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EDUCATION STATISTICS IN AFRICA

STATUS AND IMPLICATIONS FOR POLICY DISCUSSION

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About the Statistics Brief

This edition of the Africa Beyond the Numbers series from the African Centre for Statistics focuses on producing and disseminating education statistics in Africa. It highlights the key role of education statistics in development planning and policy, identifies the gaps in the existing education data ecosystem, and advocates for the institutionalisation of the routine production and dissemination of key education statistics across the life course.

The publication emphasises that reliable education data enable governments and development partners to identify inequalities, allocate resources more equitably, and track progress toward national policy targets and international goals, such as the Sustainable Development Goals (SDGs). Without timely, accurate statistics, policy decisions risk being based on assumptions rather than evidence, which can lead to inefficiencies and missed opportunities to improve learning outcomes. This edition focuses on the current gaps in Africa's education data ecosystem, which stem from fragmented data systems, limited coordination between institutions, inconsistent data collection, and weak institutional capacity for data analysis. In many cases, data on some indicators are collected irregularly or remain underutilised, sitting in reports without being fully integrated into planning processes. These challenges include the need for rigorous analysis of education data for policy and planning, and evaluation of the impacts of educational policies.

To address these issues, the series strongly advocates institutionalising the routine production and dissemination of diverse education statistics at different levels, including indicators to measure access to education, quality of education, and lifelong learning.

SECTION 1

Introduction

At the Second World Summit for Social Development in 2025, global leaders called for stronger education statistics to address the learning crisis. The leaders emphasised that reliable, comprehensive data are essential for policies that bridge gaps across schooling, skills, earnings, and inclusive sustainable development.

In Africa, education statistics remain less institutionalized than economic indicators such as GDP and inflation. They are produced from varied sources, including surveys, censuses, and Education Management Information Systems (EMIS), resulting in partial availability and limited use for policy design, monitoring and evaluation. For example, while the United Nations Educational, Scientific and Cultural Organisation (UNESCO) currently[1] has primary enrolment data for 53 out of 54 member states, between 2020 and 2023, only six countries reported reading-proficiency results. Fourteen countries have 2019 as their latest available reading-proficiency reporting year, and the remaining 34 countries either compiled data only before 2019 or have no reading-proficiency data recorded. Data and statistics on skills prevalence, investments, and outcomes important for employment and economic growth are not generated and disseminated in most African countries. Also, wide disparities in educational statistics across the continent, such as completion rates, further highlight the need for this review. This brief aims to uncover the extent of these data gaps and the wide variability in educational statistics across African member states.
At the national level, EMIS data, which are administrative records collected annually from registered schools, are well suited to producing

[1] *Enrolment rate in Djibouti was covered in earlier UIS education datasets, but the UIS data extracted in June 2026 returns no observations.*

timely indicators on enrolment, progression, completion, and, in some cases, learning outcomes. However, incomplete coverage remains a persistent challenge, as private, informal, and community-based institutions may be underreported or excluded. Limited access to EMIS raw data and weak integration with census and survey data further constrain their use. In many countries, EMIS outputs are disseminated mainly through annual statistical abstracts, summary reports, or aggregated tables, which provide useful descriptive information but offer limited scope for deeper analysis. EMIS also excludes children who have never enrolled or are currently out of school, which together represent more than 100 million children, according to UNESCO's 2026 Global Education Monitoring Report.

These limitations point to the need to integrate EMIS with population-based statistics from censuses and surveys. While population-based statistics on education are limited in scope, infrequent and characterized by long and unequal periodicity, they provide an indispensable resource. This includes providing complementary data for education indicators, such as population statistics, and offers an opportunity to assess the relationship between education and other outcome variables, such as employment and earnings.

Against this background, this brief has four specific objectives: first, to assess the coverage of education statistics across 13 core indicators among African member states; second, to determine the breadth and depth of data gaps across domains, including enrolment, completion,

literacy, and skills, and across levels, which are pre-primary, primary, lower secondary, and upper secondary education; third, to identify countries with multiple data gaps; and fourth, to present opportunities for filling these gaps and discuss their policy implications.

The subsequent sections of this brief provide definitions of key concepts and statistics and then present an overview of the data and methodology, followed by a snapshot of the current state of key education statistics across Africa. Finally, the brief explores potential avenues for institutionalising the routine production of relevant, timely education statistics across the continent.

SECTION 2

Approach and Methodology

This section introduces the main concepts and indicators featured in the brief and outlines the data sources and analytical approaches employed in this study.

2.1 Definition of Key Concepts

Access to education refers to the opportunity for individuals to participate in formal education at all levels, from pre-primary to tertiary. It reflects both the availability of schools and the ability of children, youth, or adults to enrol and attend. Education access is typically measured using enrolment data from national education administrative records and data from household surveys, such as the DHS and MICS. These national data are also compiled and harmonised for international dissemination by organisations such as the UNESCO Institute for Statistics (UIS).

Adult literacy rate refers to the share of the population aged 15 years and above who can read and write a simple, everyday statement. It provides a measure of functional literacy in the adult population.

Completion rate indicates the percentage of young people 3–5 years older than the official age of entry into the final grade who have completed that grade. This measure is often cohort-based or adjusted for repetition to enable the tracking of progression through the education system.

Gross enrolment rate measures the total number of students enrolled in a specific level of education, regardless of age, expressed as a percentage of the official school-age population for that level. Because

it includes all students, the GER can exceed 100% when overage or underage children are enrolled.

Net enrolment rate measures the proportion of children of the official age group enrolled at the corresponding education level; this brief uses this measure for pre-primary education. Total net enrolment rate measures the proportion of children of the official age group for a given level who are enrolled at any education level; this brief uses this measure for primary, lower secondary and upper secondary education.

Learning outcomes capture the knowledge, skills, and competencies acquired through formal or non-formal education and are commonly measured using literacy and numeracy. These outcomes are assessed using standardised tests administered to children or adults, including regional and international assessments, as well as household surveys.

Level of education refers to the stage or degree of learning that an individual has completed within a country's formal education system. It is typically classified into categories such as pre-primary, primary, lower secondary, upper secondary, and tertiary education based on the complexity of instruction, learning objectives, and progression through the education system. Level of education is commonly used to measure educational attainment and compare educational outcomes across populations and countries.

