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Education

Africa's educational funnel in context

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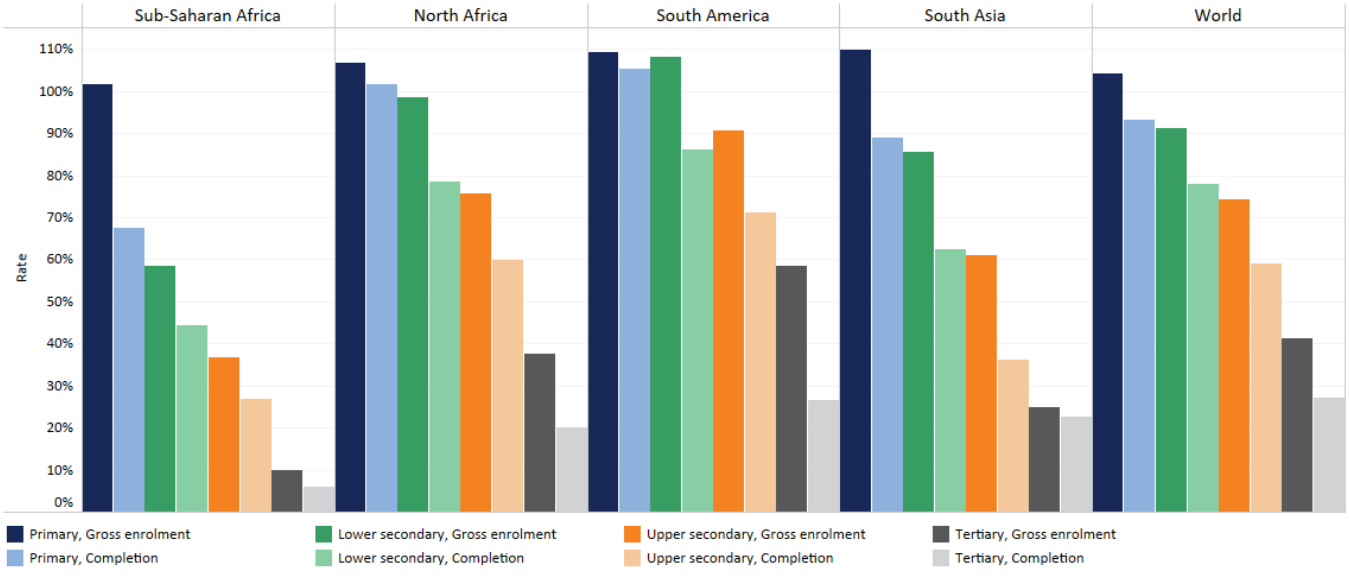
The education system can be viewed as a long funnel, with various cracks along the way. Many children enter the system at the mouth of the funnel but few complete the entire journey—from primary to secondary school and then university—to eventually graduate with a tertiary or equivalent education at the other end. To improve the level of education in a country, the goal is to increase successful completion rates along each segment of the funnel. A perfect system would be one where the previous narrowing funnel has changed to a straight pipeline without 'leaks', with the full complement of age-appropriate students entering at one end and progressing to relevant higher education at the other end, and one that provides for appropriate academic and practical skills training.

In Finland, generally considered the country with the best education system globally, the gross intake ratio to the last grade of primary school and lower secondary education is close to 100%. The completion rate in the lower secondary phase is 100% and almost 90% for upper secondary education. All Finns therefore complete at least lower secondary education, with a loss of only 10% by the end of the upper secondary phase. The numbers drop off substantially only by tertiary education stage. By this standard, Africa will require successive generations of rapid progress.

In sub-Saharan Africa, more than 20% of children between the ages of 6 and 11 years are out of school, and over 33% of young people between the ages of 12 and 14 years are out of school. The situation is even worse for young people between the ages of 15 and 17 years, with an estimated 60% not in school.

Chart 1 shows that educational throughput in sub-Saharan Africa is very different from that in North Africa, South Asia and South America (the latter two being the regions most comparable to Africa used in this website) and is consistently below world averages. Poor outcomes at either enrolment or completion are shown in orange or red, given the severity of the situation compared to other regions.

