



UNESCO IICBA

Empowering teachers for all learners to thrive

Study 2024-2

Africa Teachers Reports Series

Educating Girls and Ending Child Marriage in Africa: Investment Case and the Role of Teachers and School Leaders

January 2024

Quentin Wodon, Chata Male, and Adenike Onagoruwa

Conference Edition





In partnership with the African Union







UNESCO – a global leader in education

Education is UNESCO's top priority because it is a basic human right and the foundation for peace and sustainable development. UNESCO is the United Nations' specialized agency for education, providing global and regional leadership to drive progress, strengthening the resilience and capacity of national systems to serve all learners. UNESCO also leads efforts to respond to contemporary global challenges through transformative learning, with special focus on gender equality and Africa across all actions.



The Global Education 2030 Agenda

UNESCO, as the United Nations' specialized agency for education, is entrusted to lead and coordinate the Education 2030 Agenda, which is part of a global movement to eradicate poverty through 17 Sustainable Development Goals by 2030. Education, essential to achieve all of these goals, has its own dedicated Goal 4, which aims to "ensure inclusive and equitable quality education and promote lifelong learning opportunities for all." The Education 2030 Framework for Action provides guidance for the implementation of this ambitious goal and commitments.



The International Institute for Capacity Building in Africa (IICBA), a category 1 UNESCO institute, is based in Addis Ababa. Founded in 1999, it aims to inform education policies, strengthen teacher professional development, and build capacity in education institutions, including Ministries of Education. To provide innovative solutions and scale-up efforts to improve educational outcomes in Africa, IICBA works with a range of partners, including the African Union, UN agencies, other international organizations, development banks, bilateral donors, foundations, teacher organizations, school networks, and non-profits.

This publication was funded by the European Union under its Regional Teachers Initiative for Africa. The publication's contents are the sole responsibility of the authors and do not necessarily reflect the views of the European Union.

Published in 2024 by UNESCO IICBA, Addis Ababa, Ethiopia

UNESCO is an open access publisher and therefore uses CCBYSA. Please consult our Terms of use | UNESCO.

UNESCO IICBA STUDY 2024-2 A STUDY PART OF THE AFRICA TEACHERS REPORTS SERIES

EDUCATING GIRLS AND ENDING CHILD MARRIAGE IN AFRICA: INVESTMENT CASE AND THE ROLE OF TEACHERS AND SCHOOL LEADERS

Quentin Wodon, Chata Male, and Adenike Onagoruwa

January 2024

CONFERENCE EDITION

Abstract

In sub-Saharan Africa, just over two-thirds of girls complete their primary education and four in ten complete lower secondary education. More needs to be done to improve educational opportunities for girls, which would help end child marriage and boost countries' economic development. The first part of this study updates and expands for a much larger number of countries a previous investment case on the benefits of educating girls and ending child marriage. The second part looks at the role of teachers and school leaders in improving learning outcomes and educational attainment for girls. While the literature emphasizes economic incentives for adolescent girls to remain in school, it is also important to note that: (1) Lack of learning is a key factor leading to drop-out in primary and lower-secondary school; (2) Teachers and school leaders are key to improving learning, but new approaches are needed for pedagogy in the classroom and for training teachers and school leaders; and (3) Nationally, professional standards and competencies for teachers and school leaders are also required. These three simple facts call for investing in teachers and school leaders, especially women, to improve education for girls and end child marriage.

Keywords: Girls' education; Child marriage; Africa; Teachers; School leaders; Gender inequality.

ACKNOWLEDGMENTS AND DISCLAIMER

This study is the first in a new series – the Africa Teachers Reports Series – launched by UNESCO's International Institute for Capacity Building in Africa (<u>UNESCO IICBA</u>) in 2024 for the African Union's Year of Education. The study was prepared by a team at IICBA in partnership with the African Union's International Centre for Girls' and Women's Education in Africa (<u>AU/CIEFFA</u>). Financial support for this study was provided by the European Union under its <u>Regional Teachers Initiative for Africa</u>.

Part 1 of the study updates and expands for a much larger number of countries a 2018 report by the same lead authors then at the World Bank. That report was also co-sponsored by AU/CIEFFA. Part 2 of the study provides analysis on the role of teachers and school leaders in improving educational opportunities for girls and ending child marriage. The authors are very grateful to Simone Yankey-Ouattara, Acting Coordinator of AU/CIEFFA, for the collaboration that led to the publication of this report. The authors are also grateful to Martha Muhwezi (Executive Director, FAWE), Steve Nwokeocha (Executive Director, AFTRA), Justine Sass (Chief, Section of Education for Inclusion and Gender Equality, UNESCO), Dennis Sinyolo (Director, Education International Africa), and Carlos Vargas (Chief, Section of Teacher Development, UNESCO) for peer review comments and discussions related to the report as well as to IICBA colleagues (Eyerusalem Azmeraw, Maryann Dreas, Temechegn Engida, Njora Hungi, Victorias Kisaakye, Yvonne Mboya, Gabriel Mekbib, Kasumi Moritani, Saliou Sal, and Hundessa Tafesse) for feedback and insights. The authors thank Wouter van Damme and Judit Barna at the European Union for financial support for IICBA's work on teacher professional development including this report, and the whole Teacher Development team at UNESCO HQ for longstanding collaborations that have contributed to this report, including under the new European Union's Regional Teachers Initiative for Africa.

The conference version of this report was released at an event in Brussels at the European Union on January 31, 2024. The event was organized under the Belgian Presidency of the Council of the European Union. It seeks to address the pivotal role of improving educational attainment and learning for girls as a human right but also as a catalyzer for the reduction of poverty, improvements in health outcomes, economic growth and the creation of welfare and wellbeing for societies. With 2024 earmarked as the African Union's year of education, the event aimed to foster dialogue, share research, and drive actionable outcomes. The event also served as an opportunity to showcase the European Union's Global Gateway Flagship Regional Teachers Initiative for Africa, a €100 million investment from the European Union budget with contributions from France, Finland, and Belgium. The authors are grateful to Erwin De Wandel, Sina Asghari, and the Belgian Presidency of the European Union for organizing the event as well as a presentation of findings from this study to the European Union's Committee on Development.

<u>Disclaimer:</u> This publication was funded by the European Union under its Regional Teachers Initiative for Africa and launched at an event sponsored by the Belgian Presidency of the European Union. The publication's contents are the sole responsibility of the authors and do not necessarily reflect the views of the European Union, nor need they reflect the views of UNESCO, the UNESCO International Institute for Capacity Building in Africa, the African Union, or the Belgian Presidency of the European Union.

<u>Suggested Citation:</u> Wodon, Q., C. Male, and A. Onagoruwa. 2024. *Educating Girls and Ending Child Marriage in Africa: Investment Case and the Role of Teachers and School Leaders*. IICBA Study 2024-2. Addis Ababa, Ethiopia: UNESCO International Institute for Capacity Building in Africa.

BACKGROUND TO THE AFRICA TEACHERS REPORTS SERIES

With support from the European Union under its Regional Teachers Initiative for Africa, the UNESCO International Institute for Capacity Building in Africa (UNESCO IICBA) is launching a new Africa Teachers Reports Series with this first report on *Educating Girls and Ending Child Marriage in Africa: Investment Case and the Role of Teachers and School Leaders*. Reports in the Series will be published as IICBA Studies and will be freely available for download on IICBA's website. The reports will have two main objectives: (1) Analyzing issues affecting teachers, school leaders, and learners in Africa; and (2) Exploring the role of teachers and school leaders in improving educational outcomes for learners on the continent.

The reports in the Series will be evidence-based and relatively short (target for core text at 40 to 50 pages plus annexes and endnotes). They will focus on issues of interest to the African Union and its Member States. The aim will be to publish one report per year, although in the first year (2024) more reports may be published in the context of the declaration by the African Union of 2024 as the Year of Education. The specific theme for the year adopted by the African Union is "Educate an African fit for the 21st Century: Building resilient education systems for increased access to inclusive, lifelong, quality, and relevant learning in Africa." UNESCO IICBA intends to work closely with the African Union and other African organizations in preparing and disseminating reports in this Series, including through the Teacher Development Cluster for which IICBA serves as a secretariat under the African Union's Continental Education Strategy for Africa 2016-25. In preparing the reports, IICBA will also aim to consult and collaborate with other UNESCO teams and Institutes, national and international agencies, civil society organizations, and the International Task Force on Teachers for Education 2030 hosted by UNESCO, also known as the Teacher Task Force.

The International Institute for Capacity Building in Africa (IICBA), a category 1 UNESCO institute, is based in Addis Ababa, Ethiopia. It informs education policies, strengthens teacher professional development, and builds capacity in education institutions, including Ministries of Education. Founded in 1999, IICBA is celebrating its 25th anniversary in 2024, which is the African Union's Year of Education. To provide innovative solutions and scale-up efforts to improve educational outcomes in Africa, IICBA works with a range of partners, including the African Union, UN agencies, other international organizations, development banks, bilateral donors, foundations, teacher organizations, school networks, and non-profits. In 2023, IICBA adopted a new strategic plan with the aim of strengthening research and policy dialogue to inform capacity building. The launch of the Africa Teachers Reports Series is part of that effort.

This first report in the Series is co-published with the African Union's International Centre for Girls' and Women's Education in Africa (AU/CIEFFA), a specialized institution of the African Union since 2004. AU/CIEFFA has been established under the Department of Education, Science, Technology, and Innovation at the African Union Commission to coordinate the promotion of girls and women's education in Africa, with a view of achieving their economic, social, and cultural empowerment. The Centre works closely with AU Member States and government, civil society, and international partners to implement its programs and activities and maintains a specific working relationship with UNESCO to ensure a strong partnership in the implementation of its programs. The Centre is based in Ouagadougou, Burkina Faso.

TABLE OF CONTENTS

Executive Summary	٧
Introduction	1
Part I: Investment Case	
Introduction	3
Domain 1: Earnings and Standards of Living	5
Domain 2: Child Marriage and Early Childbearing	ϵ
Domain 3: Fertility and Population Growth	7
Domain 4: Health, Nutrition, and Well-being	11
Domain 5: Women's Agency and Decision-making	15
Domain 6: Social Capital and Institutions	17
Economic Analysis	18
Summary	19
Part II: Role of Teachers and School Leaders	
Introduction	21
Focus on West Africa	23
Step 1: Understanding How Lack of Learning in School Leads to Drop-out	24
Step 2: Supporting and Empowering Teachers and School Leaders, Including Women	29
Step 3: Strengthening National Professional Standards and Competencies	41
Appendices	
Appendix 1: Africa Educates Her Campaign	47
Appendix 2: Data and Methodology	48
Appendix 3: Review of Interventions to Delay Marriages and Pregnancies in the 2018 Report	50

EXECUTIVE SUMMARY

While nine in ten girls complete their primary education and over three in four complete their lower secondary education globally, the proportions remain much lower in sub-Saharan Africa, where just over two-thirds of girls (69 percent versus 73 percent for boys) complete their primary education and four in ten (43 percent versus 46 percent for boys) complete lower secondary education according to the latest available data from the UNESCO Institute for Statistics. More needs to be done to improve educational opportunities for girls in Africa, which would help end child marriage and boost countries' economic development. Gender imbalances in education and beyond (including in occupational choice and more broadly agency) result from deep-seated biases and discrimination against women, which percolate to education. It is therefore essential to reduce inequality both in and through education, acknowledging that education has a key role to play in reducing broader gender inequalities in societies. The first part of this study updates and expands for a much larger number of countries a previous investment case on the benefits of educating girls and ending child marriage (Wodon et al., 2018a), while the second part looks at the role of teachers and school leaders in improving learning outcomes and educational attainment for girls. Topics such as the importance of having more female teachers and school leaders, and adopting gender-sensitive approaches in the classroom, including gender-responsive pedagogy, are discussed. The study was prepared by a team at UNESCO's International Institute for Capacity Building in Africa (IICBA) with the African Union's International Centre for Girls' and Women's Education in Africa (AU/CIEFFA).

Part I: Investment Case

The first part of the study looks at the benefits of educating girls and ending child marriage, building on Wodon et al. (2018a), a study also in collaboration with AU/CIEFFAⁱ. Educating girls could have large positive impacts on many development outcomes, including (1) earnings and standards of living; (2) child marriage and early childbearing; (3) fertility and population growth; (4) health, nutrition, and well-being; (5) agency and decision-making; and (6) social capital and institutions. Key findings for this study based on a much larger set of African countries, household surveys, and other data include the following:

- Gains in earnings are substantial especially with a secondary education. Women with primary
 education earn more than those with no education, but women with secondary education earn
 more than twice as much. The gains with tertiary education are even larger.
- Each additional year of secondary education could reduce the risk for girls of marrying as a child and having a child before 18. Universal secondary education could virtually end child marriage and reduce early childbearing by up to three-fourths. By contrast, primary education in most countries does not lead to large reductions in child marriage and early childbearing.
- Universal secondary education and ending child marriage could reduce total fertility (the number of children women have over their lifetime) nationally by a third on average across countries, reducing population growth and enabling countries to benefit from the demographic dividend.
- Universal secondary education could also have health benefits, including (i) increasing women's knowledge of HIV/AIDS by one-tenth; (ii) increasing women's decision-making for their own healthcare by a fourth; (iii) reducing under-five mortality by a third; and (iv) reducing under-five stunting by a fifth. Other benefits include among others a reduction in intimate partner violence.
- Universal secondary education could also increase women's decision-making in the household by one-fifth and the likelihood that children would be registered at birth by over a fourth.
- While primary schooling is necessary, it is not sufficient. For most indicators or domains of
 potential impacts, gains associated with educational attainment tend to be substantial only with
 secondary education or higher. Secondary education is also needed to help end child marriage.

- Gender inequality, starting with inequality in and through education, is massive, with women
 accounting for only a third of lifetime labor market earnings in sub-Saharan Africa. The gap
 between men and women in human capital wealth (the value today of the future earnings of the
 labor force) is estimated at US\$ 4.0 trillion in 2018 values. Reducing gender inequality, including
 through education, could dramatically improve countries' development prospects.
- Overall, while educating girls and ending child marriage is the right thing to do, it is also a smart
 economic investment. This statement is not new, but the contribution of the first part of the study
 is to provide estimates of the benefits of educating and ending child marriage in Africa for a much
 larger number of countries and with more recent data than done previously.

Part II: Role of Teachers and School Leaders

The second part of the study focuses on the role of teachers and school leaders in educating girls and ending child marriage. The analysis follows a simple argument. To improve girls' education and end child marriage, the literature tends to emphasize economic incentives for adolescent girls to remain in school. This is needed, but (1) Lack of foundational learning is a key factor leading to drop-out in primary and lower-secondary school; (2) Teachers and school leaders are key to improving foundational learning, but new approaches are needed for pedagogy in the classroom and for training teachers and school leaders; and (3) Nationally, professional standards and competencies for teachers and school leaders are also required. These three steps in the argument call for investing in teachers and school leaders, especially women, to educate girls and end child marriage. Targeted interventions for adolescent girls are needed, but they often reach only a small share of girls still in school at that age; by contrast, improving foundational learning would benefit a larger share of girls (and boys) and could also make sense from a cost-benefit point of view. Part II provides empirical analysis to test the validity of this argument focusing on West Africa, a region with low educational attainment and high rates of child marriage, although findings should also be relevant for other regions. Key findings are as follows:

- According to parental responses to household surveys, lack of learning in school for their children
 accounts for over 40 percent of girls and boys dropping out of primary school (data for 10
 francophone countries). It also accounts for more than a third of students dropping out at the
 lower secondary level. Improving learning could therefore increase educational attainment
 substantially for girls and boys alike.
- To improve learning, reviews from impact evaluations and analysis of student assessment data suggest that teachers and school leaders are key. Yet new approaches are needed for professional development, including through structured pedagogy and training emphasizing practice. Teachers must also be better educated: household surveys for 10 francophone countries suggest that only one-third of teachers in primary schools have a post-secondary diploma.
- Female teachers and especially school leaders improve student learning according to PASEC and other data. Yet less than a fifth of teachers at the secondary level are women in many countries.
 The proportion of female school leaders is also low. Better opportunities must be given to women teachers and school leaders, which would bring additional benefits as women often remain in teaching for a longer time.
- Better professional standards and competencies frameworks are also needed for teachers and school leaders, including to make the profession more attractive and gender-sensitive. Many countries have not yet treated teaching as a career and lack clear definitions of competencies needed at different levels. Guidance for Member States is available from the African Union to strengthen the profession.

 Making the teaching profession more attractive may require better wages and benefits in some (but not all) countries, especially for women who often lag behind men in pay. But programs to increase teacher job satisfaction matter too. This includes mental health and psycho-social support for teachers, especially in contexts of emergencies. Teachers must also be trained in gender-responsive pedagogy for schools to be more welcoming for girls and to end gender-based violence.

Conclusion

Investing in teachers and school leaders is key to promoting educational opportunities for girls and ending child marriage, thereby also reducing gender inequality in and through education. Low educational attainment for girls and child marriage are profoundly detrimental for girls, but also for their families, communities, and societies. Interventions targeting adolescent girls are needed, but so are investments in teachers and school leaders to end the learning crisis that leads to drop-outs, resulting in low educational attainment, a higher prevalence of child marriage, and higher risks of early childbearing for girls. Increasing investments in girls' education yields large economic benefits apart from being the right thing to do. This requires interventions for Adolescent girls, but it should also start with enhancing foundational learning through better teaching and school leadership.