> **Pre-primary education** is the stage of education designed for young children before they enter primary school. It focuses on developing basic cognitive, social, emotional, and physical skills through age-appropriate learning and play, helping children prepare for formal schooling. This level typically serves children aged 3–5 years, although the exact age range varies by country.

Primary education is the first stage of formal schooling. It provides children with foundational skills in literacy and numeracy while also introducing them to the basic knowledge, values, and competencies needed for further learning and everyday life. Primary education generally lasts about 4 to 7 years, most commonly covering children aged 6 to 11 or 12.

Lower secondary education builds on the foundation established in primary education. It offers a broader range of subjects and more structured learning, helping students deepen their knowledge and develop the skills needed for further education and personal development. This level typically lasts 2 to 5 years, generally serving students aged 11 or 12 to 14 or 15.

Upper secondary education is the final stage of secondary schooling. It provides more advanced and often more specialised learning, preparing students for higher education, vocational training, employment, or a combination of these pathways. Upper secondary education usually lasts 2 to 5 years and generally covers students aged 15 to 18.

Reading proficiency refers to the proportion of children who can read and understand at the level expected for their grade level.

2.2 Data Sources and Methods

This brief takes a comprehensive, multi-indicator approach to evaluate the collection, reporting, and comparability of education statistics across African countries. The analysis employs a combination of descriptive and comparative techniques.

The primary data source is the UNESCO Institute for Statistics (UIS) Data Browser, an internationally recognised source of education statistics and monitoring. By harmonising data reported by national education systems, the UIS provides a consistent basis for comparing educational

indicators across countries and over time. The database contains education statistics from 1970 to 2025, allowing for both cross-sectional and longitudinal analyses of data availability and reporting trends across the continent. Although the source contains some observations for 2025, this analysis uses 1970–2024 as its common study period. The UIS database also disaggregates data at the secondary level to distinguish enrolment statistics between lower and upper secondary education, which is essential for accurately assessing educational participation and progression and, more precisely, for identifying where learners are being left behind.

To assess the coverage of education statistics systems across Africa, this brief examines a set of core indicators that capture different stages of the educational pathway, from access and participation to completion and learning-related outcomes. The selected indicators are widely used in national education planning and international monitoring frameworks. Together, they show the extent to which countries can generate and report data that supports evidence-based policymaking.

The analysis focuses on the following indicators and education levels:

1. GER-P: Gross enrolment rate, primary
2. GER-LS: Gross enrolment rate, lower secondary
3. GER-US: Gross enrolment rate, upper secondary
4. NER-PP: Net enrolment rate, pre-primary
5. NERT-P: Total net enrolment rate, primary
6. NERT-LS: Total net enrolment rate, lower secondary
7. NERT-US: Total net enrolment rate, upper secondary
8. CR-P: Completion rate, primary
9. CR-LS: Completion rate, lower secondary
10. CR-US: Completion rate, upper secondary
11. RP-P: Reading proficiency, primary
12. RP-LS: Reading proficiency, lower secondary
13. AL: Adult literacy rate

TABLE 1

Availability of indicators Across Levels of Education

Indicator	Pre-primary (PP)	Primary (P)	Lower Secondary (LS)	Upper Secondary (US)
Gross enrolment rates (GER)		√	√	√
Net enrolment rates (NER)	√			
Total net enrolment rate (NERT)		√	√	√
Completion rates (CR)		√	√	√
Reading proficiency (RP)		√	√	
Adult literacy (AL)	N/A	N/A	N/A	N/A

Gross enrolment rates provide a measure of overall participation in education, whereas total net enrolment rates measure enrolment at any education level among children of the relevant official school-age group. Completion rates provide information on progress through the key stages of the education system. Reading proficiency represents the acquisition of literacy skills and serves as an important indicator of education quality. Adult literacy rates offer broader measures of the cumulative outcomes of educational systems and lifelong learning opportunities. Table 1 summarises the availability of indicators at each level of education.

2.3 Coverage

The analysis includes data from all 54 African countries between 1970 and 2024.

2.4 Statistical Markers

The following indicators assess the timeliness, scope, and coverage of education statistics in the UIS database.

2.4.1 Data availability and coverage

Availability equals 1 when UIS reports a value for a country, indicator and year, and 0 otherwise. Indicator coverage is the proportion of available years within that indicator's observed African reporting period; country coverage is the average across the selected indicators.

2.4.2 Breadth of data availability

This measures whether a country has indicator coverage within each component. The current measure combines any-year coverage with recency-weighted evidence from the most recent observations, adjusted for cross-country indicator prevalence. When an indicator has only one component, the measure is a recency-adjusted availability score.

2.4.3 Depth of data availability

This measures the frequency of data points for a country over time, with greater weights assigned to more recent years. The first year is inferred from African availability for each indicator, while 2024 is fixed as the common endpoint.

2.4.4 Incidence of data availability

This combines the breadth and depth of data availability and gives greater weight to more recent years and to nations with coverage for indicators that are relatively unavailable for most countries on the continent.

SECTION 3

Key Findings on the Status of Core Education Statistics in Africa

Enrolment indicators have data spanning 27–55 years across African countries, with 569–2,291 country–year observations per indicator. Gross primary enrolment is the most extensively populated series, with 2,291 observations, approximately 1.7 times the 1,358 observations for total net primary enrolment.

Each completion-rate indicator has data in 27 distinct years, with 258–259 observations. Reading proficiency has the sparsest coverage: 62 observations across 10 distinct years at primary level and 11 observations across 8 distinct years at lower-secondary level. These years need not be consecutive, and individual countries may have observations for only a subset of them.

