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25 YEARS

Education Data and Statistics Commission

LASER: National Education Statistical Capacity Assessment

Global analysis based on a maturity model

LASER
for Education Information Ecosystem

#25YearsOfDataInsights

Education data ecosystem: four interconnected components that work together to support evidence-based decision-making in education

Data Production

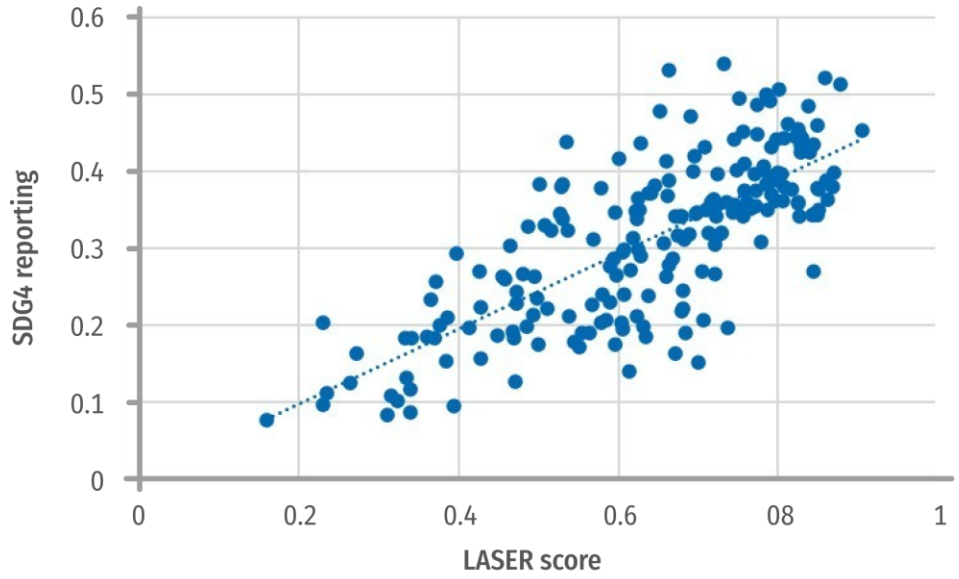
Data Reporting

Data Analysis

Data Use

SDG 4 Indicators coverage stands at 60% across 205 countries around the world, and for 64% of the population

Region	Coverage SDG4 (% population)	Coverages SDG4 (% countries)	# countries in region
Central and Southern Asia	70	63	14
Eastern and South-Eastern Asia	61	63	18
Europe and Northern America	67	63	45
Latin America and the Caribbean	73	59	39
Northern Africa and Western Asia	60	63	24
Oceania	53	54	17
Sub-Saharan Africa	59	58	48
World	64	60	205



Gaps in data collection, quality and reporting affect data availability

LASER

a tool to assess a country's education statistical capacity based on a maturity model

Is a country's education data ecosystem collecting and effectively using the variety of data sources required for policymaking and the overall governance of the education sector?

LASER helps countries:

- Identify required data for education indicators
- Assess data quality and disaggregation to address inequalities
- Develop strategies that strengthen statistical capacity to bridge gaps and fortify education data ecosystems

LASER and process of SDG4 indicator production

Step 1

Identifying indicator needs

Step 2

Assessing data source reporting capacity

Step 3

Generating LASER statistical capacity score

LASER summary with overall country LASER score and individual component and sub-component scores

Learning assessment

Total Score	0.25	89.3%
Regularity of administration	0.20	100.0%
Coverage of major education issues (SDG4 indicators)	0.30	86.4%
Coverage of major dimensions of inequality	0.20	85.7%
Alignment with internationally Accepted Standards	0.30	87.5%

Administrative data

Total Score	0.25	71.0%
ISCED 2011 mapping is available	0.20	100.0%
Response to UIS Education Survey in the period	0.50	85.9%
Coverage of indicators in EMIS forms	0.30	26.8%

Survey population systems

Total score	0.25	100.0%
Household surveys	0.50	100.0%
Labour force surveys	0.25	100.0%
Population census	0.25	100.0%