INTRODUCTION

Despite substantial progress over the last two decades, girls in Africa still have on average lower levels of educational attainment than boys in many countries. Globally, according to data for 2022 from the UNESCO Institute for Statistics, nine in ten girls complete their primary education, and over three in four complete their lower secondary education. The proportions are much lower in Africa, and especially in sub-Saharan Africa where despite progress, just over two-thirds of girls (69 percent versus 73 percent for boys) complete their primary education, and only four in ten (43 percent versus 46 percent for boys) complete lower secondary schoolⁱⁱ. At higher levels of schooling, gender ratios or proportional differences in educational outcomes between boys or men and girls or women tend to increase further. For example, only 8 percent of young women are enrolled in tertiary education in sub-Saharan Africa versus 10 percent for young men, suggesting that young men remain about one-fourth more likely to go to tertiary education than young women. There are also sharp differences in the educational tracks taken by girls/women and boys/men, with girls/women underrepresented in STEM fields associated with higher earnings. This also contributes to gender inequality in earnings in adulthood, which remains massive.

At current rates of progress, most African countries will not achieve the targets adopted under Agenda 2030, with major consequences for Africa's economic and social development. The fourth Sustainable Development Goal is to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. The first target under this goal is to ensure that by 2030 all girls and boys complete free, equitable, and quality primary and secondary education leading to relevant and effective learning outcomes. At current rates of progress, most African countries are unlikely to achieve this target. More needs to be done to improve educational attainment and learning for all children, that is for boys and girls alike. However, a special focus needs to be placed on girls, not only because they often continue to lag behind boys in Africa, but also because the consequences for them of dropping out of school are especially severe as girls dropping out of school face much higher risks of child marriage (defined as a girl entering into a formal or informal union before the age of 18) and early childbearing (defined as having a first child before the age of 18), as recognized among others by the African Union's "Africa Educates Her" campaign (see Appendix 1). Furthermore, as documented by the World Development Report 2018 (World Bank, 2018), when it comes to learning, while girls may outperform boys in reading in the early grades, they may score lower in mathematics and science tests in many countries (although this may be changing at higher levels of schoolingiii). Together with occupational segregation and social norms that discourage women from taking full advantage of labor market opportunities, this again leads to large gaps in earnings and human capital wealth between men and women (Wodon et al., 2020; Wodon, 2022a).

This report has two objectives: (1) to update and expand a previous investment case for educating girls and ending child marriage and (2) to explore the crucial role of teachers and school leaders in doing so. Low educational attainment for girls and child marriage both have large negative impacts on a wide range of development outcomes. This is the case not only for girls themselves, but also for their children, families, communities, and societies. The first objective of this study is to update and expand the analysis of these potential impacts, building on previous work (Wodon et al., 2017, 2018a, 2018b). The second objective is to make a simple yet important argument about the role of teachers and school leaders in girls' education. To improve girls' education and end child marriage, the literature tends to emphasize economic incentives for adolescent girls to remain in school at the upper secondary level. This is needed, but (1) Lack of learning in school is a key factor leading to drop-out in primary and lower-secondary school; (2) Teachers and school leaders are key to improving foundational learning, but new approaches are needed for training; and (3) Nationally, professional standards and competencies for teachers and school

leaders are also needed. Targeted interventions for adolescent girls are important, but they often reach only a small share of girls, those still in school at that age; by contrast, improving foundational learning would benefit a larger share of girls (and boys) and could be more beneficial including from a cost-benefit point of view. Overall, the study and its main argument make a case for investing in teachers and school leaders, especially women, to educate girls and end child marriage (on tracking progress and action in countries towards educating girls, ending child marriage, and reducing gender inequality, see Box 1).

Box 1: Tracking Action to Educate Girls, End Child Marriage, and Advance Gender Equality

A consortium of partners co-led by UNESCO and UNICEF has initiated a mechanism that allows for tracking of efforts and building accountability towards educating girls and ending child marriage. The Global Platform for Gender Equality and Girls' and Women's Empowerment in and through Education's Accountability Dashboard, launched in October 2023, monitors progress against key indicators on gendertransformative education, drawn from the Call to Action on Advancing Gender Equality in and through Education and country commitments made at the 2022 Transforming Education Summit (TES). Hosted by the Population's Council's Evidence for Gender and Education Resource (EGER) website, the Dashboard covers 193 countries, and monitors: 1) Gender-transformative education sector plans, budgets, policies and data systems; 2) Gender parity and non-discrimination; 3) Gender-transformative curricula, teaching/learning materials and pedagogies; 4) Gender-transformative and inclusive learning spaces; 5) Cross-sectoral collaboration and meaningful integration of young people in decision-making; and 6) Investments that target the most marginalized learners. Country profiles include data on various indicators addressing girls' education, child marriage, and early childbearing, along with legal frameworks and programs supporting action. The Dashboard enables leaders and decision-makers to demonstrate the proactive and transformative measures they are taking to address the key barriers to gender equality in and through education, focusing on the most marginalized. For more details on the Dashboard, go to: www.egeresource.org/dashboard. On UNESCO' work on girls' education, see among others the Global Education Monitoring Report 2020 on inclusion in education (UNESCO, 2020), various training guides and tools (UNESCO 2015, 2021a, 2021b), and syntheses of operational work (UNESCO, 2023a, 2023b).

PART I: INVESTMENT CASE

INTRODUCTION

The first part of this study updates a previous investment case for educating girls and ending child marriage. The analysis updates a 2018 report on Africa published at the World Bank and co-sponsored by AU/CIEFFA (Wodon et al., 2018a; for a global analysis, see Wodon et al., 2018b) iv. In comparison to previous work, the analysis covers a larger number of countries (27 surveys for 22 African countries in this report for the core analysis using Demographic and Health Surveys or DHS versus 13 countries and surveys in the previous report). The framework that guides the analysis for the investment case is however the same as in previous work and is provided in Figure 1. Six domains of potential benefits from improving educational opportunities for girls are considered: (1) Earnings and standards of living; (2) Child marriage and early childbearing; (3) Fertility and population growth; (4) Health, nutrition, and well-being; (5) Agency and decision-making; and (6) Social capital and institutions. The potential impacts of low educational attainment for girls and child marriage are estimated using regression analysis and a wide range of datasets (see Appendix 2 on data and methodology). The various domains of potential impacts are related to each other, but they are considered sequentially for simplicity and because they are based on different indicators (see Box 2). In the 2018 report, more than 50 different indicators or outcomes of interest were used to assess the potential impacts of low educational attainment for girls and child marriage. For this report, the analysis has been updated and expanded for most indicators, with a focus on indicators from DHS surveys that are directly related to the Sustainable Development Goals.

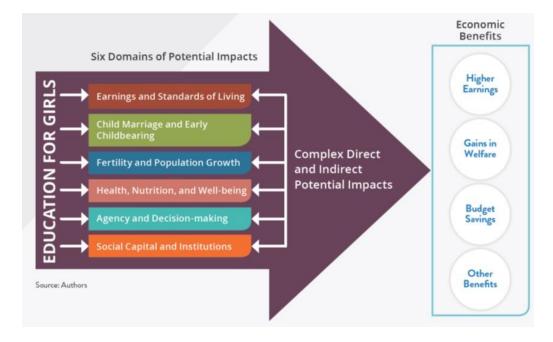


Figure 1: Conceptual Framework for the Investment Case

Source: Adapted from Wodon et al. (2018a, 2018b).

Conceptually, at least four main types of economic benefits or costs can be considered. As shown in Figure 1, these are (i) Higher earnings; (ii) Higher welfare due to lower population growth; (iii) Budget savings (or costs); and (iv) Other benefits, including individual feelings and perceptions. Estimates are

provided only for selected costs, with a focus on higher earnings for women in adulthood, and higher welfare due to lower population growth and thus higher income per capita, although analysis is also conducted for human capital wealth, as will be explained in that section. On budget savings and costs, additional work would be required to estimate benefits, however the study highlights that while ending child marriage and providing better education opportunities for girls (and boys) would have a cost, it could also lead in certain areas to budget savings, among others for the provision of basic services thanks to lower population growth. In Figure 1, the framework is presented in terms of the benefits of girls' education, but the approach also holds for the benefits of ending child marriage^{vi}.

Box 2: Interdependence between Domains of Impacts

In practice, the various domains identified in Figure 1 are interdependent. To illustrate how this is the case, consider a simple life cycle approach, whereby stages in the life of girls are considered. Social norms may contribute to disadvantage for girls early on, but they emerge in full force in adolescence when in many contexts, girls may have to get married as children if they drop out of school. This contributes to early childbearing and higher total fertility over their lifetime. In turn, having many children may affect women's ability to participate in the labor market in adulthood, and low educational attainment reduces their earnings when working. This may affect decision-making ability within the household, voice, and social capital throughout women's life. Finally, early childbearing, high fertility rate, and income losses also have intergenerational effects, contributing among others to higher risks of child mortality and malnutrition for children of poorly educated mothers. The challenges and obstacles faced by girls and women due to low educational attainment and child marriage as well as early childbearing are multifaceted. They reinforce each other, leading to a diminished ability to break away from patterns of disadvantages. In the 2018 report as well as in this study, the focus is on quantitative analysis to estimate the potential impacts and cost of low educational attainment for girls and child marriage. In some cases, interdependence between domains is explicitly considered. This is the case when considering the potential combined impacts of both low educational attainment and child marriage on various other outcomes. But there are limits to the extent to which the interdependence between domains can be considered without making the quantitative analysis overly complex.

Estimations are based on regression analysis and subject to several caveats. Analysis of the potential impacts of low educational attainment for girls and child marriage on development outcomes is based on regression analysis and is presented according to the six domains highlighted in Figure 1. A few caveats must however be emphasized. First, estimates from observational data may not permit establishing causal relationships. Thus, when referring to potential 'impacts', the analysis should be taken as only suggestive of what could be achieved with higher educational attainment for girls, reduced risks of marrying early, and related policy changes vii. Second, simulations obtained from the estimates of potential impacts do not account for broader effects on the economy arising from an expansion in the number of better-educated girls or women and the elimination of child marriage. The latter could for example happen if the economy fails to grow at a rate that can generate sufficient jobs to absorb the more educated women entering the labor market, and/or if the educational expansion were to negatively affect education quality due to the lack of adequate investments in inputs required to ensure learning. Thus, estimates only provide orders of magnitude of potential impacts, not precise or definitive values of ultimate effects. A third caveat is that the analysis in the first part of the study focuses mostly on the potential impacts of low educational attainment for girls and child marriage, not lack of learning. This focus is driven by data limitations. Apart from improving educational attainment and ending child marriage, there is an urgent need to improve learning (World Bank, 2018; World Bank et al., 2022). Insufficient learning is central to the second part of the report which discusses the role of teachers in improving educational opportunities for girls, noting that lack of learning is a key factor leading girls (and boys) to drop out of school.

DOMAIN 1: EARNINGS AND STANDARDS OF LIVING

Educational attainment has large positive effects on women's earnings in adulthood, especially beyond primary education. The 2018 report noted that the benefits from work go beyond earnings, but also that earnings are crucial for standards of living. Estimates of the potential impact of educational attainment on earnings were based on household and labor surveys (see Appendix 2)viii. Models with years of education as well as educational attainment in levels were considered but the models with education by levels were more instructive to show the importance of education beyond the primary level^{ix}. To test for robustness, models were estimated for men and women together, and only for women. Models were also estimated with and without additional controls apart from educational attainment and experience^x. Several findings emerged from the analysis. First, women with primary education (partial or completed) earned only slightly more than those with no education at all depending on the model used for the estimations. By contrast, women with secondary education could expect to make more than twice as much, and women with tertiary education almost five times as much as those with no education. Secondary and tertiary education were also associated with higher labor force participation, and especially full-time work. Finally, women with secondary and tertiary education reported higher standards of living compared to those with primary education or lower. For example, data from the Gallup World Poll suggested that women with secondary education were more likely to state that they had enough money to buy food versus women with primary education or less. As for child marriage, estimates suggested that women marrying early had earnings eight percent lower across 12 countries in comparison to what they could have earned if they had married after 18. This led to a loss in national earnings of about one percentxi. On the other hand, child marriage was not found by itself to affect labor force participation substantially^{xii}. The study did not provide estimates of the potential impact of low educational attainment and child marriage on poverty but noted they were likely large^{xiii}.

This report confirms previous findings, with additional information on the importance of literacy apart from primary education, albeit with higher returns to primary education in some countries. First, on literacy, additional estimations based on the 2018 data suggest that the gains associated with primary education relate to literacy, as opposed to primary education per se. Second, as part of a focus on West Africa in the second part of this report, wage regressions were estimated for nine countries that participated in the 2018-19 *Enquête harmonisée sur les conditions de vie des ménages*^{xiv} (Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, and Togo) and three East African countries (Ethiopia, Kenya, and Nigeria). As shown in Table 1, the order of magnitude of the gains from educational attainment for women's earnings is similar to that reported in the 2018 study at the secondary and tertiary level, although gains are higher at the primary level versus no education. Still, the evidence points to benefits from secondary or higher education much larger, as expected, than for primary education.

Table 1: Potential Impact of Educational Attainment on Earnings for Women (Gain in Earnings, %)

Women only sample	Education levels				
	Primary (vs. no education)	Secondary (vs. no education)	Tertiary (vs. no education)		
Previous study, 38 countries					
No additional controls	0.303	1.655	5.677		
With location and sectoral controls	0.188	1.309	4.488		
New estimates, 9 francophone countries					
No additional controls	1.220	2.359	5.100		
With location and sectoral controls	1.080	1.874	3.713		
New estimates, 3 anglophone countries					
No additional controls	1.185	2.475	5.658		
With location and sectoral controls	1.232	2.573	5.906		

Source: Authors and Wodon et al. (2018a) for the previous study which relied on data from the World Bank's I2D2 database. The new estimates are based on data for 9 francophone countries (Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal, Togo) and three anglophone countries (Ethiopia, Kenya, Nigeria).

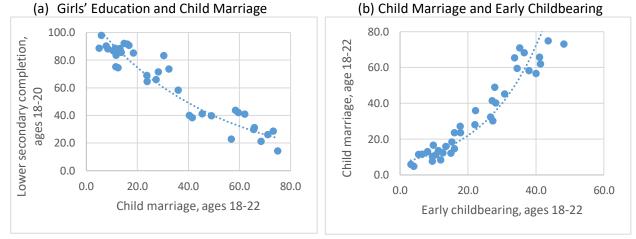
DOMAIN 2: CHILD MARRIAGE AND EARLY CHILDBEARING

There are strong relationships between (i) girls' education and child marriage; (ii) child marriage and early childbearing; and (iii) girls' education and early childbearing. Even if some girls get married after dropping out of school, child marriage is also a factor leading girls to drop out of school (e.g., Field and Ambrus, 2008; Nguyen and Wodon, 2014; see also Malhotra and Elnakib, 2021). Conversely, keeping girls in school helps in reducing child marriage. Other factors also play a role, including gender-based social norms^{xv}, but analysis of DHS data for the 2018 report suggested that across 13 African countries, each additional year of secondary school could reduce the likelihood of marrying as a child by 7.5 percentage points on average. The report included simple statistical decompositions illustrating how once they were married, very few girls were able to remain in school. In addition, the report also documented a strong relationship between child marriage and early childbearing. The report suggested that for 25 countries that account for most instances of child marriage and early childbearing in the world, three in four women (75 percent) who had their first child before the age of 18 probably did so because of child marriage. In addition, more than four in five children (84 percent) born to mothers younger than 18 were probably due to child marriage (see also Wodon et al., 2020). Probably in part because of the link between education and child marriage, the econometric analysis also suggested that each additional year of secondary education could reduce the risk of early childbearing by 6.6 percentage points. These results were not considered surprising as reviews of the literature suggested that interventions to promote education were among the most likely to delay marriage and childbearing (Botea et al., 2017; see also more recently the evidence collated in CRANK, 2023). These interventions tend to work better than interventions focusing only on safe spaces or aiming to empower adolescent girls economically. The report finally noted that while ending child marriage and early childbearing would not be sufficient to ensure that all girls would complete secondary school, ensuring that girls would complete secondary school could virtually end most child marriages and substantially reduce early childbearing.

Estimates for this report are similar, but to suggest how close relationships between girls' education, child marriage, and early childbearing tend to be, simple visuals may be most telling. Consider Figure 2 based on state-level data for Nigeria from the latest available DHS for 2018. The scatter plot on the left shows that the negative relationship across states between the prevalence of child marriage and the completion of lower secondary education for girls is strong^{xvi}. The trendline suggests that differences in the prevalence of child marriage may account for a large share of differences between states in lower

secondary education completion rates for girls (R² value for the trendline close to 0.9). This does not imply causality, but it suggests that child marriage affects educational attainment for girls, while keeping girls in schools could reduce the prevalence of child marriage. Similarly, the scatter plot on the right shows a positive relationship across states between the prevalence of child marriage and that of early childbearing. The trendline again suggests that differences between states in the prevalence of child marriage may again account for much of the differences between states in early childbearing (R² above 0.8). This does not imply causality, but when accounting for other available evidence, causality may well be at work.

Figure 2: Relationships between Girls' Education, Child Marriage, and Early Childbearing, Nigeria (%)



Source: Male and Wodon (2023) using the 2018 Nigeria DHS. Note: each dot represents a state.

DOMAIN 3: FERTILITY AND POPULATION GROWTH

The potential impact of educational attainment on total fertility is large. Women who drop out of school prematurely are more likely to marry as children. Low educational attainment and child marriage may both lead women to have children earlier in life, and more children over their lifetime. The potential impact on total fertility – the number of children that women have towards the end of their reproductive age, is large^{xvii}. Estimates for the 2018 report were based on Poisson regressions with DHS data for 13 African countries (model adapted from Onagoruwa and Wodon, 2018)^{xviii}. Estimates in Table 2 use the same approach but with a larger set of surveys and countries. Three sets of information are provided:

- Number of statistically significant effects: In the Table, the second column indicates the number of surveys for which a given level of educational attainment is associated in the regression analysis with a statistically significant reduction in total fertility, with the next column indicated the share of surveys for which statistically significant effects are observed. Potential effects are measured against women with no education or less than primary completed. For example, for 11 out of 27 surveys, a completed primary education is associated with a statistically significant reduction in total fertility versus no education. For secondary education or higher, the association is much more systematic as most effects are statistically significant (at least at the 10 percent level).
- Magnitude of the effects that are statistically significant: The next column provides the average potential impact or effects for countries where the effect is statistically significant. For example, a completed secondary education is associated with a reduction in total fertility in 24 out of 27 surveys with on average a reduction in fertility at 26.5 percent from the base when effects are statistically significant. These results are visualized in Figure 3 by educational level.