TABLE 2

Data range across education indicators

54 African countries | Selected UIS series | 1970–2024

Indicator	Earliest year	Latest year	Years with observations	Total country–year observations
Gross enrolment rate, primary	1970	2024	55	2,291
Gross enrolment rate, lower secondary	1987	2024	34	920
Gross enrolment rate, upper secondary	1987	2024	34	824
Net enrolment rate, pre-primary	1998	2024	27	569
Total net enrolment rate, primary	1970	2024	55	1,358
Total net enrolment rate, lower secondary	1970	2024	54	702
Total net enrolment rate, upper secondary	1970	2024	52	633
Completion rate, primary	1996	2024	27	259
Completion rate, lower secondary	1996	2024	27	258
Completion rate, upper secondary	1996	2024	27	259
Reading proficiency, primary	2001	2023	10	62
Reading proficiency, lower secondary	2003	2022	8	11
Adult literacy rate	1975	2024	45	303

Years with observations counts distinct years with data in at least one African country; years need not be consecutive.
One country–year observation is one available value for one country, indicator and year.
Source: UIS availability panel used in the brief. Both sexes; selected indicator series.

Gross primary enrolment has the most observed years per country during 1970–2024, with a median of 47 and a mean of 42.4, followed by total net primary enrolment, with a median of 24 and a mean of 25.1. Completion rates have a median of 5 observed years and a mean of 4.8 at each education level; adult literacy has a median of 5 and a mean of 5.6. Reading proficiency data are particularly sparse, averaging 1.1 observed years per country at primary level and 0.2 at lower-secondary level. During 2015–2024, 51 countries have at least one gross primary enrolment observation, compared with only 20 for primary reading proficiency and 5 for lower-secondary reading proficiency.

TABLE 3

Summary Statistics of Data Span of Education Indicators in Africa

54 African countries | Selected UIS series

Indicator	Median observed years per country 1970–2024	Mean observed years per country 1970–2024	Countries with data 2015–2024 (out of 54)
Gross enrolment rate, primary	47	42.4	51
Gross enrolment rate, lower secondary	19	17.0	46
Gross enrolment rate, upper secondary	17	15.3	45
Net enrolment rate, pre-primary	10	10.5	42
Total net enrolment rate, primary	24	25.1	47
Total net enrolment rate, lower secondary	12	13.0	41
Total net enrolment rate, upper secondary	11	11.7	42
Completion rate, primary	5	4.8	45
Completion rate, lower secondary	5	4.8	46
Completion rate, upper secondary	5	4.8	46
Reading proficiency, primary	1	1.1	20
Reading proficiency, lower secondary	0	0.2	5
Adult literacy rate	5	5.6	41

Mean and median cover 1970–2024 and include all 54 countries, including those with no observations.
The final column counts countries with at least one observation in 2015–2024; each country counts once.
Source: UIS availability panel used in the brief. Both sexes; selected indicator series.

There is substantial variation in data availability across enrolment indicators. Lesotho has the highest overall data coverage (74.2%) and the highest average observations (35.3), making it the best-covered country.

More than half of African countries have average enrolment-data coverage below 50.0 per cent. Djibouti is the lowest ranked and has no available observations across any enrolment indicator (0% coverage), while South Sudan (6.7%) and Somalia (8.7%) have the lowest non-zero coverage.

Across Tables 4–6, average coverage is the unweighted mean of a country's coverage percentages across the indicators shown. Each indicator's coverage is calculated by dividing the number of years with data for that country by the number of distinct years with data in at least one African country (see Table 2), then multiplying by 100. Indicators with no observations for the country contribute zero to the average.

TABLE 4

Full enrolment-rate availability matrix by country

No	Country	GER-P	GER-LS	GER-US	NER-PP	NERT-P	NERT-LS	NERT-US	Avg. obs.	Avg. coverage
1	Lesotho	55	21	21	9	53	44	44	35.3	74.2%
2	Morocco	54	28	25	24	53	22	19	32.1	73.8%
3	Mauritius	54	25	24	26	51	21	20	31.6	72.7%
4	Burkina Faso	53	25	25	14	47	26	24	30.6	67.9%
5	Niger	52	24	23	21	36	28	21	29.3	66.9%
6	Seychelles	54	28	28	26	25	7	20	26.9	65.2%
7	Namibia	39	30	28	11	34	26	28	28.0	63.7%
8	Cabo Verde	47	23	22	22	34	21	19	26.9	62.4%

No	Country	GER-P	GER-LS	GER-US	NER-PP	NERT-P	NERT-LS	NERT-US	Avg. obs.	Avg. coverage
9	Senegal	51	22	21	21	38	12	12	25.3	58.8%
10	Algeria	54	18	18	13	51	19	16	27.0	58.7%
11	Ghana	51	24	24	17	20	20	20	25.1	58.4%
12	Egypt	51	22	23	20	28	12	9	23.6	55.7%
13	Eritrea	29	22	22	20	25	23	23	23.4	55.5%
14	Gambia	54	27	4	14	46	18	15	25.4	55.3%
15	Botswana	46	19	13	9	42	29	21	25.6	54.5%
16	Togo	53	14	13	20	40	18	12	24.3	54.1%
17	Tanzania	55	14	13	20	44	11	10	23.9	53.3%
18	Burundi	49	19	20	12	33	20	12	23.6	52.6%
19	Chad	46	24	26	12	22	14	14	22.6	52.6%
20	Madagascar	51	16	14	20	25	17	17	22.9	52.1%
21	Malawi	52	25	26	0	18	23	23	23.9	52.0%
22	Mozambique	45	19	19	0	39	27	24	24.7	51.5%
23	Eswatini	51	20	20	2	39	18	18	24.0	50.9%
24	South Africa	42	24	24	10	20	16	16	21.7	50.2%
25	Mauritania	52	26	23	0	28	16	15	22.9	49.7%
26	Cameroon	51	16	17	16	26	17	9	21.7	49.3%
27	Tunisia	52	27	20	4	46	6	0	22.1	48.9%
28	Rwanda	49	25	25	13	15	8	7	20.3	48.5%
29	Ethiopia	50	23	18	7	27	17	9	21.6	47.9%
30	Mali	49	21	18	10	23	14	11	20.9	47.1%
31	Côte d'Ivoire	52	13	13	17	23	12	12	20.3	45.9%
32	Guinea	46	16	13	13	27	11	8	19.1	43.1%
33	Kenya	49	20	17	10	15	6	12	18.4	42.3%