Chart 1: Progress through the education funnel in sub-Saharan Africa compared with other regions (gross percentages), 2019



Source: IFs 7.84 initialising from UNESCO Institute for Statistics (UIS) data

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Chart 2: Definitions/terminology in education

Enrolment rates: The composite effect of specific intake rates and grade-to-grade survival rates. Breaking down enrolment rates into entry, progression and survival components provides information about flow patterns, such as whether a country is successful at providing access (high entry rates) but is less successful with respect to progression (low survival rates).

Gross enrolment rate: The number of students enrolled in a given level of education, regardless of age, expressed as a percentage of the official school-age population corresponding to the same level of education. Rates can therefore be above 100%.

Net enrolment rate: The percentage of an entering cohort persisting to the beginning of the final year of a given level of education.

Survival rate: The percentage of an entering cohort persisting to the beginning of the final year of a given level of education.

Transition rate: Transition rates to the new levels are calculated by dividing the number of new entrants to each new level by the number of students who were in the final grade of the prior level the previous year. For example, transition rate to secondary schools refers to new entrants to the first grade of secondary education in a given year, expressed as a percentage of the number of pupils enrolled in the final grade of primary education in the previous year.

Completion rate: The number of students in the relevant age group who have completed the last grade of the given level of education as a percentage of the population at the theoretical graduation age for the given level of education. In other words, the ratio between the number of students completing an education level and the number of children or youth in the population at large who are the expected age to do so. At primary level, for example, the completion rate is calculated as the number of children completing the final grade as a percentage of the population of the age a child would be who began first grade at the system-defined entry age and progressed without repetition or interruption through the final grade.

Source: JR Dickson, BB Hughes and MT Irfan, Advancing global education: Patterns of potential human progress, vol. 2, Boulder: Paradigm, 2010, 17.

The gross enrolment rate for primary school in sub-Saharan Africa was 101.7% in 2019 but the net primary enrolment rate

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was only 78.9%. This indicates that a large number of children who are supposed to be in school are in fact not and that many classes are likely crowded by older children. Crowded classrooms can manifest in several forms including a higher student-to-teacher ratio, and insufficient availability of desks, books and equipment. The consequence is lower contact time per student, higher workload for teachers as well as lower instructional quality. The primary completion rate was 67.5% in 2019, almost 26 percentage points below the world's average. It lags behind other regions, particularly North Africa with a completion rate of 102% and South America at 105%.

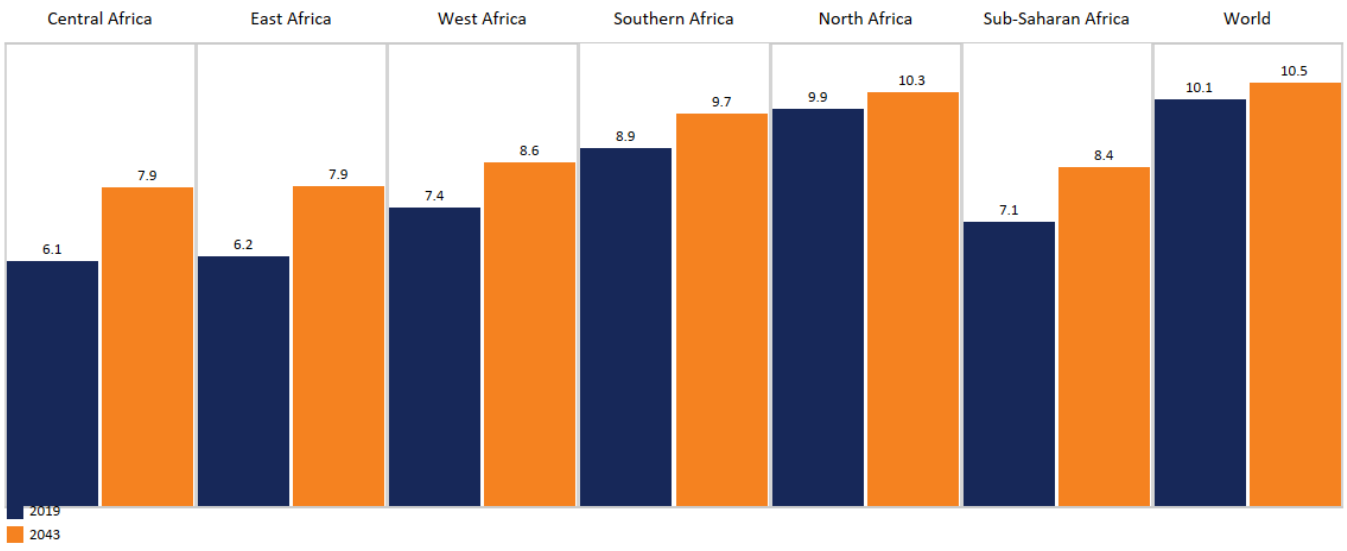
Of those who complete the primary level, some will transition immediately to the lower secondary level, some will enrol in the lower secondary level after some years out of school, and some will never enter the lower secondary level—and so on through the upper secondary and tertiary levels. In 2019, gross enrolment for lower and upper secondary levels in sub-Saharan Africa stood at 58.4% and 36.6, respectively, while that of North Africa was 98.6% and 75.7% in the same period. Completion rates drop acutely from 44% in the lower secondary phase to a mere 27% in the upper secondary phase in sub-Saharan Africa, indicative of a rapid contraction in the educational funnel. This contrasts markedly with the situation in North Africa, where lower and upper secondary completion rates were at 78.6% and 60%, respectively.