• National simulations: The last two columns provide results nationally under two simulations or assumptions. In the first, for countries where primary education is found to have a potential impact on total fertility, all women who did not complete their primary education are assumed to have that level of schooling (universal primary scenario). In the second simulation, all women are assumed to have their secondary education completed (universal secondary simulation). Under universal primary, there could be a reduction in the average number of children of 0.57 over the women's lifetime. This is a reduction from current levels of fertility of 9.4 percent on average. Under universal secondary education, the reduction in total fertility nationally is estimated at 1.50 children per woman on average in the countries where potential impacts are statistically significant, a reduction from the base of 25.6 percent.

Table 2: Potential Impact of Educational Attainment on Women's Total Fertility and Simulations

	Statistic	ally Significant Pot	National Simulated Potential Impacts				
	Impacts versus Less than Primary Completed			Universal Primary	Universal Secondary		
	Number of	Share of	Average	Absolute	Proportional change		
	Countries	countries (%)	Impact	Reduction	from base (%)		
Primary completed	11	41%	-11.5	0.57	9.4		
Some secondary	21	78%	-16.1				
Secondary completed	24	89%	-26.5	1.50	25.6		
Higher education	27	100%	-33.9				

Source: Authors. Regression analysis based on data from Demographic and Health Surveys.

Note: Data for 27 surveys. Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

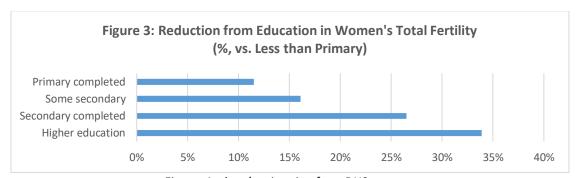


Figure: Authors' estimation from DHS surveys.

Note: Average estimates for countries with statistically significant effects.

The relationship between child marriage and total fertility is also strong. Table 3 provides only the direct potential impacts of educational attainment on lifetime fertility. For girls completing their secondary education, we should also include the indirect potential impacts that could result through a virtual elimination of child marriage. These indirect potential impacts at the margin (controlling for other factors affecting total fertility including educational attainment) are shown in Table 3 according to the age at first marriage. For example, marrying at age 13 instead of after age 18 is associated, in all but one country, with a statistically significant increase in total fertility, with the average potential impact across countries estimated at 25.0 percent more children over a woman's lifetime. If child marriage were ended, which could virtually be the case with universal secondary education, for all women nationally, there could be a reduction in total fertility of 0.54 child per woman or 9.2 percent from the base on average. This reduction would be on top of the potential impact of educational attainment mentioned earlier.

Table 3: Potential Impact of Child Marriage on Women's Total Fertility and Simulations

		Statistically Significant Potential Impacts versus Marrying at 18+ Number of Share of Average			National Simulated Potential Impacts Elimination of Child Marriage		
	Number of				Proportional change		
	Countries	countries (%)	Impact	Absolute Reduction	from base (%)		
Marrying at 12	26	96%	25.0				
Marrying at 13	26	96%	26.8				
Marrying at 14	27	100%	25.0	Combined effect:	Combined effect:		
Marrying at 15	27	100%	21.8	0.54	9.2		
Marrying at 16	27	100%	20.8				
Marrying at 17	27	100%	17.6				

Source: Authors. Regression analysis based on data from Demographic and Health Surveys.

Note: Data for 27 surveys. Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

Part of the potential effect of educational attainment on total fertility may come from the use of modern contraceptive methods. This is because such use tends to increase with higher educational attainment. To measure the potential effect of educational attainment on modern contraceptive use, probit regressions are used with DHS data (estimates for 24 surveys). As shown in Table 4, marginal effects are statistically significant for about half of the countries, depending on the level of education considered. When potential effects are statistically significant, they are much larger for secondary than for primary education. As for total fertility, the Table provides estimates of simulated potential impacts nationally both in absolute and percentage terms if universal primary or secondary education were achieved. Under universal secondary education, the increase in modern contraception use nationally is estimated at 6.3 percent on average for countries where potential impacts are statistically significant. This would be an increase from the base in modern contraceptive use of 32.9 percent in those countries (the baseline estimates of the share of women using modern contraceptives tend to be low in many countries, hence even a limited absolute increase results in a substantial increase in percentage terms from the base).

Table 4: Potential Impact of Educational Attainment on Women's Contraceptive Use and Simulations

	Statistica	ally Significant Pot	ential	National Simulated Potential Impacts	
	Impacts versus	Less than Primar	y Completed	Universal Primary	Universal Secondary
	Number of	Number of Share of Average			Proportional change
	Countries	countries (%)	Impact	Reduction	from base (%)
Primary completed	5	21%	3.4	1.24	4.6
Some secondary	16	67%	4.6		
Secondary completed	10	42%	7.1	6.26	32.9
Higher education	12	50%	7.6		

Source: Authors. Regression analysis based on data from Demographic and Health Surveys.

Note: Data for 24 surveys. Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

The association between child marriage and the use of modern contraceptive methods is weaker than for educational attainment. Recall again that when achieving universal secondary education, child marriage could be drastically reduced, if not eliminated. This could lead to additional potential effects, but in the case of modern contraceptive use, the direction of these potential effects is not clear a priori. Marrying early may reduce contraceptive use if women are not able to rely on contraception in their household (if a girl is unable to refuse marriage at an early age due to social norms, she is not likely also to insist on contraceptive use with her partner). There may however also be cases where child marriage may be associated with an increase in contraceptive use later in life, presumably because when women

have reached their desired fertility (which may be earlier if they marry early), they may want to rely on contraception more. As shown in Table 5, while both potential effects are observed at the country level, across countries child marriage is associated with a reduction in contraceptive use, at least when girls marry very early. Overall, the estimates suggest that ending child marriage could result in a small increase in contraceptive use across countries. These potential effects are small in comparison to those observed for educational attainment.

Table 5: Potential Impact of Child Marriage on Women's Modern Contraceptive Use and Simulations

	Statistica	Statistically Significant Potential			National Simulated Potential Impacts		
	Impacts	versus Marrying	at 18+	Elimination of	of Child Marriage		
	Number of	Share of	Average	Absolute	Proportional change		
	Countries	countries (%)	Impact	Reduction	from base (%)		
Marrying at 12	8	33%	-4.8				
Marrying at 13	6	25%	-9.8				
Marrying at 14	9	38%	-2.6	Combined effect:	Combined effect:		
Marrying at 15	3	13%	-1.7	0.23	1.49		
Marrying at 16	6	25%	-2.2				
Marrying at 17	3	13%	1.7				

Source: Authors. Regression analysis based on data from Demographic and Health Surveys.

Note: Data for 24 countries. Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

Through their potential impact on total fertility, improving girls' educational attainment and ending child marriage would reduce population growth. Especially in low-income countries with limited arable land or water, high population growth may threaten long-term prosperity and exacerbate competition for access to scarce natural resources. High population growth may also weaken the ability of governments to provide basic services of quality to a growing population, including education, health, nutrition, and basic infrastructure (e.g., electricity, water and sanitation, transport, connectivity, and more). To what extent could higher educational attainment for girls and ending child marriage contribute to a reduction in population growth? The 2018 report provided tentative estimations using demographic projection tools (DemProj and FamPlan) and data from DHS surveysxix. On average across countries, their annual rate of growth was reduced by 0.22 percentage points in the simulations if child marriage and early childbearing were eliminated, but in some countries like Niger, the potential effect was larger. Given the comparative potential effects on total fertility of child marriage and universal primary or secondary education, a straight extrapolation suggested that the average potential impact of universal primary education on population growth could be at 0.14 percentage points, while for universal secondary education, the average potential effect could be at 0.57 percentage points. As with other estimates, this was meant to provide only an order of magnitude of potential effects, but clearly, the effects could be large and help usher the demographic dividend (Box 3) in countries that have not yet benefited from it. Given that the effects of educational attainment and child marriage on total fertility in this report are very similar on average to the effects observed in the 2018 report, the order of magnitude of the potential reduction in population growth noted in the previous report remains valid for a larger set of surveys and countries.

Box 3: The Demographic Dividend

While different definitions of the demographic dividend have been proposed, the term is associated with improvements in standards of living and accelerated economic growth when a developing country achieves a population structure that is favorable thanks to a reduction in birth (and death) rates that is followed by rapid fertility decline. As a result, the share of the population of working-age individuals may increase sharply for some time, which tends to generate faster economic growth (e.g., Canning et al., 2015; World Bank, 2015). In addition, with lower dependency ratios, households are better able to support themselves and invest among others in education, nutrition, and health (or human capital broadly conceived). These investments in turn may lead younger generations to be better educated and more productive in adulthood. This demographic and human capital transition may help reduce poverty rates dramatically. Achieving universal secondary education for girls should help reduce population growth and improve skills levels in countries where fertility rates remain high, thereby helping to usher in the demographic dividend.

DOMAIN 4: HEALTH, NUTRITION, AND WELL-BEING

A lack of educational attainment for girls may have negative impacts on their health in adulthood. Low educational attainment may be associated with a lack of women's decision-making ability for healthcare and a lack of knowledge about health. Other risks relate among others to malnutrition, isolation, depression, and an inability to negotiate sexual and reproductive behaviors with partners, including through a lack of access to modern contraception as noted earlier. This may lead to insufficient birth spacing, and unwanted pregnancies. Lower educational attainment may also increase the risks of intimate partner violence, which can itself have severe health consequences for women. Table 6 considers whether educational attainment is associated with a more thorough knowledge of HIV/AIDS and whether it enables women to make their own decisions regarding seeking healthcare when needed. For the analysis of HIV/AIDS, an index of knowledge is created through principal component analysis using a range of questions available in DHS surveys. The values of the index are normalized to take a value between zero and 100. For decisions related to healthcare, probit regressions are used. Table 6 provides key results that are visualized in Figure 4. The potential effects of educational attainment on knowledge of HIV/AIDS are statistically significant in most countries, with again higher effects when women have completed their secondary education. Simulations suggest that under universal secondary education, there could be an increase in the index of knowledge of HIV/AIDS nationally of 8.6 percentage points in countries where the potential effect is statistically significant (an increase of 11.5 percent from the base). For women's decision-making for their own healthcare, the potential effects of educational attainment are again statistically significant in many countries, with similar effects to those observed for knowledge of HIV/AIDS (although with slightly larger proportional effects from base values). Universal secondary education could increase women's ability to make their own healthcare decisions by 9.9 percentage points or 22.3 percent from the base values in countries with statistically significant effects.

Table 6: Potential Impact of Educational Attainment on Women's Knowledge about HIV/AIDS and Decision-making Ability Regarding Their Own Healthcare, and Simulations

	Statistica	ally Significant Pot	National Simulated Potential Impacts		
	Impacts versus	Less than Primar	y Completed	Universal Primary	Universal Secondary
	Number of	Share of	Average	Absolute	Proportional change
	Countries	countries (%)	Impact	Reduction	from base (%)
Knowledge about					
HIV/AIDS (*)					
Primary completed	15	68%	5.8	3.16	4.2
Some secondary	20	91%	6.1		
Secondary completed	17	77%	10.0	8.24	11.5
Higher education	18	82%	10.2	-	-
Own healthcare					
decisions (*)					
Primary completed	11	46%	2.6	1.35	1.3
Some secondary	12	50%	7.0		
Secondary completed	15	63%	12.0	9.90	22.3
Higher education	22	92%	17.5	-	-

Source: Authors. Regression analysis based on data from Demographic and Health Surveys.

Note: (*) The number of surveys used differs between the two indicators: data for 24 surveys for decision-making and 22 surveys for HIV/AIDS. Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

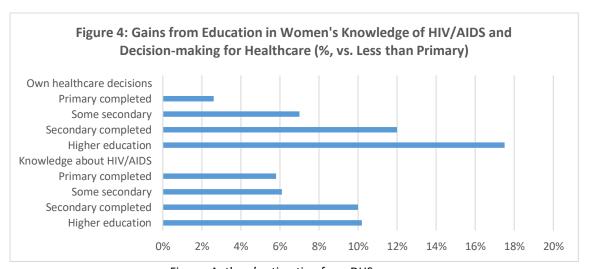


Figure: Authors' estimation from DHS surveys.

Note: Average estimates for countries with statistically significant effects.

The potential effect of child marriage on women's healthcare is likely large in some areas, although less so for the specific indicators used in this report. Child marriage affects early childbearing, which in turn increases the risk of maternal mortality and morbidity. For example, a lack of physical maturity when giving birth may lead to complications such as obstructed or prolonged labor as well as fistula. At the same time, for the two indicators used here – knowledge of HIV/AIDS and the ability of women to make their own healthcare decisions, the impact of child marriage seems to be limited. As shown in Table 7, in most countries, child marriage does not appear to have a direct statistically significant potential impact on knowledge of HIV/AIDS, and in even fewer countries this is the case for the ability of women to make their own healthcare decisions. Furthermore, even when statistically significant potential impacts are observed, their magnitude is much smaller than what is observed for secondary completion in Table 6.

Table 7: Potential Impact of Child Marriage on Women's Knowledge about HIV/AIDS and Decision-making Ability Regarding their Own Healthcare, and Simulations

	Statistica	Ily Significant Po	tential	National Simul	ated Potential Impacts
	Impacts	versus Marrying	at 18+	Eliminatio	n of Child Marriage
	Number of	Share of	Average	Absolute	Proportional change
	countries	countries (%)	Impact	Reduction	from base (%)
HIV/AIDS knowledge (*)	7	32%	-1.2	0.44	0.62
Own healthcare decisions (*)	5 21% 2.6			-1.01	-2.02

Source: Authors. Regression analysis based on data from Demographic and Health Surveys.

Note: (*) The number of surveys used differs between the two indicators: data for 24 surveys for decision-making and 22 surveys for HIV/AIDS. Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

A mother's educational attainment may also affect the risks of under-five mortality and stunting (low height for age) for her children, but these effects are not systematic. Early childhood is critical for a child's development (Black et al., 2017). Poor conditions early in life affect brain development and capabilities, with lasting consequences in adulthood, including the ability to earn a decent wage. A lack of educational attainment for mothers may affect children's health in part because better-educated mothers may have a better understanding of what they need to do to care for their children when sick or injured. Furthermore, as low education attainment for mothers affects their risk of exposure to intimate partner violence and may result in mental health issues, this may generate spillover effects for children**. For this study, following the 2018 report, we measure the potential impact of educational attainment for mothers on the risks of young children dying by age five or being stunted**i. Estimates are provided in Table 8 after controlling for a wide range of other factors that may affect those risks (see also Figure 5). In a minority of cases for both under-five mortality and stunting, we see statistically significant effects which are large when this is the case. Universal secondary education for girls could reduce under-five mortality by a third (32.1 percent) in countries where effects are statistically significant potential impacts. Unexpectedly, for stunting the potential impact for higher education is smaller than for secondary education.

Table 8: Potential Impact of Educational Attainment for Mothers on Young Children and Simulations

	Statistic	ally Significant Pot	tential	National Simulated Potential Impacts		
	Impacts versus	Less than Primar	y Completed	Universal Primary	Universal Secondary	
	Number of	Share of	Average	Absolute	Proportional change	
	Countries	countries (%)	Impact	Reduction	from base (%)	
Under-5 mortality						
Primary completed	3	12%	-1.7	1.39	20.3	
Some secondary	3	12%	-1.9			
Secondary completed	4	16%	-2.7	2.52	32.1	
Higher education	8	32%	-3.5	-	-	
Under-5 stunting						
Primary completed	3	12%	-3.8	2.37	8.6	
Some secondary	3	13%	-9.6			
Secondary completed	8	32%	-18.3	8.37	19.9	
Higher education	8	32%	-10.2	-	-	

Source: Data for 25 surveys. Authors. Regression analysis based on data from Demographic and Health Surveys. Note: Data for 25 surveys. Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

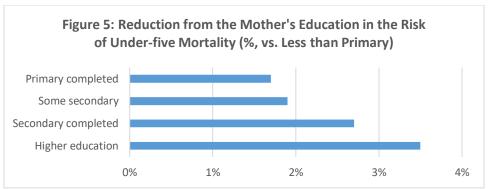


Figure: Authors' estimation from DHS surveys.

Note: Average estimates for countries with statistically significant effects.

When a mother has a child before the age of 18, it increases the risks of under-five mortality and stunting for the child. When girls have not matured yet, giving birth is risky. Furthermore, when they are poorly nourished, this may put their children at higher risk of intrauterine growth restriction. When girls are not physically, emotionally, or even financially ready to give birth, this may also affect their children. In the regression analysis for under-five mortality and stunting, the variable of interest is whether a child was born of a very young mother as opposed to child marriage per se. Table 9 shows that in most surveys, early childbirth (being born of a mother younger than 18) is associated with higher risks of dying by age five and being stunted after controlling for other factors. Specifically, when the effects are statistically significant, being born to a mother younger than 18 increases the risk of under-five mortality by 4.2 percentage points on average, and the risk of stunting increases by 9.7 percentage points. These effects are large. At the same time, nationally, ending early childbearing would not have a large potential impact on rates of under-five mortality or stunting. This is because relatively few children are born to mothers younger than 18 at the time of their birth. Still, the national potential impacts are noticeable.