No	Country	GER-P	GER-LS	GER-US	NER-PP	NERT-P	NERT-LS	NERT-US	Avg. obs.	Avg. coverage
34	Benin	51	15	15	10	30	4	5	18.6	41.4%
35	Zimbabwe	46	7	7	13	22	18	18	18.7	40.1%
36	STP	37	14	14	14	18	10	10	16.7	38.9%
37	Sierra Leone	34	14	12	12	12	11	11	15.1	35.2%
38	Nigeria	47	21	21	1	10	0	0	14.3	33.0%
39	Zambia	45	20	1	1	31	4	4	15.1	31.2%
40	Congo	44	9	5	15	16	3	2	13.4	30.7%
41	Comoros	38	11	9	7	14	7	7	13.3	29.4%
42	CAR	35	11	9	4	22	6	3	12.9	27.7%
43	DRC	40	11	11	4	13	3	3	12.1	26.7%
44	Sudan	19	19	19	2	9	3	3	10.6	25.9%
45	Angola	26	12	14	6	8	5	4	10.7	25.4%
46	Liberia	24	13	6	10	10	6	6	10.7	25.3%
47	Uganda	47	1	2	3	8	0	4	9.3	18.2%
48	Equatorial Guinea	20	8	5	6	11	1	1	7.4	17.2%
49	Libya	20	5	4	1	11	11	4	8.0	16.4%
50	Gabon	30	4	4	2	4	1	1	6.6	13.8%
51	Guinea-Bissau	30	1	2	2	8	4	1	6.9	13.5%
52	Somalia	17	1	1	0	5	4	4	4.6	8.7%
53	South Sudan	3	3	3	3	3	2	2	2.7	6.7%
54	Djibouti	0	0	0	0	0	0	0	0.0	0.0%

Senegal has the highest coverage for the CR indicators (40.7% coverage). Ghana, Kenya, and Nigeria follow closely, each recording 37.0% coverage.

Data coverage declines rapidly after the top-ranked countries, with over half of the countries recording less than 20% coverage.

Eritrea, Libya, and Seychelles have no completion rate data available (0% coverage), while Cabo Verde (2.5%), Mauritius (3.7%), and Equatorial Guinea (3.7%) have limited coverage.

TABLE 5

Full completion-rate availability matrix by country

No	Country	CR-P	CR-LS	CR-US	Avg. obs.	Avg. coverage
1	Senegal	11	11	11	11.0	40.7%
2	Ghana	10	10	10	10.0	37.0%
3	Kenya	10	10	10	10.0	37.0%
4	Nigeria	10	10	10	10.0	37.0%
5	Benin	9	9	9	9.0	33.3%
6	Mali	9	8	8	8.3	30.9%
7	Malawi	8	8	8	8.0	29.6%
8	Sierra Leone	8	8	8	8.0	29.6%
9	Cameroon	7	7	7	7.0	25.9%
10	Egypt	8	8	5	7.0	25.9%
11	Ethiopia	7	7	7	7.0	25.9%
12	Gambia	7	7	7	7.0	25.9%
13	South Africa	7	7	7	7.0	25.9%

DRC: Democratic Republic of the Congo
CAR: Central African Republic
STP: São Tomé and Príncipe

No	Country	CR-P	CR-LS	CR-US	Avg. obs.	Avg. coverage
14	Tanzania	7	7	7	7.0	25.9%
15	Zambia	7	7	7	7.0	25.9%
16	Zimbabwe	7	6	7	6.7	24.7%
17	DRC	6	6	6	6.0	22.2%
18	Rwanda	6	6	6	6.0	22.2%
19	Togo	6	6	6	6.0	22.2%
20	Uganda	6	6	6	6.0	22.2%
21	Chad	5	5	5	5.0	18.5%
22	Côte d'Ivoire	5	5	5	5.0	18.5%
23	Guinea	5	5	5	5.0	18.5%
24	Lesotho	5	5	5	5.0	18.5%
25	Liberia	5	5	5	5.0	18.5%
26	Madagascar	5	5	5	5.0	18.5%
27	Mozambique	5	5	5	5.0	18.5%
28	Niger	5	5	5	5.0	18.5%
29	Burkina Faso	4	4	5	4.3	16.0%
30	Burundi	4	4	4	4.0	14.8%
31	CAR	4	4	4	4.0	14.8%
32	Eswatini	4	4	4	4.0	14.8%
33	Guinea-Bissau	4	4	4	4.0	14.8%
34	Namibia	4	4	4	4.0	14.8%
35	Tunisia	4	4	4	4.0	14.8%
36	STP	4	4	3	3.7	13.6%
37	Botswana	3	3	3	3.0	11.1%
38	Comoros	3	3	3	3.0	11.1%
39	Congo	3	3	3	3.0	11.1%
40	Gabon	3	3	3	3.0	11.1%
41	Mauritania	3	3	3	3.0	11.1%

No	Country	CR-P	CR-LS	CR-US	Avg. obs.	Avg. coverage
42	Somalia	3	3	2	2.7	9.9%
43	Morocco	2	2	3	2.3	8.6%
44	Algeria	2	2	2	2.0	7.4%
45	Angola	2	2	2	2.0	7.4%
46	Djibouti	2	2	2	2.0	7.4%
47	South Sudan	2	2	2	2.0	7.4%
48	Sudan	2	2	2	2.0	7.4%
49	Equatorial Guinea	1	1	1	1.0	3.7%
50	Mauritius	0	1	2	1.0	3.7%
51	Cabo Verde	0	0	2	0.7	2.5%
52	Eritrea	0	0	0	0.0	0.0%
53	Libya	0	0	0	0.0	0.0%
54	Seychelles	0	0	0	0.0	0.0%

Morocco has the highest overall coverage for literacy indicators (30.9%), followed by Tunisia (29.7%).

Coverage is generally low across the continent, with only three countries exceeding 20% coverage, while most countries record less than 10%.

Djibouti has no available observations (0% coverage), while Equatorial Guinea, Libya, and South Sudan each record coverage of less than 1%.