Expenditure on education

Total Score	0.1	68.2%
Response to UIS Education Survey in the period	0.60	67.9%
Government expenditure on education data is publicly available	0.15	100.0%
Availability of private expenditure in the period	0.25	50.0%

Review and monitoring

Total Score	0.15	88.0%
Benchmark for education indicators published by the UIS	0.70	92.3%
National education plans are publicly available and has quantitative target	0.15	100.0%
National indicators reports are published by ISCED level	0.15	56.0%

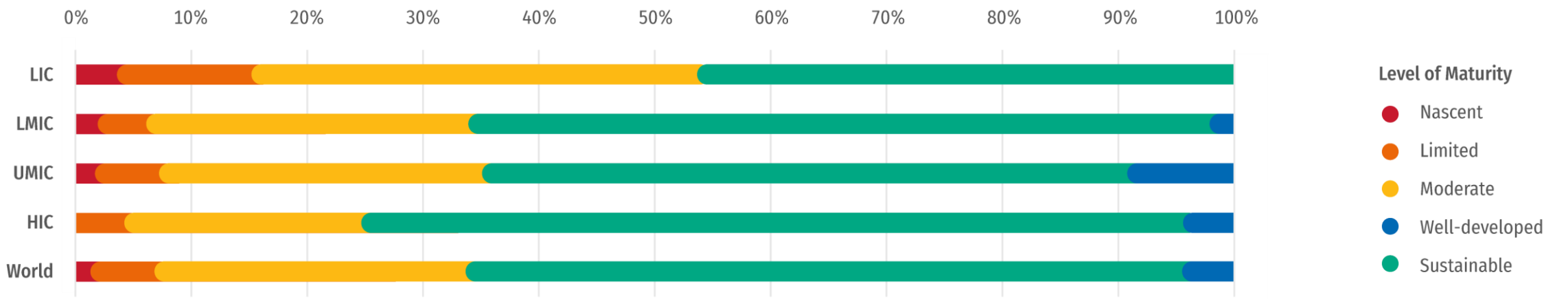
Statistical Capacity Maturity by Source of Data

Try to guide

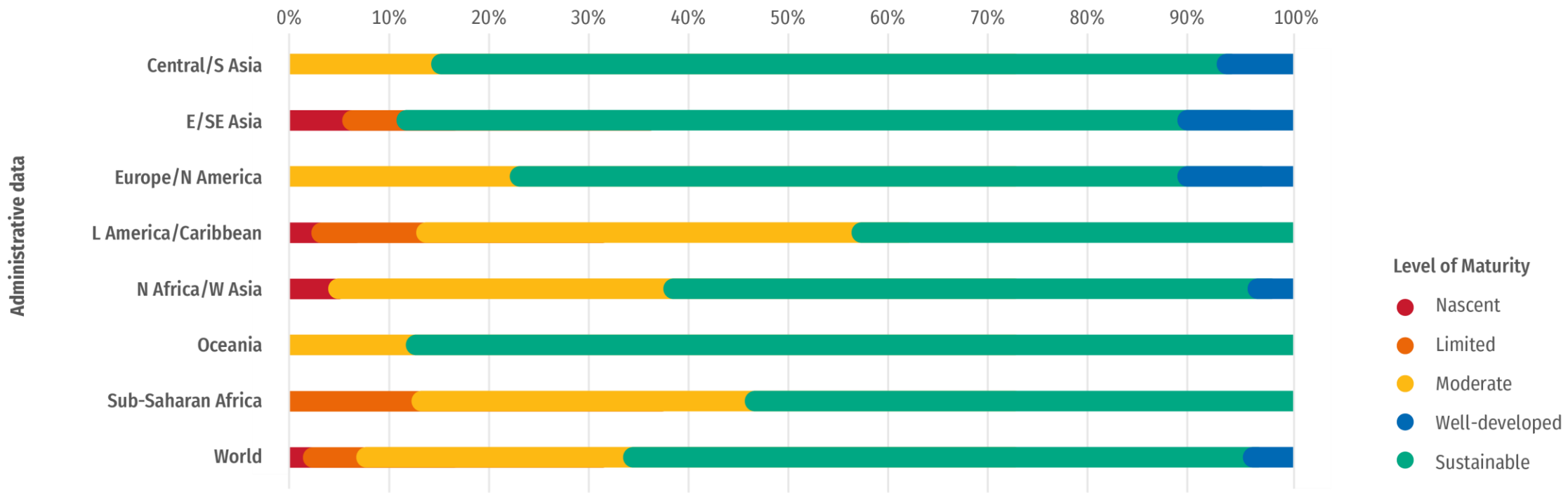
- identification of ways to **continuously improve** rather than on attaining the highest maturity level
- **prioritize their efforts** to mature in what source and within the data source on the relevant policy aspects