Table 9: Potential Impact of Early Childbearing for Mothers on Young Children and Simulations

	Statistica	ally Significant Po	tential	National Simulated Potential Impacts		
	Impacts v	ersus Mothers Ag	ged 18+	Eliminatio	n of Child Marriage	
	Number of	Share of	Average	Absolute	Proportional change	
	Countries	countries (%)	Impact	Reduction	from base (%)	
Under-five mortality	18	72%	4.2	0.31	4.59	
Under-five stunting	14	56%	9.7	0.47	1.42	

Source: Data for 25 surveys. Authors. Regression analysis based on data from Demographic and Health Surveys. Note: Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

Educational attainment and child marriage may have a wide range of other effects on women's well-being. Although this was not updated for this report, the 2018 report used Gallup World Poll data to assess the potential impact of educational attainment on psychological well-being. In comparison to women with only a primary education or less, secondary education was systematically associated with an increase in positive outcomes and a decrease in negative outcomes. For tertiary education, virtually all estimated potential impacts were statistically significant and larger. The largest potential impacts were observed for a question on whether women learned or did something interesting in the day preceding the interview.

DOMAIN 5: WOMEN'S AGENCY AND DECISION-MAKING

Educational attainment for women affects their agency and decision-making ability. A woman's capacity for choice depends on agency, access to resources, and past achievements. Low educational attainment may have a potential impact on resources, for example by reducing earnings. It may also affect past achievements as well as capabilities, again when it reduces the types of employment that women have access to. And it may also affect agency if it reduces decision-making ability in the household, among others. To measure the potential impact of educational attainment on women's decision-making ability, an index is created using various indicators available in DHS datasets^{xxii}. Values for the index are normalized to take a value between zero and 100, as was done for knowledge of HIV/AIDS. Results in Table 10 and Figure 6 suggest substantial potential impacts. Effects are statistically significant in virtually all countries when considering secondary education and higher when women have tertiary education. Under universal secondary education, women's index of decision-making ability increases nationally by 8.6 points or 15.0 percent of the base value. The potential effect is at one-third of that for primary education completed.

Table 10: Potential Impact of Educational Attainment on Women's Decision-making Ability and Simulations

	Statistically Significant Potential			National Simulated Potential Impacts		
	Impacts	versus Less than	Primary			
		Completed			Universal Secondary	
	Number of	Number of Share of Average		Absolute	Proportional change	
	Countries	countries (%)	Impact	Reduction	from base (%)	
Primary completed	14	58%	4.5	3.05	5.6	
Some secondary	23	96%	5.2			
Secondary completed	23	96%	9.5	8.63	15.0	
Higher education	24	100%	12.6			

Source: Data for 24 surveys. Authors. Regression analysis based on data from Demographic and Health Surveys. Note: Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

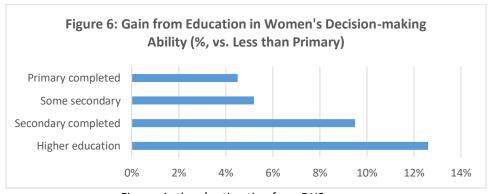


Figure: Authors' estimation from DHS surveys.

 $\label{lem:Note:Average estimates for countries with statistically significant effects. \\$

The effect of child marriage on women's decision-making ability appears to be smaller. Child marriage is one of the controls in the regressions, therefore as for other indicators, its potential effect on decision-making ability can also be measured. This effect appears smaller, both in terms of the number of countries where the effect is statistically significant and in terms of the size of the effects when they are statistically significant. It could be that in contexts where women have limited decision-making capacity in general,

those married as children may not necessarily show statistically significantly lower decision-making ability as compared to those who marry one or a few years later or when they reach the age of 18. However, child marriage itself is often a reflection of deep social norms that rob women of decision-making ability.

Table 11: Potential Impact of Child Marriage on Women's Decision-making Ability and Simulations

	Statistica	Statistically Significant Potential Impacts versus Marrying at 18+			National Simulated Potential Impacts		
	Impacts				of Child Marriage		
	Number of	Number of Share of Average			Proportional change		
	Countries	countries (%)	Impact	Reduction	from base (%)		
Marrying at ≤15	6	25%	-1.9				
Marrying at 16	5	21%	-0.3	Combined effect:	Combined effect:		
Marrying at 17	3	13%	0.7	0.28	0.54		

Source: Data for 24 surveys. Authors. Regression analysis based on data from Demographic and Health Surveys. Note: Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

Another illustrative example of women's agency is birth registrations. The benefits of birth registration are important for children. One would expect a higher level of educational attainment for mothers to be positively correlated with the likelihood of registering their child at birth. This is indeed observed for some countries in Table 12 and Figure 7. In a third to half of the countries depending on the level of education, a higher level of educational attainment for mothers is associated with an increase in the likelihood of birth registration for their children. Under universal secondary education, in countries where statistically significant potential effects are observed, the gains in registrations could be at 10 percentage points, which is equivalent to an increase of more than a fourth from the base registration rates. Potential effects for primary education tend to be substantially lower, as observed for many other indicators in this study.

Table 12: Potential Impact of Educational Attainment for Mothers on Birth Registration and Simulations

	Statistically Significant Potential			National Simulated Potential Impacts	
	Impacts versus Less than Primary Completed			Universal Primary	Universal Secondary
	Number of	Share of	Average	Absolute	Proportional change
	Countries	countries (%)	Impact	Reduction	from base (%)
Primary completed	6	30%	5.1	2.81	5.3
Some secondary	7	35%	7.3		
Secondary completed	9	45%	13.7	10.09	27.5
Higher education	9	45%	20.3	-	-

Source: Data for 20 surveys. Authors. Regression analysis based on data from Demographic and Health Surveys. Note: Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

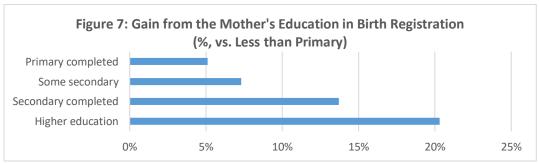


Figure: Authors' estimation from DHS surveys.

Note: Average estimates for countries with statistically significant effects.

Effects of early childbearing on birth registration are also observed, albeit less systematically. As for the risks of under-five mortality and stunting, early childbearing is used as a control rather than child marriage, in part because in countries with laws against child marriage, registering a child at birth may be problematic when the mother gave birth before the age of 18 due to early marriage. That is, legislation aimed at delaying the age of marriage could potentially lead to lower birth registration rates if women are fearful that having a child at a young age suggests that marriage took place before the minimum legal age. Whether such disincentives are at work depends on the context of each country, and whether the legal minimum age for marriage is enforced, which is not necessarily the case. Table 13 provides estimates of the potential impact of early childbearing on birth registrations. In most cases, potential impacts are not statistically significant, and when they are, they tend not to be as large as for education.

Table 13: Potential Impact of Early Childbearing for Mothers on Birth Registration and Simulations

	Statistica	Statistically Significant Potential Impacts versus Mothers Aged 18+			National Simulated Potential Impacts	
	Impacts ve				Elimination of Early Childbearing	
	Number of	Share of	Average	Absolute	Proportional change	
<u>. </u>	countries	countries (%)	Impact	Increase	from base (%)	
Birth Registration	5	25%	-5.2	0.26	0.58	

Source: Authors. Regression analysis based on data from Demographic and Health Surveys.

Note: Data for 20 surveys. Average potential impacts and simulation results reported for countries where coefficients for the variables of interest are statistically significant.

DOMAIN 6: SOCIAL CAPITAL AND INSTITUTIONS

Educating girls and ending child marriage may have a range of other beneficial effects, including for social capital and institutions. Although this part of the analysis in Wodon et al. (2018a) was not updated for this report, a few findings based on Gallup World Poll data are worth briefly mentioning.

- Altruistic behaviors matter for well-being for those who benefit from them and those who engage in them. The behaviors also matter for social cooperation. The data were used to assess the potential impact of women's educational attainment on: (1) whether women made a monetary contribution to charity in the past month; (2) whether they volunteered their time with any organization; and (3) whether they helped a stranger or someone they did not know who needed help. Controlling for other factors, higher educational attainment was associated with an increase in the likelihood of engaging in these three behaviors. This does not, of course, mean that educated women are more altruistic. It simply reflects the fact that they are in a better position in life to engage in these behaviors or have the necessary networks and income to do so^{xxiii}.
- Social capital may also be affected by educational attainment. Friendships made in late secondary school and tertiary education can be important for the transition to adulthood. Questions are asked in the Gallup World Poll on whether women are satisfied with their opportunities to make friends and whether they can rely on these friends when in need. In both cases, the likelihood of this being the case increased with educational attainment after controlling for a wide range of other factors that could affect these likelihoods, including relying on friends when in need**xiv.
- Satisfaction with and trust in institutions may also be affected by educational attainment. The
 analysis suggested that a higher level of educational attainment was associated with lower
 satisfaction with basic services, less confidence in institutions, a perception that corruption was
 widespread, a concern that freedom of the press could be limited, and lower approval ratings for
 leaders. It could be that better-educated women are more critical of core institutions or their
 leaders as they may be better informed of potential issues with those institutions or leaders. This

is not a bad thing as concerns may lead women to exercise their agency and require better-functioning institutions, less corruption, and better leaders. Better-educated women were also more satisfied in terms of how welcoming communities are to individuals facing hardship or discrimination. These perceptions may reflect the women's own attitudes as opposed to the actual reality in communities, but the fact that measured associations are positive is noteworthy. For all these effects, the complexity of factors at play makes inferences on causality problematic.

ECONOMIC ANALYSIS

In the 2018 report, the economic analysis focused on the cost of child marriage. Because that report was released at the second summit on child marriage of the African Union, the focus was on estimating the economic costs of child marriage as opposed to the (larger) costs of low educational attainment for girls. Only a small set of costs were estimated in the report, but they were large. The loss in human capital wealth (defined as the present value of the future earnings of the labor force) incurred today because women were married early in their youth was estimated at US\$63 billion for 12 countries that accounted for half of the continent's population. For perspective, annual total net Official Development Assistance (ODA), which consists of disbursements of loans made on concessional terms net of repayments of principal, was of the order of US\$41 billion for Africa overall around that time. As child marriage is associated with higher rates of fertility and population growth, it also reduces levels of wealth per person, especially in countries with high population growth. The gains in wealth per capita that could result from lower population growth by ending child marriage were estimated at US\$ 26 billion in the first year of ending child marriage (for 13 countries). Yet it was noted that these gains are cumulative over time and, hence would rival within a few years the losses in wealth from women's lower earnings due to the impact of child marriage on educational attainment. In addition, there would also be losses due to lower earnings in adulthood for stunted children, not to speak of the potential economic valuation of lives lost due to under-five mortality. Finally, the reduction in the rate of annual population growth could lead to savings for governments in the delivery of basic services (see Box 4 for the cost of providing basic education). These various estimates were only orders of magnitude, but they were large and the combined costs of low educational attainment for girls and child marriage would have been larger. All estimates would be substantially larger today given gains in standards of living and population growth.

Box 4: Budget Costs and Savings from Universal Secondary Education and Ending Child Marriage

Achieving universal quality secondary education for girls and ending child marriage would have a cost, both for state budgets and for households (out-of-pocket and opportunity costs). The costs for households can be computed from household surveys, and those for states can be computed from budget simulation tools. It is also important to increase the quality of the education provided in schools, which could also lead to costs that should not be underestimated. However, budget savings could also be realized with universal secondary education for girls and the elimination of child marriage thanks to lower population growth. In the case of the cost of providing education, lower fertility would reduce the size of new cohorts of children, with the reduction becoming larger over time in comparison to business-as-usual projections since the potential effect of lower population growth is also cumulative over time (Wodon, 2018b). Savings in the provision of other basic services would also be observed in areas such as healthcare and basic infrastructure. It is beyond the scope of this study to compare the cost of achieving secondary education for girls and ending child marriage to the savings that would result from lower population growth and other potential effects (such as an improvement in the health status of young children). But it is important to note that some budget savings for governments could be achieved, if not immediately, at least in the medium term with universal secondary education and the elimination of child marriage.

The costs of gender inequality, including the contribution to inequality of low educational attainment for girls and child marriage, are however likely much larger. After the completion of the 2018 study, its authors were associated with a broader study on the cost of gender inequality (Wodon et al., 2020) based on data on the changing wealth of nations (Lange et al., 2018). The estimates of countries' wealth were subsequently updated (World Bank, 2021), albeit without a focus on gender inequality (on gender inequality, see Wodon, 2022a). Table 14 provides the data for sub-Saharan Africa in four categories of wealth: (1) Produced capital, which comes from investments in assets such as factories, equipment, or infrastructure; (2) Natural capital, which consists of assets such as agricultural land and both renewable and nonrenewable natural resources; and (3) Human capital, which as mentioned earlier is measured as the present value of the future earnings of the labor force. Also included in national wealth are net foreign assets, a smaller and negative component of wealth for Africa. In Table 14 the largest component of countries' wealth is human capital or people which accounts for 60 percent of total wealth, versus 23 percent for produced capital and 19 percent for natural capital. However, substantial human capital wealth may be lost due to gender inequality in earnings, with women accounting for less than a third (32.9 percent) of human capital wealth. The gap in human capital wealth between men and women is estimated at US\$ 4.0 trillion, or US\$ 4,188 per person. One could debate those estimates, but high levels of gender inequality in earnings have been documented using other approaches (e.g., World Economic Forum, 2022). Low educational attainment for girls and child marriage contribute to these gaps in earnings, as do lower rates of labor force participation for women and gender segregation in occupational choices. In addition, as mentioned before, low educational attainment for girls and child marriage also contribute to high levels of population growth in Africa, which makes it more difficult to raise levels of wealth per capita and standards of living since wealth is the asset base that enables future income generation and consumption. Between 2010 and 2018, per capita wealth increased in real terms by only 4.8 percent.

Table 14: Estimates of Gender Inequality in Human Capital Wealth in sub-Saharan Africa, 2018

	Total wealth	Wealth per capita
	(US\$ million)	(US\$)
Total wealth	19,904,322	20,473
Produced capital	4,490,723	4,619
Human capital	11,936,632	12,278
Men (1)	8,003,897	8,233
Women (2)	3,932,735	4,045
Difference (1)-(2)	4,071,162	4,188
Women's share (2)/[(1))+(2)]	32.9%	32.9%
Natural capital	3,879,247	3,990
Net foreign assets	-402,280	-414

Source: Author, based on data from World Bank (2021).

SUMMARY

Educating girls and ending child marriage would have large benefits for the girls, their future family, their communities, and societies. Globally, three in four girls complete their lower secondary education. In sub-Saharan Africa, the proportion is only four in ten, leading to high risks of child marriage and, in turn, early childbearing. Educating girls and ending child marriage would have major benefits. This report updated a previous 2018 study to estimate some of these benefits. Key findings are summarized in Table 15. The Table provides the main estimated potential impacts by domain. Potential impacts are summarized by showing gains from secondary education in comparison to no education at all, factoring in the virtual elimination of child marriage that would follow if all girls completed their secondary

schooling. Another important message from the analysis is that ensuring universal primary education is not enough. The benefits from education are much larger at the secondary and tertiary levels than at the primary level. This is even more the case when it is acknowledged that universal primary education would not necessarily lead to large reductions in the prevalence of child marriage. Investing in proven programs and policies to improve educational opportunities for girls (and boys) is key to ensuring a better future for them and enabling countries to fulfill their development potential. How this can be done is discussed in Part II of the study.

Table 15: Selected Potential Benefits from Educating Girls and Ending Child Marriage

Domain	Estimated Potential Impacts		
Earnings and	Expected earnings in adulthood more than doubled		
standards of living	Increase in labor force participation or working full-time		
	Gain in perceptions of standards of living		
Child marriage and	Virtual elimination of child marriage		
early childbearing	Reduction in early childbearing by up to three-fourths		
Fertility and	Reduction in total fertility by about one-third		
population growth	Increase in contraceptive use by a third from the base		
	Reduction in population growth by over half a percentage point		
Health, nutrition	Increase in women's knowledge of HIV/AIDS by one-tenth		
and well-being	Increase in women's decision-making ability for health by a fourth		
	Increase in women's psychological well-being		
	Reduction in under-five mortality by a third		
	Reduction in under-five stunting by a fifth		
Agency and	Increase in women's decision-making in the household by		
decision-making	Increase in likelihood of birth registration by over a fourth		
Social capital	Women more likely to report engaging in altruistic behaviors		
and institutions	Women more likely to report the ability to rely on friends when in need		
	Women possibly more likely to better assess institutions and leaders		
Economic impacts	Large gains in standards of living and human capital wealth		
	Higher income and wealth per capita over time through lower population growth		

Source: Authors.

PART II THE ROLE OF TEACHERS AND SCHOOL LEADERS

INTRODUCTION

The 2018 report on educating girls and ending child marriage included a brief discussion of policy options with a focus on delaying child marriage and early childbearing. As the report was prepared for an African Union summit on child marriage, the policy discussion focused on delaying marriage and early childbearing, even if education policies**v* and social norms**x*v*i were also briefly mentioned. Specifically, the policy section was based on a review by Botea et al. (2017) which argued that: (1) There is a need for interventions to expand economic opportunities for adolescent girls who dropped out of school and are unlikely to return to school; (2) Imparting adolescent girls with life skills and reproductive health knowledge matters, as demonstrated by the experience from safe space clubs where girls may discuss issues of sexual and reproductive health as well as other topics with female mentors; and (3) Still, the most effective targeted interventions to delay marriage and childbearing are those that enable girls to remain in school, especially through economic incentives offsetting the out-of-pocket and opportunity costs of schooling. The key insights from that review remain relevant today and are shared in Appendix 3.

While interventions for adolescent girls matter, recently, a stronger emphasis has been placed on the issue of lack of foundational learning in primary school. The 2018 World Development Report, the first on education, made it clear that education systems were faced with a learning crisis (World Bank, 2018) which was recently exacerbated by the COVID-19 pandemic. Today in sub-Saharan Africa, nine in ten children aged 10 are deemed to be learning poor, which means that they cannot read and understand an age-appropriate text**XVIII. This includes out-of-school children, but most children who are learning poor are enrolled in school (World Bank et al., 2022)*XVIIII. Estimates of learning poverty among African countries where data are available are provided in Table 16.