TABLE 6

Full outcome availability matrix by country

No	Country	RP-P	RP-LS	AL	Avg. observations	Avg. coverage
1	Morocco	5	2	8	5.0	30.9%
2	Tunisia	0	5	12	5.7	29.7%
3	Zambia	3	1	9	4.3	20.8%
4	Senegal	2	1	12	5.0	19.7%
5	Mauritius	2	1	10	4.3	18.2%
6	Burkina Faso	2	0	13	5.0	16.3%
7	South Africa	2	0	13	5.0	16.3%
8	Lesotho	3	0	6	3.0	14.4%
9	Uganda	2	0	10	4.0	14.1%
10	Benin	2	0	9	3.7	13.3%
11	Togo	2	0	9	3.7	13.3%
12	Burundi	2	0	8	3.3	12.6%
13	Mozambique	2	0	8	3.3	12.6%
14	Côte d'Ivoire	2	0	7	3.0	11.9%
15	Tanzania	2	0	7	3.0	11.9%

No	Country	RP-P	RP-LS	AL	Avg. observations	Avg. coverage
16	Egypt	1	0	11	4.0	11.5%
17	Namibia	2	0	6	2.7	11.1%
18	Niger	2	0	6	2.7	11.1%
19	Cameroon	2	0	5	2.3	10.4%
20	Chad	2	0	5	2.3	10.4%
21	Malawi	2	0	5	2.3	10.4%
22	Eswatini	2	0	4	2.0	9.6%
23	Madagascar	2	0	4	2.0	9.6%
24	Seychelles	2	0	4	2.0	9.6%
25	Zimbabwe	2	0	3	1.7	8.9%
26	Botswana	2	0	2	1.3	8.1%
27	Congo	2	0	2	1.3	8.1%
28	DRC	1	0	6	2.3	7.8%
29	Nigeria	1	0	6	2.3	7.8%
30	Kenya	2	0	1	1.0	7.4%
31	Algeria	0	1	4	1.7	7.1%
32	Guinea	1	0	5	2.0	7.0%
33	Mali	0	0	9	3.0	6.7%
34	Ethiopia	0	0	8	2.7	5.9%
35	Rwanda	0	0	8	2.7	5.9%
36	Gabon	1	0	2	1.0	4.8%
37	Sierra Leone	0	0	6	2.0	4.4%
38	Cabo Verde	0	0	5	1.7	3.7%
39	Ghana	0	0	5	1.7	3.7%
40	STP	0	0	5	1.7	3.7%
41	Angola	0	0	4	1.3	3.0%

No	Country	RP-P	RP-LS	AL	Avg. observations	Avg. coverage
42	CAR	0	0	4	1.3	3.0%
43	Comoros	0	0	4	1.3	3.0%
44	Gambia	0	0	4	1.3	3.0%
45	Guinea-Bissau	0	0	4	1.3	3.0%
46	Mauritania	0	0	4	1.3	3.0%
47	Eritrea	0	0	2	0.7	1.5%
48	Liberia	0	0	2	0.7	1.5%
49	Somalia	0	0	2	0.7	1.5%
50	Sudan	0	0	2	0.7	1.5%
51	Equatorial Guinea	0	0	1	0.3	0.7%
52	Libya	0	0	1	0.3	0.7%
53	South Sudan	0	0	1	0.3	0.7%
54	Djibouti	0	0	0	0.0	0.0%

We developed an education statistics availability index (ESAI) through stepwise aggregation. For both enrolment rate indicators (ER) and completion rate indicators (CR), we first measure two dimensions: breadth (B) and depth (D). We then combine these dimensions into a single score (S) for each domain using a mathematical method that ensures both dimensions contribute fairly to the result. This produces separate scores for enrolment rate indicators (S_ER) and completion rate indicators (S_CR). Finally, the two domain scores are combined to produce the overall ESAI_ERCR score. The aggregation method rewards balanced performance across dimensions and indicators, so a high score in one area cannot fully offset a low score in another. The final ESAI_ERCR score ranges from 0 to 100.

ESAI_ERCR scores range from 69.45 (Ghana) to 0.84 (Libya), highlighting disparities across the breadth, depth, and incidence of education-related data availability in Africa. The top-performing countries consistently record high breadth scores (B_CR and B_ER) and relatively strong depth scores (D_ER and D_CR), indicating both broad indicator coverage and sustained data availability over time.

Several countries, including Morocco, Mauritius, Seychelles, and Eritrea, show high enrolment data availability but rank lower because of limited or absent CR data, as the index penalises imbalanced coverage between indicators.

TABLE 7

Full ERCR breadth, depth, and ESAI rankings by country

No.	Country	B_ER	D_ER	S_ER	B_CR	D_CR	S_CR	ESAI_ERCR
1	Ghana	0.95	0.72	0.82	1.00	0.43	0.60	69.45
2	Senegal	0.98	0.66	0.79	0.92	0.43	0.59	67.57
3	South Africa	0.96	0.64	0.77	1.00	0.41	0.58	66.38
4	Kenya	0.88	0.44	0.58	0.98	0.44	0.61	59.77

No.	Country	B_ER	D_ER	S_ER	B_CR	D_CR	S_CR	ESAI_ERCR
5	Egypt	0.98	0.70	0.82	0.93	0.29	0.44	57.57
6	Gambia	0.96	0.72	0.83	0.93	0.28	0.44	57.13
7	Benin	0.90	0.46	0.61	0.94	0.38	0.54	56.96
8	Mali	0.86	0.50	0.63	0.91	0.32	0.47	54.19
9	Tanzania	0.97	0.68	0.80	0.88	0.26	0.40	53.46
10	Malawi	0.85	0.69	0.76	0.80	0.25	0.38	50.90
11	Sierra Leone	0.98	0.58	0.73	0.80	0.25	0.38	49.85
12	Ethiopia	0.93	0.51	0.66	0.89	0.26	0.40	49.75
13	Rwanda	0.99	0.64	0.77	0.90	0.23	0.36	49.64
14	Nigeria	0.61	0.34	0.44	0.95	0.40	0.56	49.13
15	Lesotho	0.91	0.76	0.83	0.89	0.22	0.35	48.98
16	Togo	0.97	0.64	0.77	0.86	0.22	0.35	48.39
17	Zimbabwe	0.90	0.55	0.68	0.76	0.23	0.35	46.38
18	Niger	0.98	0.75	0.85	0.87	0.19	0.31	45.63
19	Cameroon	0.98	0.58	0.73	0.75	0.20	0.31	43.93
20	Côte d'Ivoire	0.99	0.69	0.81	0.82	0.18	0.29	43.19
21	Madagascar	0.97	0.71	0.82	0.83	0.18	0.29	43.04
22	Tunisia	0.64	0.44	0.52	0.95	0.22	0.36	42.28
23	Zambia	0.81	0.31	0.45	0.88	0.25	0.39	41.40
24	Mozambique	0.73	0.54	0.62	0.83	0.18	0.30	40.61
25	Burkina Faso	0.99	0.87	0.93	0.78	0.15	0.25	39.61
26	Chad	0.99	0.68	0.80	0.76	0.16	0.26	39.50
27	Liberia	0.90	0.36	0.52	0.79	0.18	0.30	37.91
28	Eswatini	0.80	0.45	0.57	0.82	0.16	0.26	36.33
29	Botswana	0.83	0.38	0.52	0.90	0.16	0.27	36.14
30	DRC	0.67	0.23	0.35	0.88	0.23	0.36	35.37
31	Guinea	0.71	0.35	0.47	0.77	0.16	0.27	33.95