The situation at the tertiary level is even worse. In 2019, gross tertiary enrolment in sub-Saharan Africa was below 10%. This is just one-quarter of the world average, less than one-third of North Africa and almost one-sixth of the rates in South America. Even with this, only about 6% of the relevant age group in sub-Saharan Africa graduated from a tertiary institution with at least a first degree in 2019. Comparing the average of 20% in North Africa and 26.6% in South America reveals the depth of the educational crisis in sub-Saharan Africa and the rapid contraction along the educational funnel.

Moreover, enrolment does not always translate into attendance. In the majority of poor countries, enrolment rates are significantly higher than attendance rates as many children who are officially enrolled do not regularly attend school.

Another way of measuring the general level of education in a country is to look at the mean level of adult education. The mean years of education for the five regions in Africa, as well as the global averages, are shown for the age group 15–24 years in Chart 3 and for adults 25 years and older in Chart 4.

Chart 3: Current Path forecast of mean years of education among 15–24 year-olds, 2019 and 2043



Source: IFs 7.84 initialising from UNPD medium term forecast and Barro-Lee educational attainment data

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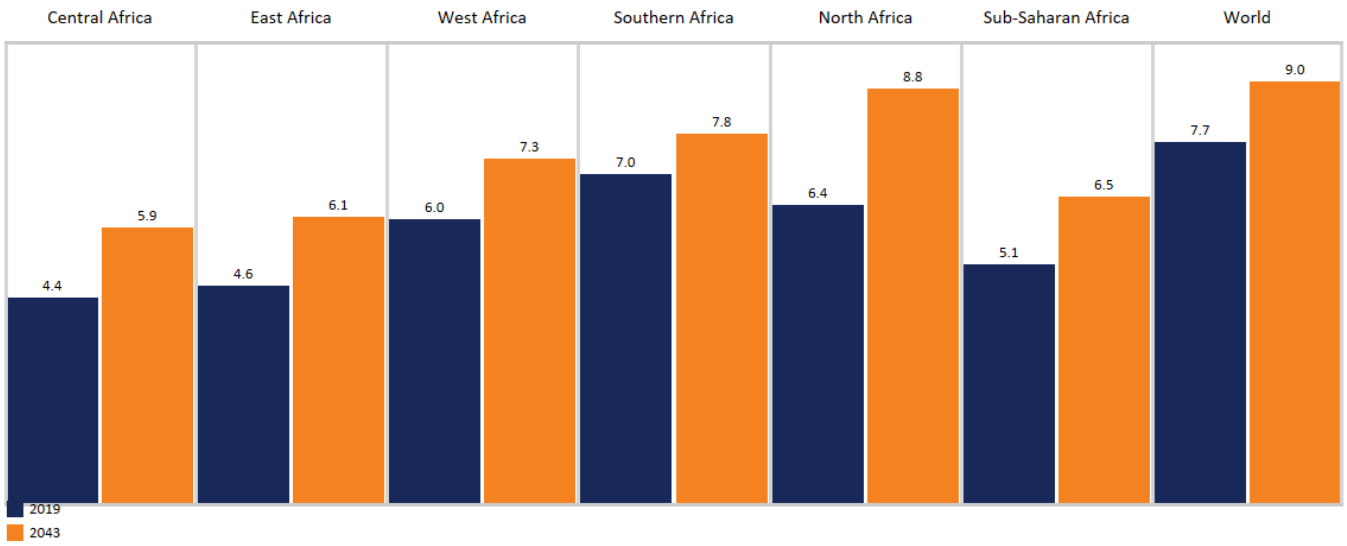
Chart 4: Current Path forecast of mean years of education among 25 years and older, 2019 and 2043