Considering high levels of learning poverty, a simple argument can be made emphasizing the role of teachers and school leaders in educating girls and ending child marriage. The argument is visualized in Figure 8 which provides a simple argument for Part II of this report that proceeds in three steps. The literature tends to emphasize economic incentives for adolescent girls to remain in school at the upper secondary level. However, (1) Lack of learning in school is a key factor leading to drop-out in primary and lower-secondary school; (2) Teachers and school leaders are key to improving foundational learning, but new approaches are needed for training; and (3) Nationally, professional standards and competencies for teachers and school leaders are also needed. In addition, while targeted interventions for adolescent girls are important, they may reach only a small share of girls, those who are still in school at that age; by contrast, improving foundational learning would benefit a much larger share of girls (and boys) and could therefore be more beneficial including from a cost-benefit point of view. Together, these steps in the argument make a powerful case for investing in teachers and school leaders, especially women, to educate girls and end child marriage. The structure for Part II of the report follows these steps.

Figure 8: Argument for Investing in Teachers and School Leaders

The literature
emphasizes economic
incentives for girls to
remain in upper
secondary school,
but...

Step 1: Lack of learning in school is a key factor leading to drop-out in primary and lower-secondary school Step 2: Teachers and school leaders are key to improve foundational learning with new approaches to training showing great promise

Step 3: Nationally, professional standards and competencies for teachers and school leaders are also needed Note: Improving learning would benefit more girls (and boys) than targeted interventions and could have higher benefit-cost ratios

Source: Authors.

Table 16: Estimates of Learning Poverty in African Countries (Circa 2020)

Countries	Learning Poverty (%)	Learning Deprivation (%)	Children out of school (%)
Algeria	68	67	4
Benin	56	55	3
Botswana	51	44	12
Burkina Faso	74	67	21
Burundi	96	96	7
Cameroon	72	70	7
Chad	94	92	27
Comoros	86	82	21
Congo, Republic	70	66	11
Congo, Dem. Republic (*)	97	91	63
Côte d'Ivoire	83	78	21
Egypt	70	69	1
Ethiopia	90	89	15
Gabon	31	24	9
Guinea	83	78	22
Lesotho	97	97	12
Madagascar	94	94	3
Mali	90	86	33
Mauritania	95	93	26
Mauritius	40	38	4
Morocco	65	64	3
Niger	90	86	34
Senegal	69	59	24
South Africa	79	78	4
Togo	82	81	5
Tunisia	66	65	1
Uganda	82	81	4
Zambia	99	98	15

Source: Compiled by the authors from individual country briefs available on the World Bank website.

Note: (*) The estimate of the share of children out of school in the Democratic Republic of Congo seems high.

FOCUS ON WEST AFRICA

The analysis in this part of the report focuses mostly on West Africa for four reasons. The first is that West Africa is home to many of the countries with the lowest level of educational attainment for girls and the highest prevalence of child marriage. The second is the availability of rich data. The third is the fact that a rise in conflict and violent extremism in some countries may be especially detrimental to girls. The fourth is that West Africa, and especially francophone countries, are often neglected in applied research. While the analysis focuses on West Africa, most findings are likely relevant to other African countries.

- Levels of educational attainment and child marriage: Estimates of girls' educational attainment, child marriage, and early childbearing in many West African countries, and especially in Sahelian countries and parts of Nigeria, tend to be worse than estimates for countries in other regions. For example, Niger is the country with the highest prevalence of child marriage in the world.
- Data availability: The analysis for West Africa is based on rich multi-country datasets including (1) the Enquête harmonisée sur les conditions de vie des ménages or EHCVM, a household survey implemented in 2018-19 with support from the World Bank and the West African Economic and Monetary Union (WAEMU) in 10 francophone countries (Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea, Guinea-Bissau, Mali, Niger, Senegal, and Togo); (2) PASEC (Programme d'analyse des systèmes éducatifs de la CONFEMEN), a multi-country student assessment implemented under the leadership of the Conference of Ministers for Francophone States and Governments (CONFEMEN, with the 2019 round covering Bénin, Burkina, Burundi, Cameroun, Congo, Côte d'Ivoire, Gabon, Guinée, Niger, Madagascar, RDC, Sénégal, Tchad, and Togo); and (3) a multi-country survey and more detailed data on professional standards and competencies for teachers and school leaders implemented by UNESCO IICBA, in two countries (Sierra Leone and The Gambia). These are other datasets that provide a relatively rich analysis of the issues.
- Conflicts and violent extremism: There has been a rise in conflicts and violent extremism in Africa with devastating effects on the population, including high risks for some girls to drop out of school and get married as children. Analysis of Afrobarometer data suggests that one-fifth (20.6%) of adults in Africa consider issues related to crime and security, political violence, political instability or division, or civil war to be among the top three issues in their country. But in some West African countries such as Burkina Faso and Mali, the proportion is above half. "Learning for lasting peace" is the theme for the International Day of Education 2024. This theme includes gender aspects and is important to reflect on at least briefly in this report, especially in the context of West Africa.
- Lack of applied research: More research is typically conducted and published on anglophone countries, especially countries in East and Southern Africa, than on francophone countries. This is also the case for research on the role of teachers and school leaders in improving learning and attainment. By highlighting data for West Africa and especially francophone countries, this report may contribute in a small way to calling for more applied research on those countries.

STEP 1: UNDERSTANDING HOW LACK OF LEARNING IN SCHOOL LEADS TO DROP-OUT

The first step in the argument consists of demonstrating that lack of learning is a key factor leading girls (and boys) to drop out of school. To understand the approach, a simple conceptual framework is useful. Figure 9 suggests five conditions or sequential steps needed for children to go to school and learn enough in school so that they can complete their education: (1) schools must have the capacity to accommodate students and be accessible (including through transport and housing services when schools are located far away); (2) schooling must be affordable given the potential out-of-pocket and opportunity cost of schooling (SDG4 calls for free primary and secondary education, but other costs for parents should also be affordable); (3) going to school must be safe (including from violence, although data on school violence are not available in the survey used for the estimates) and children must be able to thrive in school without hindrance from harmful social norms; (4) children must be able to learn in school – this refers not only to traditional academic subjects, but also to social-emotional and life skills (in addition, parents' preferences for the type of school and what children should learn in school must also be taken into account); and (5) pregnant and married girls should be allowed to stay in school, and for both boys and girls alike, secondchance programs should be available for dropouts whose circumstances do not allow them to return to school. In addition, Figure 9 also highlights the fact that appropriate national or subnational processes (e.g., preparing diagnostic studies, organizing national or regional consultations, adopting strategies, and mobilizing financial and other resources) are needed for policies and programs at each stage.

Household survey data are available to assess factors leading girls (and boys) to never enroll in school or drop out of school at various educational levels. The analysis in this section is based on the WAEMU household survey mentioned earlier with data for 10 francophone countries. Reasons parents cite for why (when this is the case) their children were never enrolled in school or dropped out of school are considered according to the framework provided in Figure 9. For example, the survey includes 14 potential parental responses as to why the child never enrolled in school. Since the response modalities are detailed, the data are likely to be a good indicator of the relative importance of different factors leading to a lack of initial schooling. The 14 modalities are grouped into five categories (Lack of school accessibility; Schooling expenses and opportunity costs; Safety, well-being, and social norms; Lack of learning; and Other reasons) for easier reading, broadly following the conceptual framework in Figure 9. For children who enrolled in school, 17 modalities are included in the survey as to why they dropped out (if they did). Again, these 17 modalities are regrouped into the five same categories linked to the framework in Figure 9 for easier reading. In the Tables, data are provided for all 10 countries together weighting each country equally (hence more populated countries do not have a higher weight than less populated ones), but more detailed results are available from the authors for each country and the individual modalities.

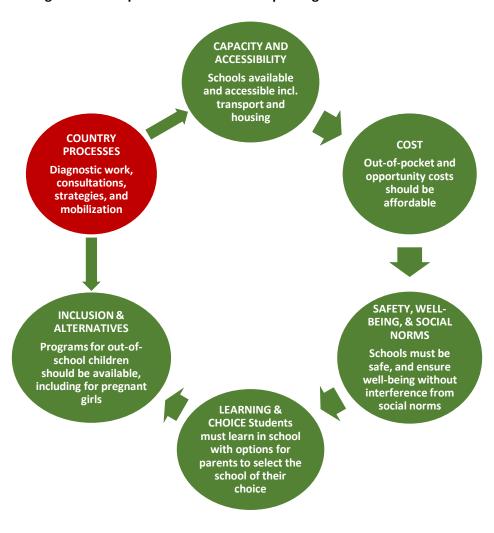


Figure 9: Conceptual Framework for Improving Educational Outcomes

Source: Authors.

Multiple factors may lead some children to never enroll in school, but schools not being accessible, cost, and social norms (whether a child is too young to start school) are key factors. Using data from the 2018-2019 EHCVM, Table 17 categorizes the reasons parents cite for why (when this is the case) their children were never enrolled in school. The analysis focuses on children ages 7-12 because, after age 12, children are very unlikely to attend school (some parents with younger children in this age range may still send their children to school at older ages, so the estimates are only suggestive). As mentioned above, parental responses have been aggregated into the five broad categories highlighted in Figure 9.

- Lack of school accessibility: Two reasons for never enrolling are included in this category: (1) the fact that there are no schools or that they are located too far away, and (2) the fact that the children may be sick or disabled (lack of school accessibility for children with disabilities may be one of the reasons why these children never enrolled). Estimates suggest that lack of school accessibility and disability contribute to about a fifth of cases of children not having enrolled.
- Schooling expenses and opportunity costs: Five reasons mentioned by parents are included in this
 category: (1) schooling expenses are too high; (2) parents lack the financial means to send their
 children to school; (3) the child (or family) may have a preference for the child to work, which may

indicate an opportunity cost of schooling; (4) the child is involved in farm work (more likely for boys – this is again an opportunity cost of schooling); and (5) the child is involved in household chores (this is more often the case for girls and represents an opportunity cost of schoolings). Cost considerations account for about a third of cases of children not having been enrolled in schools.

- Safety, well-being, and social norms: Three reasons are combined in this category: (1) the child is too young to go to (primary) school; (2) the family is not willing to let the child go to school, which could be related to social norms, e.g., gender; and (3) gender ("it's a girl"). Social norms so defined account for a fourth of the boys not enrolled and more than a third of girls not enrolled.
- Lack of learning: Two reasons are grouped in this category: (1) education is not appropriate for the child (as perceived by parents); and (2) education is not useful. These negative perceptions of children's likely ability to learn useful skills in school account for relatively few cases of non-enrollment according to the survey, i.e., less than one case of non-enrollment in ten.
- Other reasons: Two reasons are grouped in this last category: (1) insecurity; and (2) the "other reasons" modality. These two reasons also account for less than a tenth of non-enrollment.
- Share of children not enrolled: The share of children not enrolled is high at 27.8 percent for boys and 29.3 percent for girls. Even if some of these children may ultimately enroll, there is a clear need to implement programs and policies to prevent some children from never enrolling.

Table 17: Reasons Cited by Parents for Not Enrolling Children in School, 10 Countries, Age 7-12 (%)

Gender	Boys	Girls
Schools not accessible		
No school/distance	18.5	16.6
Sick/disabled	3.5	2.4
Total	22.0	19.0
Opportunity cost		
Cost too high	0.8	0.5
Lack of means	20.7	20.6
Preference for work	1.4	1.0
Agricultural work	11.2	3.8
Household chores	1.1	6.9
Total	35.2	32.8
Social norms		
Too young	0.3	0.5
Family not willing	25.4	27.3
Gender ("it's a girl")	0.0	6.7
Total	25.8	34.5
Lack of learning		
Unsuitable studies	2.9	2.5
Unnecessary studies	5.2	3.6
Total	8.1	6.1
Other reasons		
Insecurity	0.6	0.6
Other	8.3	6.9
Total	8.9	7.5
All reasons	100.0	100.0
Share never enrolling	27.8	29.3

Source: Authors based on the 2018-19 EHCVM survey.

Note: Includes Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea, Guinea-Bissau, Mali, Niger, Senegal, and Togo.

For children who enrolled in school and dropped out, lack of learning was a key factor especially at the primary and lower secondary levels, even if social norms also play a role, especially for girls. Using the same approach, Table 18 categorizes reasons parents give for their children dropping out of school by level of education, considering primary, lower secondary, and upper secondary education. Different questions are asked in the survey about the reasons for dropping out, depending on whether the dropout occurred within a school year or between school years. Because the potential response patterns are more detailed for dropouts between grades and these cases are also more likely, this is the question used for the estimates. Again, potential parental responses have been aggregated into the five broader categories.

- Lack of school accessibility: The same two reasons for dropping out are included in this category as for non-enrollment. Overall, lack of accessibility to schools does not appear to be a major reason for children dropping out, as the associated reasons are only three percent or less of boys and girls at all grade levels. Note that the question is asked to parents of children who have already attended school, implying that to some extent schools were already accessible, at least at the primary level. Therefore, this does not mean that more schools or schools closer to where students live are not needed, but it is a second-order constraint among children who enrolled.
- Schooling expenses and opportunity cost: The same five reasons for never enrolling are included in this category. At all levels, cost is one of the primary reasons for dropping out, accounting from 40 to 50 percent of dropouts for boys depending on the level and a slightly lower proportion for girls. Clearly, interventions are needed to reduce the (direct and opportunity) costs of schooling, even though public schools are in principle free at least at the primary level in all countries.
- Social norms: Six reasons are combined in this category. In addition to the reasons identified for children never enrolling, three other reasons are included: (1) the child has completed her schooling (which may indicate a lack of perceived value for the child's continued schooling); (2) the child or the family desires a marriage; and (3) the girl had a pregnancy. The role of social norms is substantial, especially for girls. There are also differences by levels, with child marriage and the risk of pregnancy more important factors for girls to drop out at the lower and especially upper secondary levels. Overall, while opportunity cost constraints are more important factors for dropout for boys than for girls, social norms matter more for girls than for boys, as expected.
- Lack of learning: In addition to the two modalities included when considering children who never enrolled in school, a third modality is included for dropouts: the child dropped out or failed (an examination). The fact that dropout and failure are combined into a single modality for parental responses may overstate the role of lack of learning, as other reasons may have led to dropout. That said, these other reasons are captured by other modalities, hence the bias may be limited. At all levels, but especially at the primary level, the results are striking in highlighting the need to improve the quality of instruction since lack of learning accounts for a large share of dropouts. Better learning could also reduce the role of other dropout factors. For example, the direct and opportunity costs of schooling could be more bearable for households if children learned more in school. The results suggest that lack of learning is a key factor for drop-out, although not the only factor.
- Other reasons: The questionnaire on reasons for dropping out does not identify the problem of insecurity, but it does include an "other reasons" modality. These other reasons may be quite varied, but they represent only a small proportion of dropouts, as was the case for not enrolling.
- Share of children dropping out: Among children enrolled in primary school, one-third did not complete the cycle boys and girls alike. Among those completing primary school, nearly half did not complete lower secondary school. And among children completing lower secondary school, again half did not complete the cycle. These rates indicated high instances of dropping out.

Table 18: Reasons Cited by Parents for Children Dropping Out by Education Level, 10 Countries (%)

	Prir	Primary		Lower secondary		Upper secondary	
Gender	Boys	Girls	Boys	Girls	Boys	Girls	
Schools not accessible							
No school/distance	0.9	0.8	0.4	0.2	0.3	0.1	
Sick/disabled	2.3	2.4	1.8	2.1	1.4	1.3	
Total	3.2	3.1	2.2	2.4	1.8	1.5	
Opportunity cost							
Cost too high	0.4	0.4	0.3	0.4	0.3	0.4	
Lack of means	15.5	13.4	18.9	13.3	14.3	10.2	
Preference for work	15.0	7.0	21.5	11.8	30.9	21.7	
Agricultural work	8.1	1.5	4.0	0.5	0.9	0.0	
Household chores	0.6	6.1	0.2	4.1	0.1	1.9	
Total	39.6	28.4	44.9	30.1	46.5	34.2	
Social norms							
Too young	1.8	1.7	0.1	0.1	0.0	0.0	
Completed studies	7.8	6.4	11.4	10.5	28.3	28.7	
Family not willing	2.6	5.1	0.9	1.6	0.2	0.3	
Desire to get married	0.3	5.2	0.7	8.8	0.3	3.9	
Sex ("it's a girl")	0.0	0.8	0.0	0.3	0.0	0.0	
Pregnancy	0.0	2.4	0.0	6.7	0.0	6.1	
Total	12.5	21.7	13.1	28.0	28.8	39.0	
Lack of learning							
Unsuitable studies	2.2	2.1	1.5	1.3	1.0	0.9	
Unnecessary studies	2.8	3.4	2.2	2.6	0.8	1.2	
Abandonment/Failure	35.1	36.2	32.8	32.0	18.1	20.3	
Total	40.0	41.7	36.5	35.9	19.9	22.5	
Other reasons							
Other	4.6	5.1	3.3	3.6	2.9	2.8	
All the reasons	100.0	100.0	100.0	100.0	100.0	100.0	
	34.3	34.6	49.5	47.4	55.8	47.8	

Source: Authors based on the 2018-19 EHCVM survey.

Note: Includes Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea, Guinea-Bissau, Mali, Niger, Senegal, and Togo.

Qualitative data also suggest that lack of learning is a major factor leading children to drop out. The analysis indicates that when parents are asked in surveys why their daughters dropped out of school, issues related to the cost of schooling (out-of-pocket and opportunity costs) and early marriages and pregnancies play a role, but so does a lack of learning while in school and a lack of interest in remaining in school. This also emerges from qualitative work, as illustrated in the case of Niger in Box 5.