No.	Country	B_ER	D_ER	S_ER	B_CR	D_CR	S_CR	ESAI_ERCR
32	Namibia	0.99	0.86	0.92	0.68	0.12	0.20	33.01
33	Burundi	0.85	0.57	0.68	0.68	0.11	0.19	30.38
34	Comoros	0.94	0.38	0.54	0.78	0.12	0.20	29.52
35	STP	0.73	0.37	0.49	0.71	0.12	0.20	28.68
36	Mauritania	0.80	0.58	0.67	0.67	0.10	0.17	27.32
37	Algeria	0.94	0.65	0.77	0.71	0.09	0.16	27.04
38	Angola	0.86	0.26	0.39	0.80	0.11	0.20	26.52
39	Uganda	0.49	0.13	0.21	0.86	0.21	0.33	25.58
40	CAR	0.66	0.20	0.30	0.72	0.12	0.21	24.64
41	Congo	0.62	0.20	0.30	0.67	0.10	0.17	21.60
42	Morocco	0.99	0.88	0.93	0.58	0.06	0.12	21.25
43	Mauritius	0.97	0.81	0.88	0.46	0.05	0.10	18.29
44	Gabon	0.64	0.10	0.17	0.69	0.10	0.17	16.90
45	Sudan	0.79	0.33	0.47	0.56	0.05	0.10	16.55
46	Guinea-Bissau	0.47	0.06	0.11	0.81	0.14	0.24	15.08
47	Cabo Verde	0.92	0.73	0.81	0.25	0.04	0.06	12.27
48	South Sudan	0.79	0.12	0.21	0.52	0.04	0.08	11.81
49	Somalia	0.39	0.03	0.06	0.72	0.10	0.18	8.85
50	Equatorial Guinea	0.57	0.14	0.22	0.40	0.01	0.03	5.57
51	Seychelles	0.99	0.76	0.86	0.00	0.00	0.00	0.99
52	Eritrea	0.87	0.58	0.69	0.00	0.00	0.00	0.98
53	Djibouti	0.00	0.00	0.00	0.63	0.07	0.13	0.87
54	Libya	0.44	0.06	0.10	0.00	0.00	0.00	0.84

In this analysis, we combined reading proficiency and adult literacy as a single category: RPAL.

Overall, ESAI_RPAL scores range from 30.56 (Zambia) to 0.00 (Djibouti), revealing substantial disparities in the breadth, depth, and incidence of reading proficiency and adult literacy across Africa.

Zambia ranks first on the ESAI_RPAL index (30.56), followed by Morocco (27.15), Tunisia (22.74), and Senegal (22.67).

Djibouti has no available reading proficiency or adult literacy data (ESAI_RPAL = 0.00), while Libya (0.30) and Equatorial Guinea (0.56) also have extremely limited data.

TABLE 8

Full RPAL breadth, depth, and ESAI rankings by country, 1970-2024

No.	Country	B_RP	D_RP	S_RP	B_AL	D_AL	S_AL	ESAI_RPAL
1	Zambia	0.98	0.12	0.22	0.96	0.34	0.51	30.56
2	Morocco	0.95	0.16	0.27	0.65	0.17	0.27	27.15
3	Tunisia	0.62	0.08	0.14	0.92	0.40	0.56	22.74
4	Senegal	0.83	0.08	0.14	0.89	0.40	0.56	22.67
5	Lesotho	0.69	0.07	0.13	0.91	0.24	0.37	19.17
6	Burkina Faso	0.66	0.05	0.09	0.95	0.40	0.57	16.45
7	Togo	0.66	0.05	0.09	0.87	0.30	0.45	15.77
8	Benin	0.66	0.05	0.09	0.90	0.29	0.44	15.75
9	Mauritius	0.76	0.05	0.09	0.91	0.34	0.50	15.32
10	Burundi	0.66	0.05	0.09	0.80	0.21	0.34	14.87
11	Côte d'Ivoire	0.66	0.05	0.09	0.84	0.21	0.34	14.84
12	Niger	0.66	0.05	0.09	0.84	0.20	0.33	14.75
13	Madagascar	0.67	0.05	0.10	0.82	0.14	0.25	13.94
14	Chad	0.66	0.05	0.09	0.74	0.13	0.22	13.14