Characteristics of maturity levels				
Nascent	**Limited**	**Moderate**	**Well-developed**	**Sustainable**
Poor coordination between data-producing institutions.	Data quality checks and validation processes are in development.	Partial coverage of key indicators (e.g., school connectivity, teacher training).	Education data ecosystem is well-structured and systematic.	Fully integrated, automated, and sustainable education data ecosystem.
Limited or fragmented data collection.	Low or no coverage of key education issues (e.g., bullying, home language).	Basic governance for data is put into place to check.	High compliance with international reporting standards.	Data is consistently used for policy formulation and decision-making.
Minimal compliance with international education data standards.	Partial alignment with international reporting standards.	Standardized data collection processes exist but may have gaps.	Use of data analytics to inform policy decisions.	High level of international collaboration and best-practice adoption.

Distribution of statistical capacity by ‘Administrative data’ component and country income group: Percentage of countries by statistical capacity



Distribution of statistical capacity by ‘Administrative data’ component and SDG region: Percentage of countries by statistical capacity



Administrative data component has three sub-components	
Administrative data	**0.25**
ISCED mapping 2011 is available	0.20
Response to UIS Education Survey in the period	0.50
Coverage of indicators in EMIS forms	0.30
Total	**1.00**

Calculation of the score of the LASER component 'Administrative data' for country X based on the sub-scores of its sub-components			
Sub-components of 'Administrative data'	**Sub-score of sub-component (%) C**	**Weight of sub-component D**	**Values to calculate the component score (%) E=C*D**
ISCED 2011 mapping available	100	0.2	20
Response to UIS Education Survey in the period	85.9	0.5	43
Coverage of indicators in EMIS forms	26.8	0.3	8
Total score of the 'Administrative data' component (Sum of column E)			**71**

LASER Component: Administrative data

Sub-component 1: ISCED 2011 mapping is available

Weight = 0.2

- Has the country developed and published an ISCED 2011 mapping of its national education system?
- Does the available ISCED mapping reflect the current country's situation?
- Is the ISCED mapping regularly updated to reflect changes in the education system?
- Is the ISCED mapping accessible to stakeholders and used in reporting education data and statistics for international comparability?

Sub-component 2: Response to UIS Education Survey in the period

Weight = 0.5

Regularity | Completeness | Quality

- Has the country consistently responded to the UIS Education Survey and dynamic templates?
- If not, are the missing data available at national level to close the data gap?
- What is the level of data completeness and quality? If lower what are possible action to improve it?
- Is the trend for data completeness and quality improving over the years? If not, what is the reason of a decline and what is the best approach to address it?
- Is there a designated team or individual responsible for coordinating responses to the UIS Education Survey?

Response to UIS surveys

Year	UIS Questionnaire	Regularity	Completeness of data points in questionnaire	Quality	Source
2015	A	100.0%	82.2%	97.5%	UIS Education Survey
	C	100.0%	91.2%	48.8%	UIS Education Survey
2016	A	100.0%	82.2%	97.5%	UIS Education Survey
	C	100.0%	90.1%	82.5%	UIS Education Survey
2017	A	100.0%	88.1%	97.5%	UIS Education Survey
	C	100.0%	86.6%	78.6%	UIS Education Survey
2018	A	100.0%	88.3%	97.3%	UIS Education Survey
	C	100.0%	89.6%	92.9%	UIS Education Survey
2019	A	100.0%	88.0%	97.3%	UIS Education Survey
	C	100.0%	86.6%	99.1%	UIS Education Survey
2020	A	100.0%	87.9%	97.3%	UIS Education Survey
	C	100.0%	86.6%	96.7%	UIS Education Survey
2021	A	100.0%	89.4%	99.1%	UIS Education Survey
	C	100.0%	80.7%	80.5%	UIS Education Survey
2022	A	100.0%	88.4%	99.1%	UIS Education Survey
	C	100.0%	80.8%	94.9%	UIS Education Survey
2023	A	0.0%	-	-	-
	C	0.0%	-	-	-
2024	A	0.0%	-	-	-
	C	0.0%	-	-	-
Partial Score	-	80.0%	86.7%	91.0%	-
Sub-score	**-**	**-**	**-**	**85.9%**	**-**