Box 5: Why Do Girls Drop Out of School? Insights from Qualitative Fieldwork in Niger

In Niger, ethnographic work (Perlman et al., 2018) suggests that six main obstacles lead most girls to not pursue their education beyond the primary level: (1) Poor learning outcomes and cost. Rural government schools are so poor in quality and resources that many children graduate from primary school without learning to read. The schools do not charge tuition, but parents complain that the cost of uniforms, guard fees, transport, lunches, and the opportunity costs of losing their daughters' labor are hardly worth the poor learning outcomes they see; (2) Failure at examinations. Students can only take the primary school completion exam twice. If they fail, they are ineligible to continue in public education. When girls fail examinations, parents say that they have little choice but to begin looking for a suitable suitor whom their daughter could marry; (3) Lack of nearby secondary schools. Few rural communities have their own secondary school and there are few boarding schools serving communities. Parents must send their children to nearby towns and cover the costs of transportation and room and board. Students stay with relatives or contacts and parents are reluctant to leave their daughters without what they consider proper oversight; (4) Forced withdrawal of married adolescents. Once a girl is married, she is likely to be expelled from school. Husbands show little interest in supporting their adolescent wife's education especially if they must enroll in a private school. This is an expense that they cannot afford. Conversely, the fear of not being allowed to withdraw their daughters from school for marriage is a complaint of some parents; (5) Never enrolling in school or enrolling too late. Some families never enroll girls in school, perhaps in part because parents had no educational opportunities themselves. In some cases, teachers may refuse to enroll children that are considered too old to start primary school; and (6) Influence of relatives and demands on first daughters. Extended family members may influence parents on the value of educating girls, not always with positive outcomes. Schooling decisions may also depend on household composition and the activities of other children. Being the first daughter lessens a girl's chances of going to school as they are expected to help their mother at home during the day. While finding solutions to keep girls in school and enabling them to learn while in school is context-specific, improving learning can help.

STEP 2: SUPPORTING AND EMPOWERING TEACHERS AND SCHOOL LEADERS, INCLUDING WOMEN

Strategies to Improve Learning

If lack of learning leads many girls (and boys) to drop out, improving learning is a priority. Guidance is available to do so. How can learning be improved for girls (and for boys since what works may be similar for both; see Evans and Yuan, 2022)? The World Bank (2020a) blueprint for realizing the future of learning is a good startxxix. As shown in Table 19, the blueprint is organized around five pillars: (1) Learners are prepared and motivated to learn—with a stronger emphasis on whole-child development and support to learning continuity beyond the school; (2) Teachers are effective and valued—and ready to take on an increasingly complex role of facilitators of learning at and beyond the school with use of education technology; (3) Learning resources, including curricula, are diverse and of high quality—to support good pedagogical practices and personalized learning; (4) Schools are safe and inclusive spaces—with a wholeand-beyond-the-school approach to prevent and address violence and leave no child behind; and (5) Education systems are well-managed— with school leaders promoting effective pedagogy and a bureaucracy adept at using technology, data, and evidence⁴. For each pillar, recommendations are based on a review of the literature. For example, for systems to be well managed, three actions are suggested: (i) Strengthen human resource function of education systems to professionalize school leadership; (ii) Provide school leaders with the tools to manage with autonomy; and (iii) Invest in system leadership and management capacity to support schools. Or to support teachers, education systems should focus on four actions: (i) Establish the teaching profession as a meritocratic, sociallyvalued career; (ii) Expand

engagement in pre- service training; (iii) Invest in at-scale in-service professional development; and (iv) Give teachers tools and techniques for effective teaching. In addition, five principles to guide policy reforms across pillars are suggested: (1) Pursue systemic reform supported by political commitment to learning for all children; (2) Focus on equity and inclusion through a progressive path toward universalism; (3) Focus on results and use evidence to keep improving; (4) Ensure financial commitment commensurate with what is needed to provide basic services to all; and finally (5) Invest wisely in technology.

Table 19: World Bank Framework for Realizing the Future of Learning

		amework for Realizing			
Learners are	Teachers facilitate	Learning resources	Schools are safe	Systems are well	
engaged	learning	are adequate and diverse	and inclusive	managed	
All learners engage in learning that is personalized, inclusive, holistic, and relevant to their realities.	Teachers play the role of facilitating learning of all students rather than delivering content and are provided with the training and holistic support they need to play this role.	Learning resources are adequate and of rich variety so that each child can access quality learning experiences anywhere.	school environments have the necessary infrastructure, human resources, policies, and norms to enable all children to learn in a welcoming environment, free from discrimination, violence and bullying.	At the school level, school leaders are pedagogical leaders and engage with technology to enable more elective and efficient school management.	
Parents, Caregivers, c	and the Home Learning	Environment are Supp		otes Learning Objective	
	Key Policy	y Actions for Each of th	e Five Pillars		
 Increase provision of early childhood development services Remove demandside barriers Put conditions in place for learning to occur with joy, rigor and purpose Bolster role of family and communities 	 Establish teaching profession as a meritocratic, socially valued career Expand engagement in preservice training Invest in at-scale in-service professional development Give teachers tools and techniques for 	 Ensure the curriculum is effective Provide pedagogical tools to teach to the level of each student Use assessments judiciously Ensure access to high-quality, ageappropriate books Effectively harness technology 	Ensure minimum infrastructure Prevent bullying and any form of discrimination and violence Increase inclusiveness so that all learners feel welcome and thrive Teach students first in a language they speak and understand	 Strengthen human resource function of education systems to professionalize school leadership Provide school leaders with the tools to manage with autonomy Invest in system leadership and management capacity to support schools 	

Source: World Bank (2020a).

For teacher policies, the guidance provided in the blueprint was based in part on a policy deep-dive for which the first recommendation was to make teaching more attractive as a profession. Beteille and Evans (2018) suggested five basic principles to recruit and support teachers: (1) Making teaching an attractive profession by improving its status, compensation policies and career progression structures; (2) Promoting meritocratic selection of teachers, followed by a probationary period, to improve the quality

of the teaching force; (3) Ensuring pre-service education includes a strong practicum component to ensure teachers are well-equipped to transition and perform effectively in the classroom; (4) Providing continuous support and motivation, in the form of high-quality in-service training and strong school leadership, to allow teachers to continually improve; and (5) Using technology wisely to enhance the ability of teachers to reach every student, factoring their areas of strength and development^{xxx}. Some of these recommendations, especially those focusing on how to make the teaching profession more attractive, are also made in an upcoming global report on teacher shortages by UNESCO (2024).

Another report provides recommendations on cost-effective approaches to improve learning. The recommendations are made by the Global Education Evidence Advisory Panel convened by the World Bank and the UK Foreign, Commonwealth & Development Office and hosted by the Building Evidence in Education Global Group. The mandate of the panel is to provide succinct, usable, and policy-focused recommendations to support decision-making on education investments in low- and middle-income countries. Two reports were produced (World Bank, 2020b, 2023a), with the second report expanding on the first. To provide guidance on what to do, and what not to do, the panel classified interventions to improve learning in low- and middle-income countries into four classes with examples of interventions (in the 2023 report, a fifth class of effective but expensive interventions was added):

- Great buys (most cost-effective): Providing information on the benefits, costs, and quality of
 education; Supporting teachers with structured pedagogy (a package that includes structured
 lesson plans, learning materials, and ongoing teacher support); Targeting teaching instruction by
 learning level, not grade (teaching at the right level in or out of school).
- Good buys (highly cost-effective): Providing parent-directed early childhood stimulation programs (for ages 0 to 36 months); Providing quality pre-primary education (for ages 3 to 5); Reducing travel times to schools; Giving merit-based scholarships to disadvantaged children and youth; Administering school-based mass deworming where worm-load is high.
- Promising low-evidence interventions (cost-effective, but more rigorous evidence is needed):
 Using software that allows personalized learning and adapts to the learning level of the child (if
 hardware is already in schools); Augmenting teaching teams with community-hired staff;
 Providing mass school-based treatment of specific health conditions; Leveraging mobile phones
 to support learning; Safeguarding students from violence; Teaching socio-emotional and life skills;
 Involving communities in school management; Targeting interventions towards girls.
- Bad buys (not effective or cost-effective as typically implemented): Investing in hardware like laptops, tablets, and computers alone; Providing inputs (textbooks, additional teachers to reduce class size, school buildings, grants, salary increases, and libraries) without addressing other issues.
- Effective but expensive buys (relatively expensive way to deliver learning outcomes these interventions may be appropriate for school systems with larger budgets or to achieve non-education objectives): Transferring cash to improving learning; Feeding in primary schools.

On targeting interventions towards girls, the World Bank report notes that while girls may benefit from non-targeted interventions, they may also continue to face girl-specific barriers. Among successful interventions, the report mentions programs teaching girls negotiation skills, economic incentives (in kind or cash) for girls to remain in school and attend school, efforts to inform parents and communities of the benefits of girls' education, and constructing girl-friendly schools (including with girls-only toilets). The cost of some of these interventions, however, leads the report to advise that more evidence is needed on how to bridge the gender gap in enrollment and learning cost-effectively. This is also the argument made in this report, namely that beyond targeting adolescent girls, improving foundational learning may also be effective. Both approaches can however work hand in hand as illustrated in the case study in Box 6.

Box 6: Improving Girls Education and Ending Child Marriage: Case Study for Nigeria

The World Bank report on cost-effective ways to improve learning mentions targeting girls as promising interventions. Lessons can be learned from innovative programs. One such program in West Africa is the Center for Girls' Education (CGE) in Nigeria started in 2008 to delay marriage by reducing social and economic barriers to schooling and providing group-based mentoring and support. A key intervention involves afterschool educational enrichment programs that adapt the safe space approach to address parent's and girls' requests for strengthening academic competencies (literacy and numeracy), considering the challenges encountered in rural schools. Clubs led by female teachers from the girls' schools provided accelerated literacy instruction with student-centered teaching methods. The girls were also given opportunities to gain crucial life skills not offered in secondary school — by discussing reproductive health, visiting local health services, developing relationships of trust, and building social networks. Through ongoing engagement with parents and with religious and traditional leaders, community support was strong.

CGE dedicated its founding year to conducting a baseline survey and exploratory ethnographic research in the rural communities planned to serve. The survey found the mean age of marriage to be 14.9 years and that 45 percent of adolescents aged 15-19 had begun childbearing. Only 8 percent of women ages 18-24 had completed primary school and just 5 percent had completed secondary school. In contrast, more than twice as many men of this age range had completed primary school (17 percent) and secondary school (14 percent). The ethnographic component of the research found education to be one of the few socially appropriate alternatives to early marriage. Given the low quality of public education most parents said they were reluctant to make the sacrifices required to send their daughters to school.

A preliminary evaluation by Perlman et al. (2016) suggested that the program was achieving large gains. The 2007 baseline found that less than 25 percent of girls graduating from primary school in participating communities made the transition to junior secondary and only four percent graduated from senior secondary. Of the first 800 girls to go through the CGE program, 97 percent progressed from primary to secondary school and 82 percent graduated from secondary school. Participation in the program was also associated with a delay in the age at first marriage. This was not a randomized control trial, but the gains in the program area were much larger than those achieved regionally. Part of the program's success may have been due to parents seeing that their daughters were learning. Qualitative feedback from participants and their families also suggested that the program was also making other differences in the girls' lives. Mentors leading sessions on life skills reported that some girls had been able to use their newly acquired expression skills to persuade their parents to delay their marriage, so that they could complete their education. Others convinced in-laws to let them remain in school after marriage.

A separate assessment of a new CGE Second Chance program preparing out-of-school girls to re-enroll in school is also being conducted. Preliminary results (not published yet) found that after three years, participants were 83 percent less likely to have married than girls in control communities. The program increased school enrolment seven-fold and this increase was highest among the poorest girls. Participants were far more likely to report that they felt listened to, considered, trusted, important, and able to make a positive impact on their communities. They also scored significantly higher on an index of self-advocacy measures related to decision making about marriage and schooling. Full functional literacy increased from 10 percent at baseline to 87 percent at the end of the accelerated academic bridge training.

Source: Perlman and Wodon (2023).

Role of Teachers

The great, good, and promising buys identified in the World Bank report must be implemented by teachers with adequate training. Traditionally, teacher training used to involve gathering teachers for short mostly theoretical training sessions and then sending them back to the classroom, hoping that what was taught would be applied and make a difference. This does not work. A review of successful programs improving student learning suggests that these programs have common characteristics (RTI Learning at Scale study – see Stern et al., 2023, on program characteristics and Harris-Van Keuren, 2023, on costs). Many of these programs are also those cited in the report on smart buys issues from the Word Bank.

- <u>Literacy.</u> For literacy programs, 10 characteristics of successful programs were identified: the programs focus on training teachers in modeling and practicing new skills, include structured teachers' guides, have coaches providing structured tools to support teachers, use face-to-face training methods for the initial trainings, use direct-instruction pedagogical methods, ensure that student books are available at a 1:1 ratio for all students, use a phonics-based instructional methodology, increase the amount of instructional time in reading lessons, build capacity at a decentralized level, and are designed to align with existing government education plans.
- Numeracy. For numeracy programs, 14 characteristics of successful programs were identified: the programs include learning aids for students (e.g., counters, number cards, etc.), have materials aligned to the curriculum, use structured teacher's guides (scripted lessons), include continuous and formative assessment, target instruction to the student level (differentiated instruction or teaching at the right level), focus on developing conceptual understanding, include pair or group work, use concrete materials and resources (manipulatives), rely on coaches who are government staff, include an initial face-to-face training as well as refresher face-to-face training, have teacher training (lowest level in cascade) done by government officers, have Government staff responsible for conducting monitoring, and invest in building capacity building at the decentralized level.
- Implications for teacher training. A common feature of many successful programs is to train teachers in practicing new skills using structured pedagogy, with coaches supporting teachers and monitoring progress. Part of the trainings may be online, but starting face-to-face helps. A key recommendation appears to increase the time allocated in trainings to practice.

While specific interventions may improve learning, analysis of PASEC 2019 data for West Africa suggests that the overall quality of teachers and school leaders and their gender also matter. The two World Bank and RTI reports just cited all rely on reviews of "what works", with a focus on impact evaluations relying on randomized control trials (RCTs) or quasi-experimental methods. The emphasis on RCTs is warranted since they are the gold standard in evaluation. At the same time, while RCTs may have internal validity, their external validity (i.e., whether their results are valid outside of the experiment they are part of) is often questionedxxxi. Another issue is that some types of interventions may not easily be randomized. It is therefore also useful to use existing datasets to look at the correlates of learning performance for students. While these analyses may not imply causality, they may point to policies and interventions that can help students. For francophone Africa, regression analysis can be conducted using PASEC, a multicountry student assessment that started in 1991 under the leadership of the Conference of Ministers for Francophone States and Governments (CONFEMEN). The assessment is implemented in grades 2 and 6 for competencies in reading/language and mathematicsxxxii. Scores are scaled so that the international average is 500 points and standard deviation 100 points when weighting all countries equallyxxxiii. Table 20 provides preliminary estimates of the potential impact of selected variables on student scores across grades and subjects. Being taught in the language used at home, having a female teacher or head of school xxxiv, having a teacher who holds a professional diploma or has pre-service training, having a teacher also serving as tutor (which may be a signal of quality as the teacher is in demand), and being enrolled in a private school are all associated with positive effects on performance, while large class sizes are associated with lower performance. Country effects also tend to be large given differences between countries in student performance. Overall, for the purpose of this study, the main finding is that estimates suggest that the quality and training of teachers and school leaders and their gender matter for learning.

Table 20: Effect of Selected Variable on Student Performance, PASEC (Mid-point at 500)

Variable	Effects (similar for boys and girls)			
Language of teaching same as child language at home	+25 to +35			
Women teacher	+4 to +7			
Women head of school	+11 to +14			
Teacher with a professional diploma	+8 to +19			
Teacher with prior training	+4 to +11			
Teacher also acting as tutor	+18 to +22			
Large class size	-7 to -9			
Private school	+21 to +27			
Country effects	-58 to +81			

Source: Authors' estimation with PASEC data – estimates are preliminary.

Several explanations could be advanced for the positive effect of female teachers and school leaders on learning outcomes, but this effect may be related in part to their occupational and income status. Data from the EHCVM surveys suggest that female teachers are less likely than male teachers to have a second job (12.9 percent and 13.2 of female teachers have a second job in public and private schools, respectively, versus 27.5 percent and 24.9 percent of male teachers in those schools). The fact that female teachers are more likely not to have a second occupation may be related to their responsibilities at home, or the fact that they may not be the main earner in the household, but this may enable them to concentrate more fully on their teaching. Another interesting finding is the fact that female teachers are less likely to be poor than male teachers, probably because they married with individuals with better earnings opportunities in average given their own social status and educational attainment. Not having to confront the daily pressures and uncertainty associated with poverty may also enable female teachers to concentrate more fully on their job. An additional benefit from women teachers (and school leaders) is that they may stay in the profession longer, which has important benefits for students and reduce the cost of staffing schools (staff turnover is lower, hence the costs of hiring and training are also lower).

While teachers' education and training and their gender matter for student learning, most countries are doing poorly on those dimensions. Table 21 provides data from the 10-country EHCVM household survey mentioned earlier on teacher characteristics, including gender, education, and training. This is done by identifying teachers in the employment module of the surveys. Several findings stand out:

- <u>Educational attainment:</u> At the secondary level, 75.7 percent of teachers in public schools have a post-secondary education, but the proportion is only 32.8 percent at the primary level. The differences between public and private schools are small, but overall educational attainment for teachers falls short of accepter standards and recommendations from the African Union.
- <u>Gender:</u> In primary schools, about four in ten teachers are women, but the proportion drops to less than one in five (and in public schools one in six) at the secondary level. This is likely to affect learning negatively and may also deprive girls from teachers serving as role models for them.
- Other statistics: Estimates are provided for location with 33.2 percent of teachers in public schools living in rural areas versus 25.6 percent for private schools which are more concentrated in urban areas. The share of teachers in rural areas is lower for secondary schools than for primary schools. Internet access remains a problem, especially for primary school teachers, which can pose

problems for distance or hybrid teacher training initiatives, as well as the ability of teachers to benefit from digital resources. In terms of family status, most teachers are married and heads of household, although with slightly lower proportions (especially for marriage) in the private sector. This could be partly due to teachers in the private sector being slightly younger. The average age of teachers is 38.8 years in public schools and 35.6 years in private schools.

