

RESEARCH BRIEF:

The Combined Effect of Free and Compulsory Lower Secondary Education on Educational Attainment in Sub-Saharan Africa

About:

This research brief presents key findings from the following article:

Martin A, Sprague A, Raub A, Bose B, Bhuwania P, Kidman R, Heymann J.

[The combined effect of free and compulsory lower secondary education on educational attainment in Sub-Saharan Africa.](#)

International Journal of Educational Development. 113, 103218 (2025).



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Background:

- Greater educational attainment has vast economic, health, and intergenerational benefits, yet major gaps persist in sub-Saharan Africa (SSA).
 - The gaps are particularly marked at the secondary level. Only 38% of children in SSA complete lower secondary, compared to 63% who complete primary
- These low levels of secondary attainment have grave human and economic costs, and are becoming more critical given the growing number of jobs that require digital skills.
- One longstanding debate is whether there should be stronger protections for the right to secondary education in international law. In general, international human rights treaties guarantee that primary education should be free and compulsory, but use weaker language when it comes to the right to secondary education.
- A significant number of low-income countries continue to charge tuition for secondary education and a majority do not make secondary school compulsory.
- Studies across Africa have shown that the introduction of universal primary education, usually making education tuition-free and compulsory, increased educational attainment.
- This is the first multi-national study to look simultaneously at reforms to tuition-free and compulsory lower secondary and to examine the impact of policy change on educational attainment.

Methods:

- Data on the provision of tuition-free and compulsory education was constructed by the WORLD Policy Analysis Center (WORLD) for all African countries with at least two Demographic and Health Surveys (DHS) from 1990 to 2019. This data was combined with information on educational attainment from the DHS, a nationally representative household survey.

- This study used a differences-in-differences approach to compare grades completed and progression to secondary in countries that experienced changes in tuition-free and compulsory education policies (treatment countries) with countries without policy changes (control countries).
- Seven countries were identified as treatment countries that experienced a change in free or compulsory lower secondary education. Treatment countries were Chad, Kenya, Zambia, Liberia, Rwanda, Senegal, Sierra Leone.
- Seven countries were used as comparators without policy changes in the same time period. Control countries were Democratic Republic of Congo, Burkina Faso, Mozambique, Niger, Zimbabwe, Benin, Burundi.

Findings:

- Making lower secondary education compulsory, in addition to tuition-free, had a significantly larger impact on educational attainment compared to providing tuition-free lower secondary alone.
 - Exposure to tuition-free, compulsory lower secondary increased girls' average educational attainment by 1.6 grades, and boys' attainment by 1.4 grades, compared to exposure to only tuition-free education.
 - Girls and boys were also 13.5 and 14 percentage points more likely to complete some secondary compared to their peers in countries that had made lower secondary education free, but not compulsory.
- Making secondary education compulsory in addition to tuition-free had a significantly larger impact for students from low-income settings. Low-income families are more likely to rely on paid or unpaid child labor, making tuition-free policies alone less effective.
- The effect of making secondary education compulsory was larger in urban areas than rural areas. This may be due to lack of implementation and limited access to schools in rural areas or due to rural/urban migration.

Discussion:

- Despite widespread agreement on the importance of increasing educational attainment in SSA, there are still significant gaps as well as debates about effective solutions. This study shows that making lower secondary education compulsory, in addition to tuition-free, led to greater improvements in educational attainment than making lower secondary just tuition-free.
- Guaranteeing free, quality education at the secondary level requires significant investment. A number of countries in SSA have already demonstrated its feasibility. For smaller economies that cannot expand funding for secondary education, global funds have the role and responsibility to address the shortfall. Over time, as countries' economies grow in response to the greater investments in education, countries will be able to cover the full costs.
- There may be other forms of barriers to education, such as uniform or textbook fees, lack of adequate sanitation or transportation, discrimination or sexual harassment in schools, child labor, or early marriage. Future studies should consider how policy approaches to these barriers interact with tuition free and compulsory policies in individual countries.