Response to UIS surveys: Completeness

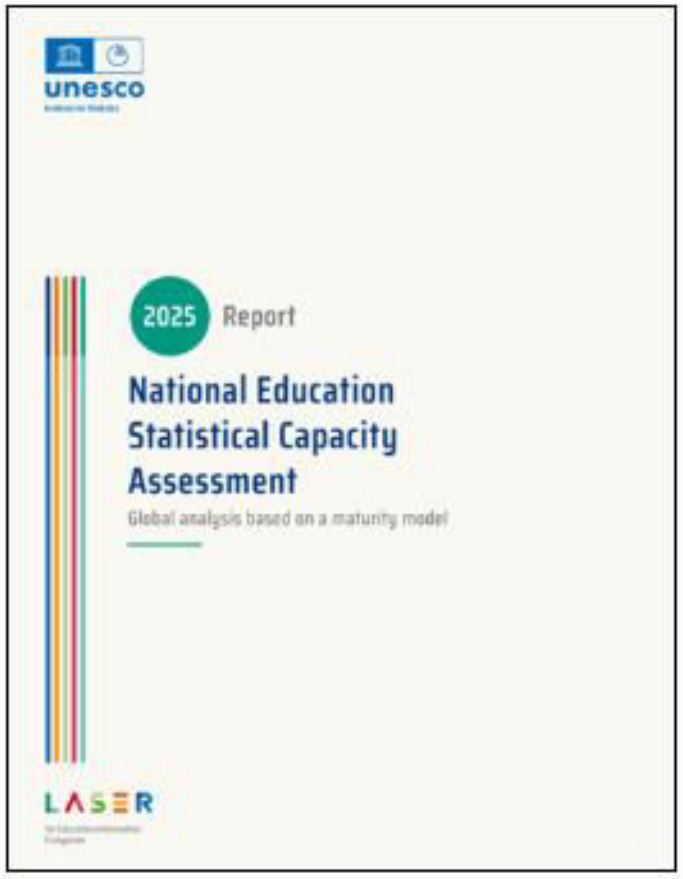
Table ofthe UIS Education Questionnaire	2015	2016	2017	2018	2019	2020	2021	2022
A10: Number of classroom teachers by qualified and trained status, teaching level of education, type of institution and sex	20	20	20	20	20	20	20	20
A11: Annual statutory teacher compensation (units of national currency) in public institutions, by teaching level of education- all programmes (general and vocational)	0	0	0	100	100	0	0	0
A12: Number of educational institutions by level of education and type ofinstitution - all programmes (general and vocational)	100	100	100	100	100	100	100	100
A13: Number of educational institutions with ICT services, basic hygiene facilities and the provisioning oflife skills-based HIV and sexuality education by level of education - all programmes (general and vocational)	27	27	27	27	27	27	64	64
A2: Number of students by level of education, intensity of participation, type ofinstitution and sex	100	100	100	100	100	100	100	100
A3: Number of students by level of education, age and sex	85	85	100	100	100	100	100	100
A5: Number of students and repeaters in initial primary education by age, grade and sex	100	100	100	100	99	99	100	96
A6: Number of students and repeaters in initial lower secondary general education by grade, age and sex	100	100	100	100	100	100	100	100
A9: Number of classroom teachers by teaching level of education, type ofinstitution and sex	20	20	20	20	20	20	20	20
B2: Actual expenditure on education by level of education, source and destination in instructional and non-instructional institutions	55	54	54	43	53	11	16	24
B3: Actual expenditure on education by level of education, type ofinstitution and nature in instructional and non-instructional institutions	46	46	46	35	24	24	24	24
C2: Number of students by level of education, type ofinstitution and sex	88	74	88	88	88	88	79	79
C5: Number of students in tertiary education by age and sex	67	67	44	59	44	44	18	18
C6: Number ofinternationally mobile students in tertiary education by country of origin and sex	100	100	100	100	100	100	100	100
C7: Number of graduates by level of education, field and sex	100	100	100	100	100	100	100	100
C8: Number of academic staff by level of education, type of institution and sex	20	0	20	15	20	20	10	15