No.	Country	B_RP	D_RP	S_RP	B_AL	D_AL	S_AL	ESAI_RPAL
15	Egypt	0.50	0.04	0.07	0.89	0.30	0.45	12.87
16	Cameroon	0.66	0.05	0.09	0.68	0.11	0.19	12.52
17	Nigeria	0.50	0.04	0.07	0.92	0.21	0.34	12.23
18	South Africa	0.48	0.03	0.06	0.94	0.43	0.59	11.30
19	Uganda	0.48	0.03	0.06	0.98	0.36	0.53	11.16
20	Mozambique	0.48	0.03	0.06	0.88	0.25	0.39	10.68
21	Tanzania	0.48	0.03	0.06	0.87	0.24	0.37	10.61
22	Namibia	0.48	0.03	0.06	0.87	0.20	0.32	10.37
23	DRC	0.50	0.03	0.06	0.91	0.25	0.39	10.21
24	Malawi	0.48	0.03	0.06	0.82	0.16	0.26	9.96
25	Guinea	0.50	0.03	0.06	0.72	0.13	0.22	9.20
26	Eswatini	0.48	0.03	0.06	0.69	0.08	0.14	8.49
27	Zimbabwe	0.48	0.03	0.06	0.61	0.06	0.11	7.71
28	Gabon	0.50	0.03	0.06	0.64	0.06	0.12	7.61
29	Seychelles	0.48	0.03	0.06	0.53	0.06	0.10	7.44
30	Algeria	0.42	0.02	0.04	0.54	0.06	0.11	6.46
31	Congo	0.66	0.05	0.09	0.44	0.02	0.04	6.03
32	Botswana	0.48	0.03	0.06	0.44	0.02	0.04	5.04
33	Kenya	0.72	0.07	0.13	0.40	0.01	0.03	4.66
34	Ethiopia	0.00	0.00	0.00	0.90	0.28	0.43	0.97
35	Mali	0.00	0.00	0.00	0.88	0.26	0.40	0.96
36	Rwanda	0.00	0.00	0.00	0.88	0.25	0.38	0.96
37	Sierra Leone	0.00	0.00	0.00	0.80	0.23	0.35	0.96
38	Ghana	0.00	0.00	0.00	0.82	0.18	0.29	0.94
39	Cabo Verde	0.00	0.00	0.00	0.84	0.17	0.28	0.94
40	Gambia	0.00	0.00	0.00	0.83	0.15	0.26	0.94
41	Angola	0.00	0.00	0.00	0.84	0.15	0.25	0.94
42	Mauritania	0.00	0.00	0.00	0.77	0.13	0.23	0.93

No.	Country	B_RP	D_RP	S_RP	B_AL	D_AL	S_AL	ESAI_RPAL
43	Guinea-Bissau	0.00	0.00	0.00	0.82	0.13	0.22	0.92
44	Somalia	0.00	0.00	0.00	0.80	0.11	0.19	0.91
45	Comoros	0.00	0.00	0.00	0.75	0.11	0.19	0.91
46	Sao Tome and Principe	0.00	0.00	0.00	0.70	0.10	0.18	0.91
47	CAR	0.00	0.00	0.00	0.63	0.07	0.13	0.87
48	Eritrea	0.00	0.00	0.00	0.50	0.04	0.07	0.78
49	Sudan	0.00	0.00	0.00	0.49	0.04	0.07	0.78
50	Liberia	0.00	0.00	0.00	0.48	0.03	0.06	0.75
51	South Sudan	0.00	0.00	0.00	0.45	0.02	0.04	0.69
52	Equatorial Guinea	0.00	0.00	0.00	0.40	0.01	0.03	0.56
53	Libya	0.00	0.00	0.00	0.35	0.00	0.01	0.30
54	Djibouti	0.00	0.00	0.00	0.00	0.00	0.00	0.00

SECTION 4

Discussion of Findings

The availability of key education statistics in Africa varies considerably depending on the type of indicator. An analysis of data between 1970 and 2024 shows substantial gaps in the frequency and coverage of key education indicators across countries and educational levels.

The most consistently available indicators across the continent relate to access to primary schooling. Completion rates are less frequently released. A few countries have no data or very limited time series for completion indicators.

More concerning is the scarcity of learning-outcome data. Across the two selected reading proficiency series, 33 countries have at least one observation, while 21 have none. Primary reading has 62 observations across 31 countries, whereas lower-secondary reading has only 11 observations across six countries; 48 countries have no lower-secondary reading observation.

Adult literacy data are also sparse, with an average of 5.6 observations per country over the period. A well-functioning education data system should allow policymakers to follow learners through the education cycle: from enrolment, to progression, to completion, and ultimately to literacy and learning outcomes. However, there are disconnects in the availability of these interrelated indicators across Africa.

This disparity creates a significant gap in the education results chain. While governments can often track the number of children enrolled in school, they have far less information on whether those children remain

in school and complete the basic education cycle. As a result, education systems may appear successful based on enrolment trends, even when large numbers of children fail to reach the end of primary education. The disconnect is not only one of frequency but also of timing. Enrolment indicators are often available from earlier decades and continue to be updated regularly, creating long and relatively complete time series. However, completion rate data are frequently introduced much later and updated less consistently. A further dimension of the disconnect concerns the frequency of data collection. Across Africa, enrolment indicators are collected far more regularly than indicators of progression, completion, and educational outcomes.

An even larger disconnect is observed between secondary completion rates, from administrative data sources and adult literacy rates which are typically derived from censuses or household surveys. Temporal disconnect between these indicators complicates analysis, as adult literacy outcomes often reflect educational experiences that occurred decades earlier, whereas secondary completion rates capture more recent cohorts. Ideally, continuous data on both indicators would allow policymakers to examine whether improvements in secondary education participation and completion contribute to rising literacy among adults over time. Instead, sparse and irregular observations prevent robust analysis of these relationships and limit the ability to evaluate long-term returns on education.

The data also reveals substantial variation in data availability across countries. Countries such as Mauritius, Morocco, Lesotho, Senegal, and Tanzania maintain relatively extensive education datasets across multiple indicators. In contrast, countries such as South Sudan, Somalia, and Djibouti have relatively fewer data points.

SECTION 5

Policy Use and Implications

The availability of educational data across African countries has improved considerably over the past five decades. However, there are disparities in data availability across education levels and outcome measures, with important implications for policy.

First, weak data availability limits evidence-based decision-making, as many decisions are made using outdated information. Further, gaps in secondary education statistics constrain planning for demographic and economic transformation. As African countries seek to expand secondary education and equip young people with skills for the labour market, the limited availability of enrolment and completion data at the lower and upper secondary levels weakens the evidence base for investment decisions.

The absence of regular completion data can constrain governments' ability to identify where learners are leaving the system and to evaluate the effectiveness of policies aimed at reducing dropout and improving retention. It also weakens efforts to estimate the economic returns to education investments, as completion, rather than enrolment, is often more closely linked to skills acquisition and labour market outcomes.

