnosis will be used to inform the implementation of the country’s Crisis and Risk Management strategy
How were the tools used in real life?

**UNRWA**

- Piloting self-administration of the tools
- Applied the tools to five contexts in parallel (Gaza, Jordan, Lebanon, Syria and West Bank)
- Diagnosis is being used to inform the UNRWA EMIS Strategy for 2023-2027
  - Capacity development
  - Coordination and data exchange across fields
  - Development of data sharing protocols
  - Integration with national tools (for example OpenEMIS in Jordan)
Next steps

Further disseminating the tools

Mainstreaming tools as part of the EiE system diagnoses
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7 - 9 FEBRUARY 2024
UNESCO HEADQUARTERS, PARIS, FRANCE
Geospatial data for better decision-making in education: the Togolese experience with micro-planning

Kossi Kpomegni TSALI, Director of Education, Planning and Evaluation, Ministry of Primary, Secondary, Technical Education and Handicrafts of Togo
Digitalization of assets in Togo
The PRISE project
The PRISE project

Objective: geolocating all social and economic infrastructures in the country

Goal: Reduce inequalities between regions

Sub-domains:
- Water
- Electricity
- Health
- Economy
- Education

Information:
- Location
- Type
- State
- Number of employees
- Types of employees
The school mapping exercise
The case of Togo
Main findings

Students

<table>
<thead>
<tr>
<th>Level</th>
<th>2023</th>
<th>2030</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary</td>
<td>207,436</td>
<td>291,880</td>
<td>41%</td>
</tr>
<tr>
<td>Primary</td>
<td>1,609,282</td>
<td>1,769,247</td>
<td>10%</td>
</tr>
<tr>
<td>Secondary I</td>
<td>596,137</td>
<td>1,069,982</td>
<td>79%</td>
</tr>
<tr>
<td>Secondary II</td>
<td>178,775</td>
<td>498,627</td>
<td>179%</td>
</tr>
</tbody>
</table>
Main findings

Students (Primary by Prefecture)

Zio (-25%)

Kpele (106%)
### Main findings

#### Classrooms

<table>
<thead>
<tr>
<th>Level</th>
<th>2023</th>
<th>2030</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-primary</td>
<td>25,979</td>
<td>31,837</td>
<td>23</td>
</tr>
<tr>
<td>Primary</td>
<td>154,670</td>
<td>162,181</td>
<td>5</td>
</tr>
<tr>
<td>Secondary I</td>
<td>43,389</td>
<td>72,351</td>
<td>67</td>
</tr>
<tr>
<td>Secondary II</td>
<td>13,725</td>
<td>33,717</td>
<td>146</td>
</tr>
</tbody>
</table>
Main findings

Classrooms (Primary by Prefecture)

- Tone (28%)
- Zio (-25%)
Integration of results

School mapping tool
Integration of results into a visualization tool

The use of MapStore
Main interface: Prospective school map
Additional analyses available: Analysis by education cycle
Additional analyses available: Catchment areas

- Number total of schools: 11,395
- Average distance between preschools: 117.195 m
- Average distance between primary and secondary schools: 2,008.145 m
- Average distance between secondary schools: 3,176.457 m
Additional analyses available: Catchment areas
Additional analyses available: Distance between schools from different cycles

- 11,395 schools
- Distance between Primary and Secondary: 117,195 m
- Distance between Primary and Preschool: 2,008,145 m
- Distance between Secondary 1 and Secondary 2: 3,176,457 m
Current status

- Most up-to-date data, future live connection with EMIS
- Specialized trainings provided to Ministry staff for autonomy
- Creation of Admin and regular accounts for access by key decision makers at national, regional, and local level.
- System currently hosted by IIEP-UNESCO
- Technical collaboration with IT team within the Ministry of Education to host within Government servers
Process ownership
The school mapping exercise
Training and professional development

- Project launch
- Initial online workshop (November 2022)
- Meetings with Dir. Planning and technical team (January 2023)
- Online Beginner QGIS training (March 2023)
Training and professional development

Online Beginner QGIS training
(March 2023)

Face-to-face Intermediate QGIS training
(April 2023)

Online workshop on methodological guidelines
(July 2023)
Training and professional development

Online workshop on methodological guidelines (July 2023)

Face-to-face Advances QGIS training (August 2023)

Online workshop on the prospective school map (September 2023)
Training and professional development

Online workshop on MapStore (November 2023)

Online workshop on the prospective school map (September 2023)
Contributions to research

- Challenge: How to create local school-age population estimates for small areas?
- Solution: Spatialized population projections using WorldPop data and adjusting to national estimates
  - Free, open-source code
  - Projections at any level over 100m x 100m (based on mobility trends stability)
  - Uses open-source software
  - Applicable to any other country

https://at.iiep.unesco.org/SSAPTogo
Conclusions
Using geospatial data for decision-making in Togo
Using data for decision-making in Togo

- Circumscribed within a bigger push for data-informed policy making (PRISE)
- Prospective micro-planning, focusing on local needs
- Strong push for capacity development and ownership
- Reaching policy-makers at national, regional, and local level
- Using free, open-source software
THANK YOU

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