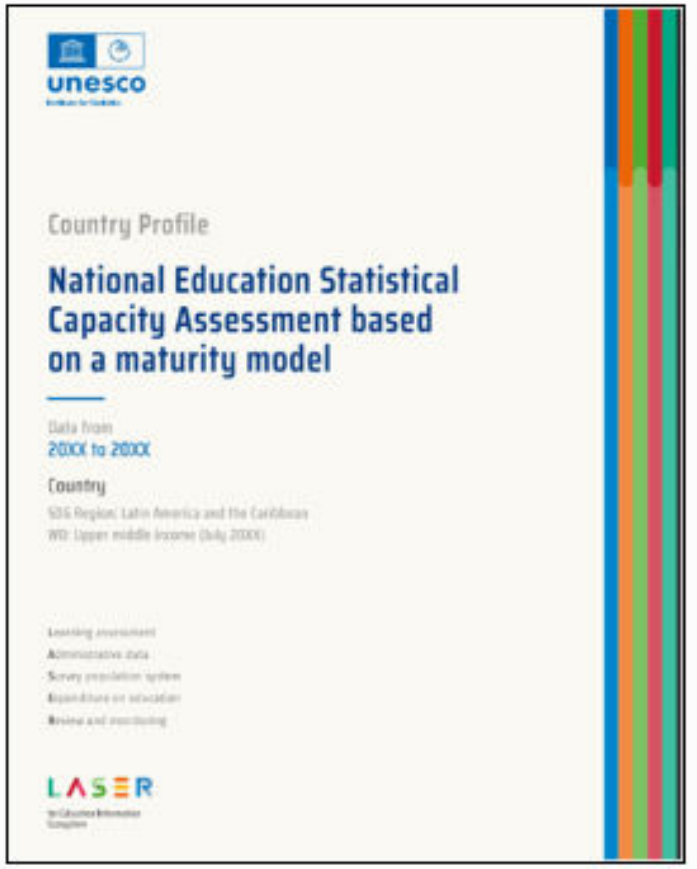
Sub-component 3: Coverage of indicators in EMIS forms

Weight = 0.3

- Is the EMIS forms or annual school census forms available and can be shared or accessible to external users?
- Does the EMIS collect all necessary variables and data disaggregation to produce key education indicators?
- Are the data collection instruments aligned with national and international reporting requirements?
- Is there a process to review and update EMIS forms to capture emerging educational priorities?

LASER Global Report and Country Profiles





https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2025/02/LASER-2025-National-Education-Statistical-Capacity-Assessment.pdf