Despite the wide coverage of enrolment data on important policy-relevant indicators, which is aligned with Sustainable Development Goal 4 (focus on quality and lifelong learning), data on these indicators are less available. The lack of learning data also undermines efforts to improve education quality. While enrolment indicators provide information on access, they do not reveal whether children are acquiring foundational literacy and numeracy skills. The near absence of reading proficiency data across Africa makes it difficult to monitor progress

toward learning recovery, foundational learning targets, and broader human capital objectives. Data on other important labour market skills, such as digital or life skills programs, are also not available. Given the importance of lifelong learning, workforce development, and adult skills acquisition for harnessing the first and second demographic dividends, this gap can hamper efforts to design policies and monitor progress.

SECTION 6

Filling the Gaps in Education Statistics in Africa

Evidence suggests that Africa's education data systems are far better at counting children enrolled in school than at measuring whether they finish school or acquire lasting literacy skills. This creates an incomplete picture of educational progress and underestimates the investments needed to convert access into learning and human capital outcomes. The selected dataset contains only 62 primary and 11 lower-secondary reading-proficiency observations, alongside 303 adult-literacy observations. Potential strategies for addressing these gaps are discussed in the following sections.

6.1 Investing in Traditional Data Sources

Strengthening traditional data sources remains a cornerstone for improving the reliability of educational statistics. Although resource-intensive, they are integral to evidence-based policymaking in education. These sources remain the backbone of reliable education data because they are built on standardised methodologies and long-term data collection practices, allowing for comparisons over time. By investing in these established mechanisms, governments and institutions can ensure the continuity, comparability, and credibility of their data.

Investments in training, digital infrastructure, and institutional development at Ministries of Education and National Statistical Offices can help countries generate and use reliable education statistics for all levels more effectively.

Making education statistics publicly available through centralised portals can also promote data use for decision-making. Expanding access to anonymised datasets and publishing data through user-friendly, open, and interoperable platforms would significantly increase the value and impact of existing education statistics systems. Equipping education management information systems to collect longitudinal data on cohorts is essential for improving the coverage of education data across all levels of the system. Going further to collect data on individual learners will make advanced policy analysis linking processes to outcomes possible.

Countries need continuous and overlapping time series that allow learners to be tracked conceptually across the educational pathway. from school entry, to completion, to foundational skills and long-term learning outcomes. Strengthening administrative records, household surveys, learning assessments, and census-based literacy measurements would help close these gaps and provide policymakers with a more complete picture of educational progress and its long-term impacts.

Regular and institutionalised learning assessments should be prioritised to provide timely and reliable data on foundational literacy and numeracy. Increasing support for household surveys can strengthen the production of learning outcome and skills data. These sources can complement administrative data and provide information on populations outside formal education systems.

6.2 Exploring Non-Traditional Data Sources for Education Statistics

Beyond conventional methods, non-traditional data sources offer innovative ways to fill gaps in education statistics. Learning management system data, satellite imagery, social media activity, and digital learning platforms can provide near real-time information on student participation and access to resources. These sources, although less standardised, can complement traditional data by capturing dimensions of education that are often overlooked, such as informal learning and digital inclusion, especially in hard-to-reach areas. Harnessing them requires careful validation and ethical considerations, but they can help fill gaps where traditional data collection is slow or incomplete.

6.3 Exploring Synthetic Data and Imputations

Synthetic data generation and statistical imputation present another avenue for addressing missing or incomplete education statistics. When gaps exist due to limited coverage or reporting delays, these techniques can estimate values based on existing patterns, ensuring continuity in datasets. When applied appropriately, these approaches can strengthen analysis, enable more robust forecasting, and support decision-making in contexts where data are limited or sensitive, while maintaining confidentiality and data integrity.

Synthetic data and statistical imputations involve using modelling techniques to estimate or simulate missing or incomplete education data. Imputation methods help fill gaps in datasets where responses are missing or delayed, thereby improving completeness and usability of existing records. Synthetic data goes a step further by generating artificial datasets that preserve the statistical properties of real data while protecting privacy. Although synthetic data should never replace actual observations, they can serve as valuable interim solutions.

SECTION 7

Conclusion and Way Forward

Africa's education data systems have made important progress in tracking school participation, particularly through regular reporting of enrolment indicators. However, gaps remain in measuring student progression, completion, learning outcomes, and literacy skills in adulthood. The evidence shows that indicators most closely linked to educational outcomes and human capital formation are collected less frequently, have shorter time series, and are often unavailable for many countries. As a result, policymakers can more easily track access to education than determine whether learners acquire the knowledge and skills needed to succeed in the labour market and beyond.

The findings suggest that Africa's education data architecture remains heavily focused on measuring access rather than learning and completion. While enrolment statistics have enabled the monitoring of educational expansion, critical information gaps persist in areas that matter most for educational quality and human capital development. Achieving the education ambitions of Agenda 2063 and Sustainable Development Goal 4 will require not only greater investment in schools and learners, but also greater investment in the statistical systems that enable governments to measure progress, identify challenges, and target resources effectively.

Increasing investment in education data systems requires allocating a larger share of education budgets to statistical capacity building. Closing these gaps requires a renewed commitment to investing in education statistics as a core component of education system strengthening. Governments and development partners should prioritise: (i) strengthening Education Management Information Systems (EMIS) to improve the availability, quality, and continuity of administrative data;

(ii) increasing the frequency of data collection on completion, learning, literacy, and skills outcomes; (iii) institutionalising national and regional learning assessments to monitor foundational and transferable skills; and (iv) building national capacity for data analysis, dissemination, and use in policymaking.

Ultimately, achieving quality education and realising Africa's human capital potential requires moving beyond measuring school participation to measuring what learners know, can do, and become. Building stronger education data systems is a much-needed strategic investment for better policies and improved educational outcomes for all.

AFRICA BEYOND THE NUMBERS SERIES

This edition of the Africa Beyond the Numbers series from the African Centre for Statistics focuses on producing and disseminating education statistics in Africa. It highlights the key role of education statistics in development planning and policy, identifies the gaps in the existing education data ecosystem, and advocates for the institutionalisation of the routine production and dissemination of key education statistics across the life course.

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Status and Implications for Policy Discussion