Source: IFs 7.84 initialising from UNPD medium term forecast and Barro-Lee educational attainment data

Average levels of education in North Africa are substantially higher than in other regions. Education levels in East Africa are expected to improve more than in Central Africa by 2043, with Kenya doing particularly well. Progress in education levels in Africa is reflected by young people (15–24 years) often being better educated than their parents. Africa, therefore, also has a large intergenerational gap when it comes to education. The literacy and education rates for the youngest population group in poor countries can be up to three times higher than those for the oldest population group. These large differences in outlook and expectation inevitably translate into frustration and even violence.[1]

In 2019, the mean years of education for the 25-years and older age group in North and Southern Africa was almost similar at 6.7 years. Looking to 2043, North Africa will continue to improve its education endowment on the Current Path (to 8.9 years), while the improvement in Southern Africa will only be to 7.6 years. By 2043, West Africa (with a mean of 6 years in 2019) will almost close the gap by 2043, progressing to 7.3 years. The main reason for Southern Africa's slow improvement is that the adult education level in South Africa, Zimbabwe, Zambia and Madagascar will improve very slowly. This is an alarming forecast for South Africa, as it finds itself in a demographic sweet spot for growth given its favourable demographic dividend (see the theme on demographics). Botswana will perform best in this region (and indeed on the continent), reaching 11.3 years by 2043. Mozambique, the country with the lowest average in the region, improves from 2.8 years in 2019 to 5.2 years in 2043.

The Sustainable Development Goal (SDG) 4 focuses on quality education and is closely related to Goal 5 on gender equality. In the Current Path forecast, Africa is set to miss its targets by 2030:

- At a gross primary enrolment rate of 107%, the continent will achieve only indicator 4.1.1a of this SDG (however, it will fall short of its net enrolment target by 12 percentage points, reminding us of the misleading nature of gross enrolment figures).
- Enrolment rates at secondary level and completion rates for both primary and secondary education will also remain well below the targets.
- Upper secondary graduation rates will fall short of the SDG target by almost 60 percentage points (at 38% with a target of 97%).

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- Gender parity rates will improve but will also fall short of the 2030 targets.

Although getting primary education right remains the top priority, Africa needs to attack all aspects of the educational funnel to ensure that it not only retains students at every level but also increases the progression rate to expand the pool of students at each successive level. This is generally the most cost-effective way to increase general levels of education throughout society and improve skills and potential as part of a comprehensive development strategy. However, African countries often do not take a systematic approach. In a number of countries, a lot of funds and too much attention are spent on improving later education phases (e.g. upper secondary or even tertiary) without prioritising throughput at primary and lower secondary school levels.

In summary, the gap in adult educational attainment between Africa and other developing regions is forecast to widen, especially at higher levels. By 2030, citizens in South Asia and South America could expect to receive about seven to eight full years of education, respectively, whereas citizens in sub-Saharan Africa will only obtain about six years. The second continental report on the implementation of the African Union Agenda 2063 reveals that the continent fell short of meeting all the targets relating to Goal 2 (on education) of the Agenda with an overall performance score of 44%. The divergence in education between sub-Saharan Africa and other regions is driven by factors that relate to rates of economic growth, the policy to use non-African languages as the medium of instruction and low or skewed government expenditure on education.

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Endnotes

1. A prime example is the event known as the Arab Spring in North Africa in 2010/11, where the protests were generally led by younger, well-educated people, many of whom were unable to find formal-sector jobs in economies stifled by state bureaucracy and corruption. At the time, the 15–24-year cohort had been educated for two years more than those aged 25 and older.

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