https://tcg.uis.unesco.org/laser/

Example of policy questions

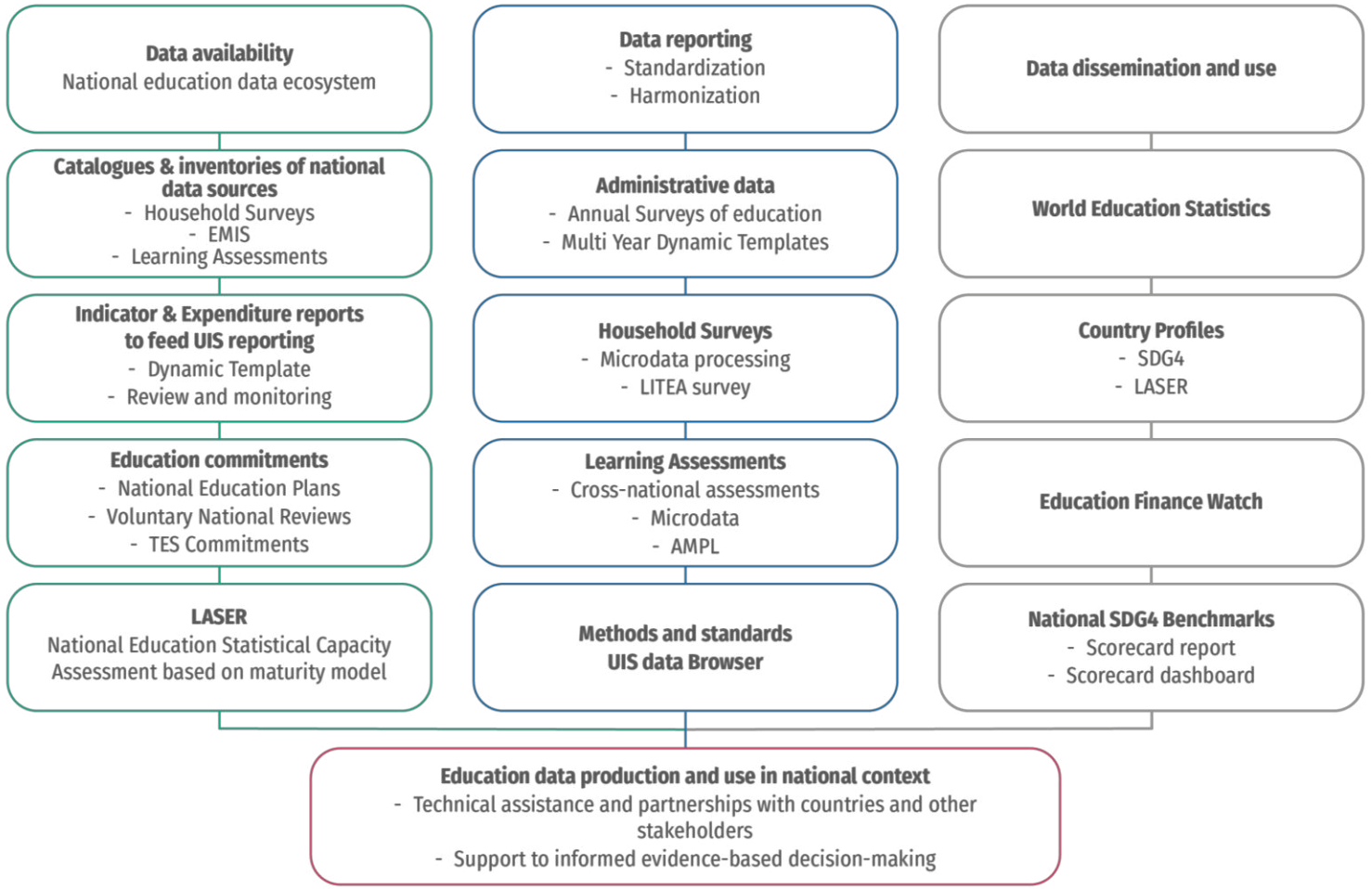
Equity and access

- How does administrative data reveal disparities in student-teacher ratios across ISCED levels, regions, and school types (public/private), and how can this inform equitable resource allocation? (SDG 4.5, 4.c)
- What does the geographic distribution of schools by ISCED level indicate about access gaps in rural, remote, or conflict-affected areas? (SDG 4.1, 4.5)
- How can data on over-age children and grade repetition rates guide targeted interventions to improve retention and progression? (SDG 4.1)

Service delivery and governance

- What mechanisms ensure real-time data reporting (e.g., EMIS dashboards) to monitor school performance and resource allocation?
- How does administrative data track teacher absenteeism and its impact on learning outcomes?

UIS cooperation with member states



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Calculation of a LASER score for country X			
LASER components	**Component Score (%) A**	**Component Weight B**	**Score by Weight (%) C=A*B**
Learning assessments	89.3	0.25	22.3
Administrative data	71	0.25	17.8
Survey population systems	100	0.25	25.0
Expenditure on education	64.7	0.1	6.5
Review and monitoring	88	0.15	13.2
Total LASER Score (Sum of C)			**84.7**

LASER Score