Table 21: Educational Attainment and Other Characteristics of Teachers, 10 Countries (%)

	Public schools			Private schools			
	Primary	Secondary	All	Primary	Secondary	All	
Sex							
Men (%)	61.7	86.3	69.6	58.4	81.4	68.1	
Women (%)	38.3	13.7	30.4	41.6	18.6	31.9	
Total (%)	100	100	100	100	100	100	
Family status							
Household head (%)	86.9	87.9	87.2	72.5	79.8	75.6	
Married (%)	80.6	80.3	80.5	65.1	56.4	61.4	
Household size	6.2	5.9	6.1	6.6	4.8	5.8	
Age							
Mean age	38.2	39.9	38.8	35.8	35.3	35.6	
18-24 years (%)	3.3	2.1	2.9	10.9	6.4	9.0	
25-34 years (%)	34.7	30.9	33.5	40.7	53.7	46.2	
35-44 years (%)	38.4	38.0	38.2	27.2	20.5	24.4	
45-54 years (%)	18.0	23.7	19.9	16.1	13.3	14.9	
55-65 years (%)	5.3	5.2	5.2	4.4	5.3	4.8	
66+ years (%)	0.3	0.1	0.2	0.7	0.9	0.8	
Total (%)	100	100	100	100	100	100	
Education level							
Primary (%)	9.5	9.3	9.4	18.0	8.8	14.1	
Lower secondary (%)	13.6	2.8	10.1	17.9	2.6	11.4	
Upper secondary (%)	44.1	12.3	33.9	43.2	14.8	31.2	
Higher education (%)	32.8	75.7	46.5	20.9	73.8	43.3	
Total (%)	100	100	100	100	100	100	
Location							
Rural (%)	40.2	18.3	33.2	31.5	17.5	25.6	
Access to the internet (%)	69.5	82.0	73.5	52.9	79.7	64.3	

Source: Authors based on the 2018-19 EHCVM survey.

Note: Includes Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea, Guinea-Bissau, Mali, Niger, Senegal, and Togo.

Better professional development for teachers requires a range of approaches, but they should include gender-sensitive components, including for preventing school-related gender-based violence (SRGBV). Several interventions have been added in the second World Bank report on smart buys published in 2023 versus the first shorter report published in 2020. Many of these additional interventions were included in the promising low-evidence interventions category. This is the case for safeguarding students from violence, which is often in part gender-based (on the global benefits of ending violence in schools and interventions to do so, see Box 7). Teaching socio-emotional and life skills was also included as a new promising intervention, as was targeting interventions towards girls as already mentioned above.

Box 7: Ending Violence in Schools, including SRGBV

Violence in schools remains a major issue in Africa and elsewhere, as noted in an investment case to end violence in schools published by the World Bank and the Safe to Learn Initiative (Wodon et al., 2021). For education to be transformative, learning is needed, yet less likely to happen if a child experiences fear or trauma in school. Violence in schools affects learning negatively and leads some children to drop out of school. Being the victim of violence in school also has a wide range of other negative effects, including for health (not sleeping well, headaches, injuries from corporal punishment, and poor mental health) and engaging in risky behaviors (using drugs and alcohol or having sex at a younger age, and even considering suicide). For virtually all education and health variables for which data were available in school health surveys, violence in school was associated with negative outcomes in a statistically significant way. Individuals and societies are paying a heavy price as a result with an estimate of \$11 trillion in lost lifetime earnings globally (from impacts on schooling/learning, not additional impacts on health/mental health).

What can be done to prevent violence in schools? Wodon et al. (2021) identify a range of interventions, with cost-benefit analyses suggesting that their benefits are likely to far outweigh the costs. Mathews et al. (2021) also published an evidence review suggesting that it is best to: (i) Implement multi-component and integrated interventions engaging a variety of stakeholders; (ii) Consider whole school approaches that address not only policies and practices, but also values; (iii) Promote group-based learning which can help in developing shared values while also tackling gender norms, including gender-based social norms; (iv) Provide leadership opportunities for school staff and learners including through short practical courses; (v) Adapt interventions to the school context (e.g., different types of violence require different strategies); and (vi) Adopt an iterative learning process, considering the "how" of interventions apart from the "what" and due attention to monitoring outcomes along the way.

Several interventions reviewed in Wodon et al. (2021) and Mathews et al. (2021) were implemented in Africa. This includes the Good School Toolkit, for which an evaluation (DeVries et al., 2015) suggests that the program reduced the risk of physical violence by teachers and school staff by 42 percent; halved the number of teachers who reported using physical violence against students; and improved students' connectedness and sense of safety and belonging with their school. Importantly, the cost of implementing many interventions can be low, as simulations illustrate. From francophone Africa, a great experience is that of Graines de Paix, a non-profit operating currently in Benin and Côte d'Ivoire that received the prestigious UNESCO-Hamdan Prize for Teacher Development in 2022. In Côte d'Ivoire for example, the project aimed to upgrade teachers' capacities to use more efficient classroom management techniques than violence-based authority and improve classroom dynamics. Findings from a formative evaluation of the program are available. The program has now been replicated among others in Benin.

These are just a few examples of promising interventions from Africa. In terms of global guidance, UNESCO is providing various resources including a primer on why gender matters and how to measure school-related gender-based violence (UNESCO, 2023c). Also of interest is UN Women's (2016) Global Guidance on school-related gender-based violence and the recently launched African Union's Continental Strategy on Education for Health and Well-being of Young People of the African Union (2023).

Another key gender sensitive component of professional development for teachers and school leaders is gender-responsive pedagogy (GRP). GRP encourages teachers to adopt a gender-sensitive approach by comprehending the distinct needs of both boys and girls, recognizing that gender identity is not a homogeneous construct. For effective implementation, teachers should undergo refresher training periodically to ensure that they remain abreast of evolving pedagogical strategies and continue to refine

their skills in understanding and responding to students' needs. As teachers are better equipped to create inclusive and supportive learning environments, the performance of learners may be positively impacted, contributing to a reduction in dropout rates, particularly for girls. Although experimental evidence on the impact of GRP is limited, reviews suggest benefits. Based on focus groups, interviews, and online questionnaires in 16 African countries, Dowd et al. (2018) suggest a range of potential beneficial outcomes, including: (i) teachers stopping using discriminatory, abusive, and threatening language, and learners feeling more encouraged to participate and support each other in learning; (ii) teachers being more able to motivate and provide appropriate feedback to boost student self-esteem and confidence, particularly for girls; (iii) stronger commitment for participating school leaders to support a safe learning environment for girls; (iv) prioritization on hiring female teachers and ensuring that facilities are genderresponsive; and (v) innovative approaches at the school level such as girls' support groups. Challenges were also identified, including prevailing social norms in families, communities, and even schools, a limited ability for some teachers to engage with sensitive topics such as sexual and reproductive health, and a lack of mainstreaming of GRP in teacher training institutions. Recommendations included (i) mainstreaming GRP in pre-service training and ongoing professional development; (ii) providing regular refresher trainings and on-site consultation with GRP resource people and experts; (iii) ensuring full participation of school leaders; (iv) providing more trauma-informed guidance and counseling skills for teachers; (v) improving safe school policies and practices, including teacher codes of conduct, reporting mechanisms for SRGBV, support mechanisms for victims, and mechanisms of child protection in schools. For widespread dissemination of GRP principles and training, digitalizing contents is key (see Box 8).

Box 8: Gender Responsive Pedagogy: A New eLearning Course

The Forum for African Women Educationalists (FAWE), the UNICEF Eastern and Southern Africa Regional Office and West and Central Africa Regional Office, and UNESCO's International Institute for Capacity Building in Africa (UNESCO IICBA) jointly released a free online self-paced eLearning course on GRP at a plenary session of FAWE's Triennial Conference on Girls' Education in Nairobi in November 2023. The course builds on a previous facilitated course and years of experience of FAWE and its partners, including its training guide for teachers and other educationalists (FAWE, 2020). The course is available on IICBA's eLearning platform in English and is being translated in French. It can be adapted to country needs based on demand. Teachers and school administrators who complete the course and pass a short test at the end of the course receive a certificate of completion, contributing to their professional development.

FAWE started to develop the GRP model more than 15 years ago to address the quality of teaching in African schools and equip teachers with knowledge, skills, and attitudes to empower them to respond to the learning needs of girls and boys with gender-aware classroom practices. Yet many teachers in sub-Saharan Africa, conditioned by male-dominated values and social norms in their communities, employ teaching methods that do not provide equal opportunity for participation by girls and boys in the classroom. Neither do these methods account for the individual needs of learners, especially girls.

The course is structured into two parts or modules. The first part on teaching and learning consists of eight units. The first two units are on gender and human rights. The next six units are on various aspects of gender responsiveness, including for schools and management systems; learner-centered pedagogy; language use; lesson planning; teaching and learning material; and classroom set-up and management. The second part of the course is on gender-based violence and other factors that are known as causes of school drop-out of girls, in particular. It has four units on sexual and reproductive health for gender-responsive schools, school-related gender-based violence, engaging stakeholders and advocacy, and design, monitoring, and evaluation. Each of the two parts should take only a few hours to complete.

The hope is that this holistic course will be widely used by teachers, school principals, Ministries of Education, and development partners. For teachers, the course is a tool that can be used to strengthen teaching practices and student engagement to help create a gender responsive classroom environment. It can also serve as a source of creative and participatory activities that help create a gender responsive classroom. For school principals and other administrators, the course can serve as a reference for school management to guide the creation of gender responsive school systems, for creative engagement of community stakeholders in GRP, and for supporting the monitoring and evaluation of gender responsive school systems. Feedback on the course is welcome, including to adapt it to specific country needs.

Role of School Leaders

To train and motivate teachers and improve pedagogy and leaning in the classroom, the role of school leaders is essential. Quality leadership can be defined in various ways (Rashid, 2023), but it goes hand in hand with quality schools and higher performance for teachers and students, as noted by UNICEF in its school positive deviance research suggesting that effective school leadership is associated with better outcomes including in disadvantaged areasxxxv. Education International (2015) argues for collaborative, collegial, and co-operative leadership, involving leaders, administrators, teachers, education support personnel and the pedagogical community. School leaders are key to create a positive school climate and culture of peace, tolerance, equity, inclusiveness, cooperation, and hard work, fostering conditions for effective teaching and learning (Sinyolo, 2018). The importance of leaders has long been noted (e.g., Leithwood et al., 2004), but it has been confirmed by more recent work (e.g., Tedla and Kilango, 2022; Neufeld, 2014). Quality leadership is also associated with other desirable outcomes including improved teacher retention rates, higher levels of teacher job-satisfaction, increased student motivation, and reduced student drop-out rates (e.g., Shell, Hurt and White, 2023; Banerjee et al., 2017; Cogaltay, Yalciny and Karadag, 2016). School leadership also makes a difference for parental involvement in schools -a challenge in many countries in sub-Saharan African and yet another factor associated with better outcomes for students (e.g., Magunda and Nabitaka, 2022; Mahuro and Hungi, 2016; Chowa et. al, 2012).

Unfortunately, many school leaders in Africa lack leadership skills and have not benefitted from adequate professional development. In addition, only a small share of leaders being women. Many countries don't have clear policies on school leadership. School leaders are often appointed from a pool of teachers without training to equip them with the skills they need. For West Africa, a review of professional standards and competencies for teachers and school leaders (Nwokeocha et al., 2023a) suggests that programs and policies for school leaders are lacking in comparison to what is in place for teachers, even if there are also gaps in programs for teachers. Gender is another major concern for school leadership. Analysis using the EHCVM surveys in francophone Africa shows that women account for a minority of teachers at the primary and especially secondary levels. They are also a minority among school leaders. In public schools, as shown in Table 22. Appointment to leadership position is often skewed in favour of male teachers possibly because of societal stereotypes that portray girls and women as ineffective leaders, even though research associates female leaders and teachers with positive learning outcomes for both girls and boys, as mentioned earlier when pointing to selected results with PASEC data (see also Hwang and Fitzpatrick, 2021; Tsimpo and Wodon, 2021; Hoque et al., 2013; Antecol et al., 2012).

Table 22: Share of School Leaders by Gender, Type of School, and Education Level, 10 Countries (%)

	F	Public	Private		
	Primary	Secondary	Primary	Secondary	
Share by gender					
Men (%)	79.1	70.5	68.3	86.2	
Women (%)	20.9	29.5	31.7	13.8	
Total (%)	100.0	100.0	100.0	100.0	

Source: Authors based on the 2018-19 EHCVM survey.

Note: Includes Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea, Guinea-Bissau, Mali, Niger, Senegal, and Togo. Sample sizes are small for school leaders, hence even when combining surveys, estimates may be tentative only.

A recent review points to the importance of Africa-specific styles of leadership. Bush et al. (2022) focus on three questions. The first is which competencies and practices are associated with effective school leadership in Africa. Effective school leadership tends to be understood as helping schools achieve their goals, but most of the research is driven by international scholars typically focusing on 'transformational' leadership. Issues related to shared and distributed school leadership models are discussed, but less so. Of interest here is the concept of Ubuntu leadership, whereby principals model behaviors for others and demonstrate a commitment to core values such as compassion, empathy, truthfulness, and respect for others (Kalabo, 2017; Setlodi, 2019). The second question is about the features of effective and scalable continuous professional development for school leadership. There is a lack of evidence on whether these programs are working, and most programs are small and fragmented. The third question is about whether policies in Africa promote or inhibit leadership practices. Few African countries have policies in place for school leadership (e.g., Bush et al., 2021, on instructional leadership, from the World Bank).

Box 9: Data on School Leadership Policies and Characteristics

Systematic data on policies related to school leadership in Africa are hard to come by, but work done a decade ago under the SABER (Systems Approach for Better Education Results) initiative suggests that these policies are still very much latent. SABER was an initiative to help countries assess their education policies, with two main goals: (1) providing advice to countries on what works to improve educational outcomes in various domains through a review of the evidence; and (2) assessing county policies against good practice benchmarks based on that evidence. The analysis was based on country policies on the books (de jure), and thereby on policy intent, as opposed to the implementation of existing policies (de facto). The domain of analysis that focused on teachers suggested that education system should aim to achieve eight policy goals: 1) Setting clear expectations for teachers; 2) Attracting the best into teaching; 3) Preparing teachers with useful training and experience; 4) Matching teachers' skills with students' needs; 5) Leading teachers with strong principals; 6) Monitoring teaching and learning; 7) Supporting teachers to improve instruction; and 8) Motivating teachers to perform. How did countries perform on these goals? For 12 African countries where analysis was completed and published (of which five were in West Africa), the average rating for the eight policy goals was 2.04 on a scale of one to four. The goal most closely related with school leadership had an average rating of only 1.58, the lowest average rating among the eight policy goals. Countries were rated especially poorly on whether there were programs to support the development of leadership skills.

A more recent initiative at the World Bank is the Global Education Policy Dashboard (GEPD) that aims to provide policy makers with a diagnostic tool including 39 indicators (plus sub-indicators) on factors that may affect learning outcomes. The focus is on what is happening in the classroom, although the (*de jure*)

policy framework is also considered. In practice, GEPD is largely based on three surveys. The first survey is a school survey consisting of eight short modules "typically implemented in 200 to 300 schools to produce nationally representative estimates. The focus is on practices. The second survey is a policy survey to provide *de jure* indicators as was done in the SABER approach. The third survey is a streamlined version of the civil-servant surveys of the Bureaucracy Lab. With a sample size of about 200 public officials who work in education per country, the survey collects data about the capacity and orientation of the bureaucracy, and political factors affecting education outcomes. In addition, existing data for other indicators that affect educational outcomes are also used. At the time of writing, GEPD had been piloted in six countries, four of which were in sub-Saharan Africa: Ethiopia, Madagascar, and Sierra Leone, for which data were publicly available and Rwanda for which data were not available in the GEPD website. The school surveys include a range of questions to assess school leadership practices.

There are however interesting initiatives for training school leaders. As part of situational analyses on professional standards and competencies for teachers and school leaders in West Africa, Nwokeocha (2023c) consider the School Leadership and Management (SLM) training program in The Gambia as a promising approach. The Gambia introduced a mandatory diploma in SLM in 2020 as a prerequisite for entering the leadership track. This is a one-year program with over a dozen modules, the completion of which leads to a Diploma in School Leadership and Management. The program targets teachers serving in middle leadership positions to equip them with the necessary knowledge, skills, and attitude to effectively run a school and achieve desirable school and learning outcomes. An assessment of the first cohort of teachers undertaking the program suggests high levels of satisfaction, but there is a need to conduct a more thorough evaluation of the initiative and a cost-benefit analysis in comparison to other initiatives such as the LEAD (Learning through assessment and data) initiative for school leaders being in Rwanda.

Box 10: Beyond School Leaders, Do Faith Leaders Help in Educating Girls and Ending Child Marriage?

The role of faith leaders in ending child marriage is often recognized. After all, faith leaders are often those performing marriages. Recent work (Bagamboula Mayamona et al., 2022; Boungou Bazika et al., 2022) focusing on the issues of girls' education and child marriage in the Democratic Republic of Congo (DRC) and the Republic of Congo (ROC) based on qualitative fieldwork from the capital cities and two rural areas in each country looks at four questions: (1) How much support is there in communities for girls' education and women's work?; (2) What are the factors leading girls to drop out of school?; (3) What are communities' perceptions related to child marriage?; and (4) Is there a role for faith leaders and faithbased schools in helping to end child marriage and promote girls' education? There is substantial support for girls' education and women's work in the communities where the qualitative fieldwork was conducted in the DRC. There is also support for girls' education and women's work in the communities in the ROC, although less so in one of the communities with a predominantly indigenous population. Still, a range of factors including the out-of-pocket costs of schooling for parents, the poor quality in the education being provided, and the risk of becoming pregnant when sexually active lead some girls to drop out of school prematurely. In those cases, child marriage is more likely. Faith leaders should play a role in preventing child marriages, but they tend not to talk about the issue in the ROC, in contrast to what is observed in the DRC. Findings from the qualitative fieldwork also suggest heterogeneity between communities, which matters for adapting program and policies to local contexts. Overall, the findings are encouraging, given broad support in most communities to end child marriage, support girls' education, and promote women's work. The challenge for public policy, as well as for faith leaders and faith-based and other schools, is to build on the support to provide better opportunities for girls, taking into account differences in context and attitudes between communities.

Teachers and school leaders are key to improve girls' education and thereby end child marriage, but professional standards and competencies are needed to strengthen the profession and career paths. A set of three recent UNESCO IICBA studies (Nwokeocha et al., 2023a, 2023b, 2023c) investigate the state of professional standards and competencies for teachers and school leaders in West Africa, with more detailed case studies for Sierra Leone and The Gambia. The studies were conducted against the backdrop of guidance on professional standards and competencies from international best practice, including the Global Framework of Professional Teaching Standards developed by UNESCO and Education International (2019) and instruments from the African Union Commission (2019a, 2019b, 2019c): the African Continental Framework of Standards and Competencies for the Teaching Profession, African Continental Teacher Qualification Framework, and African Continental Guidelines for the Teaching Profession. These global and continental frameworks provide a framework to assess professional standards and competencies in West Africa. In this section, key findings from the West Africa and country studies are summarized. Interestingly, Sierra Leone is a country at an advanced stage for developing its professional standards and competencies for teachers and school leaders, while The Gambia is still in the process of developing its standards. The analysis of countries at different stages of the process illustrates what can be done in different contexts.

West Africa Study

The West Africa study focuses on three areas: (1) framework of professional standards and competencies; (2) teacher education; and (3) the working conditions of teachers. Apart from an introduction on the need for professional standards and competencies for teachers and school leaders, the core of the study is structured into three chapters devoted respectively to: (1) national frameworks of professional standards and competencies and its implementation; (2) teacher education, both preservice and in-service; and (3) the working conditions of teachers and school leaders. The analysis relies on a mixed quantitative and qualitative approach that includes results from (i) nationally representative household surveys (especially the EHCVM survey for 10 countries mentioned earlier); (ii) an online survey of officials from Ministries of Education and other agencies across West Africa; (iii) more in-depth analysis and online surveys for teachers and school leaders for Sierra Leone and The Gambia; and (iv) key informant interviews, focus groups, and brainstorming sessions conducted in the two countries and other West African countries. This executive summary outlines key findings and recommendations.

On professional standards and competencies for teachers and school leaders, many countries in West Africa still need to make progress. The analysis targeted 15 ECOWAS countries, of which eight had responded at the time of writing. Apart from an online survey, key informant interviews were held with officials of five countries. While results should be considered as illustrative and preliminary, they are nevertheless instructive to provide a comparative perspective. All countries face challenges, but some are more advanced than others in confronting them. Most countries have legal or policy provisions that support the establishment of a national framework of teaching standards and competencies, but they are at various stages of this process and have not aligned their frameworks with recommendations from the African Union Commission and UNESCO and Education International, with Nigeria and Sierra Leone being exceptions. Except in those two countries and Ghana, Ministries of Education continue to regulate the teaching profession. Practices such as professional licensure examination, registration, and licensing of teachers and school leaders tend to be absent in most countries. Career paths and mandatory school leadership training for school leaders are yet to be implemented in most countries. Except for Nigeria,

Ghana, Sierra Leone, and Burkina Faso, countries do not participate actively in African and global federations of teaching agencies, which reduces their ability to benefit from exchanges of good practices.

On teacher education, using the EHCVM survey, a profile of the education and other characteristics of teachers was provided. As mentioned in the previous section, the analysis of household survey data for WAEMU countries suggests (1) a low proportion of women among teachers; (2) low levels of education, particularly for primary school teachers, but with little difference between public and private schools; (3) a minority but nonetheless significant proportion of teachers in rural areas with limited internet access. Data from an online survey of Ministry of Education and other officials also suggests that the qualifications required of teachers are often limited (one or two years of post-secondary school training, typically), with significant issues for continuous professional development and a large contingent of "unqualified" teachers in many countries (those teachers do not meet the required qualifications in their country).

On working conditions for teachers, using again the EHCVM survey, a profile of the salaries, benefits, and levels of poverty of teachers was also provided. Data from the online survey of Ministry of Education and other officials suggests that the teaching profession is not well perceived in terms of its social status, with job satisfaction likely to be low for many teachers. This is confirmed from data from teacher surveys in Sierra Leone and the Gambia. But to get a more precise profile of teacher working conditions, analysis was conducted with the EHCVM surveys. Key findings are displayed in Table 23. The average annual salary of teachers is much higher in public schools (FCFA 2.1 million, or about US\$3,540 at the current exchange rate) than in the private sector (FCFA 0.9 million, or about US\$1,450). Compared to teachers in the private sector, those in the public sector are also much more likely to receive benefits (paid leave, sick leave, pension fund contributions, maternity leave, bonuses, and other benefits). Within the two networks (public and private), secondary school teachers are better paid than primary school teachers, especially for the private sector, but the differences are not large and the same is true for other job-related benefits. For both private and public schools, just over one teacher in five has a second job. The workload is similar in public and private schools, with teachers working on average for 20 days per month and 7 hours per day. Estimates are also provided for the share of teachers in poverty and higher order poverty measures (for definitions, see Coudouel et al., 2002). As expected given differences in salaries, poverty is higher for teachers in private than in public schools (13.6 percent of teachers in the private sector live in poverty versus 6.7 percent for those in the public sector). Poverty measures are also slightly higher for primary than secondary teachers. Nevertheless, in terms of quintiles of well-being, most teachers have consumption levels that place them in the highest quintile. Data are also provided for the share of teachers who have had a recent illness and whether they benefited medical coverage in terms of insurance. Finally, data are provided on access to financial services. Compared to teachers in the private sector, those in the public sector are more likely to have a bank account, including a savings account. They are also more likely to have benefited from credit. Conversely, teachers in the private sector participate a little more in tontines. These results are logical given the differences in salary and resources between the two groups.

Table 23: Teacher Wages, Benefits, and Well-being, 10 Countries (%)

	Public schools			P	Private schools			
	Primary	Secondary	All	Primary	Secondary	All		
Salaries and Benefits								
Salaries (FCFA, thousands)	2,047	2,322	2,134	706	1,109	877		
Second job (%)	22.4	24.3	23.0	23.2	18.3	21.2		
Days worked per month	19.7	19.8	19.7	20.0	18.6	19.4		
Hours worked per day	7.3	6.8	7.1	6.9	6.6	6.8		
Paid leave (%)	97.9	97.5	97.8	26.4	21.5	24.3		
Sick leave (%)	69.8	65.1	68.3	24.8	29.2	26.7		
Pension (%)	73.1	70.0	72.1	14.3	14.9	14.5		
Maternity leave (%)	54.6	40.9	50.2	22.4	9.6	17.0		
Bonus (%)	25.0	30.5	26.7	4.5	6.3	5.3		
Other benefits (%)	27.3	26.7	27.1	4.6	6.5	5.4		
Food received (%)	0.8	0.4	0.7	3.3	2.0	2.7		
Household Poverty								
Incidence (%)	8.3	3.0	6.7	18.3	7.2	13.6		
Depth (%)	1.3	0.5	1.1	4.7	1.2	3.3		
Severity (%)	0.4	0.1	0.3	1.7	0.3	1.1		
Quintile of Well-being								
Poorest quintile (%)	1.4	0.5	1.1	6.7	1.5	4.5		
Second quintile (%)	5.5	2.5	4.6	9.5	3.8	7.1		
Third quintile (%)	11.2	7.4	10.0	12.0	9.1	10.8		
Fourth quintile (%)	18.4	16.6	17.8	25.4	14.0	20.6		
Richest quintile (%)	63.5	73.0	66.4	46.4	71.5	57.0		
Total (%)	100	100	100	100	100	100		
Health Status								
Sick, ill, or injured (%)	32.9	34.1	33.3	36.8	34.0	35.6		
No health insurance (%)	74.9	72.2	74.0	94.7	90.1	92.8		
Financial Services								
Banking account (%)	83.5	91.4	86.1	60.0	84.8	70.5		
Obtention of credit (%)	20.8	24.7	22.0	4.2	7.4	5.5		
Savings account (%)	56.9	65.3	59.6	33.3	53.1	41.7		
Savings group (tontine) (%)	15.6	13.9	15.0	20.2	17.5	19.1		

Source: Authors based on the 2018-19 EHCVM survey.

Note: Includes Benin, Burkina Faso, Chad, Côte d'Ivoire, Guinea, Guinea-Bissau, Mali, Niger, Senegal, and Togo.

Study for Sierra Leone

Sierra Leone now has a National Professional Standards and Competencies for Teachers and School Leaders which has been mainstreamed into policy documents including the Comprehensive and Harmonized National Teacher Policies, the Teacher Licensing Examination Guidelines and Syllabus and the Collective Agreement Between the Employers of Teachers of Sierra Leone and The Sierra Leone Teachers Union. The country may be the first in Africa to have signed an agreement with its teacher union to change the salary structure and grade levels of teachers to match the four career stages prescribed by the African Union Commission's (2019a, 2019b). Sierra Leone's professional standards and competencies also align with continental frameworks. In short, the regulation of teaching in the country has a strong legal foundation with TSC solidly established to regulate teaching while also enjoying international recognition. The professional standards and competencies adopted in 2017 are being implemented even if there are challenges, including limited funds, staff, and digitization in TSC's regulatory operations. As for teachers and school leaders, the majority seem to be aware of the new standards and support them.

On teacher education, for both pre-service and in-service, multiple issues undermine quality. Teacher education is fundamental to improve teaching and learning, especially in a context where a large share of teachers do not have the minimum qualifications for teaching. The following issues have been identified and require responses: (i) The regulatory and quality assurance frameworks for pre-service teacher education is weak; (ii) the TC is the dominant qualification in the school system, with at least 40 percent of the teachers considered as "untrained and unqualified" - they require a path to acquire a degree and minimum qualifications; (iii) even if teachers and school leaders opine that they had adequate pre-service education, retraining is likely needed in many areas. Similar issues affect teacher continuous professional development (CPD). There is lack of national framework for the regulation of CPD and an inability of TSC currently to exert its regulatory power over CPD programs. Government programs (and budgets) are insufficient to address CPD concerns, with only a minority of teachers and school leaders being trained each year. Another issue is the multiplicity of agents training teachers, often with their own preferences in terms of what trainings emphasize, without effective coordination. CPD programs should have a positive impact on the professional capacities of teachers and leaders yet may not count so much towards promotion and advancement along the career path. CPD is being provided by the government, the teacher union, and individuals themselves, but coordination may again be lacking. A positive development is a National School Leadership Program being developed by TSC, although it could be better aligned with the African continental standards, domains, and competencies of school leadership. Teachers need more supply of teaching and learning resources, while leaders need more staffing and resources. As to digital competencies, most teachers and school leaders feel that they have good or excellent knowledge and skills for using computers, the internet, and online resources but there are few official provisions for access to a computer, laptop, tablet, or the internet. In terms of priority needs for CPD, teachers and leaders emphasize capacity building in teaching methodologies and the use of educational technologies, respectively, with school leaders also emphasizing training for leading professional knowledge, practice and conduct in their school. Many of these topics are discussed in the Education Sector Plan 2022-2026.

On working conditions for teachers and school leaders, the Collective Agreement signed between TSC, and the Teacher Union is a major step forward, but some issues remain. The Collective Agreement will strengthen professional standards and competencies. It is a clear example of good practice in teacheremployer relationships as it aligns with the Professional Standards and Competencies, stating clearly what a teacher or school leader should know and do, how to behave and what to expect in terms of reward, sanctions, retirement, and general benefits. Another positive development is the role of the Teaching Service Trade Group Negotiating Council in promoting harmony in labor relations between employers and union representatives. At the same time, a range of issues remain. Teacher performance evaluations still appear to follow the traditional pattern of superiors filling up annual performance reports and recommending for promotion, not necessarily considering CPD credits for example. The Presidential Teacher Awards have been instituted in 2021 to recognize some of the Best Teachers at the district and national levels, but some teachers and school leaders still do not know about these awards. In terms of their working environment, while most teachers and school leaders assess it as good, in many schools staffrooms and offices still do not have basic amenities. Working relations are generally good among colleagues and should be sustained. While, for the most part, salaries tend to be paid on time and in full, some teachers indicate that their salaries are either paid partially or delayed. Overall, teachers and school leaders rate their social status and job satisfaction as average only, rather than good.

Study for The Gambia

On professional standards and competencies for teachers and school leaders, while The Gambia has policies in place, it has yet to adopt recommendations from international frameworks. The country has made substantial efforts to develop and implement a national framework of professional standards and competencies for teachers and school leaders. However, much of these have not been published, the implementation is still in its infancy, and the framework is not aligned with the global frameworks provided by UNESCO and Education International and those developed by the African Union Commission. There is a low level of awareness about these global and continental frameworks among stakeholders. Other professional foundations have also not been laid for the teaching profession as expected by the continental frameworks. For instance, there is yet no law that has conferred on teaching a professional status, and there is also no National Teaching Council for the regulation of the profession. The Gambia has also not joined the Africa Federation of Teaching Regulatory Authorities (AFTRA) and the International Forum of Teaching Regulatory Authorities (IFTRA) to benefit from sharing of good practices. The Gambian Education Sector Strategic Plan 2016- 2030 endorses the development of professional standards and competencies for teachers and school leaders, but its recommendations must be implemented, including by creating a career path aligned to the African Union Commission framework. Mentoring, guidance, monitoring, assessment, evaluation, rewards, and other professional support to teachers and school leaders should all be further developed to firmly establish teaching as a profession in the country.

As in other countries, for both pre-service and in-service teacher education, multiple issues undermine quality. Teacher education is fundamental to improve teaching and learning, especially in a context where a large share of teachers do not have the minimum qualifications for teaching. The following issues have been identified and require responses: (i) The regulatory and quality assurance frameworks for pre-service teacher education is weak (e.g., lack of accreditation); (ii) two-year degrees are a dominant qualification in the school system, which is not enough, but some teachers do not even have that minimum-they require a path to acquire a degree and minimum qualifications; (iii) even if teachers and school leaders opine that they had adequate pre-service education, retraining is likely needed in many areas; and (iv) the academic staff and enrolment capacity of the three teacher education institutions is limited and insufficient to meet the demand for teachers. Similar issues affect teacher continuous professional development (CPD). There is a "Comprehensive Pre-Service and In-Service Strategic Framework and Implementation Plan" but it is not yet operationalized and could be better aligned with the international frameworks on standards and competencies. Government programs (and budgets) are insufficient to address CPD concerns, with only a minority of teachers being trained each year. CPD programs should have a positive impact on the professional capacities of teachers and leaders yet may not count so much towards promotion and advancement along the career path. CPD is being provided by the government, the teacher union, and individuals themselves, but coordination may be lacking. A positive development is a new one-year full-time training from the Management Development Institute in school management and leadership provide to aspiring leaders. Teachers need more supply of teaching and learning resources, while leaders need more staffing and resources. As to digital competencies, most teachers and school leaders feel that they have good or excellent knowledge and skills for using computers, the internet, and online resources but there are few official provisions for access to a computer, laptop, tablet, or the internet. In terms of priority needs for CPD, teachers emphasize capacity building in teaching methodologies and the use of educational technologies. Many of these topics have been discussed in the Education Sector Strategic Plan 2016-2030.

On working conditions for teachers and school leaders, improvements should again also be considered. Teachers in public basic and senior secondary education are government employees bound by the civil

service rules and conditions of service. Policies and Orders issued by the Personnel Management Office define the rights and obligations of employees as well as government. The Public Service Commission Regulations empowers the Public Service Commission to handle all appointments, promotions, transfers, terminations, and related matters in the service. However, The Gambia Civil Service: Scheme of Service Teachers Cadre makes additional provisions that are specific to teachers. Many of the recommendations related to strengthening the career path for teachers are relevant for their working conditions. In addition, while many Governments and regional entities have introduced Best Teacher Awards to recognize outstanding teachers, this has not yet been done in The Gambia. In many countries teachers tend not to be highly satisfied with their job. This is also the case in The Gambia. Teachers were asked questions in the online survey on a range of factors that may affect working conditions as well as their overall job satisfaction and perception of their status. On a scale from 1 to 5, teachers rate their social status at an average value of 3.5 and their job satisfaction at an average value of 3.2. The relatively low levels of job satisfaction may be due in part to the level of salaries, but possibly also due to issues with the timing of payment of those salaries. Half of the teachers that responded to the survey stated that their school did not have staff rooms, and when they are available, they may lack amenities. On the other hand, almost all teachers described the relationships with their supervisors as good or excellent, a positive sign.

Conclusion

While progress is being achieved towards professional standards and competencies for teachers, a lot remains to be done, including for teacher education and the working conditions of the teachers. This study was conducted against the backdrop of guidance from international best practice, including instruments developed by UNESCO, Education International, and the African Union Commission. Apart from an introduction on the need for professional standards and competencies for teachers and school leaders, the core of the study is structured into three chapters devoted respectively to: (1) the national frameworks of professional standards and competencies and its implementation; (2) teacher education, both pre-service and in-service; and (3) the working conditions of teachers and school leaders. The analysis relies on a mixed quantitative and qualitative approach that includes analysis of nationally representative household surveys, online surveys, key informant interviews, and focus groups. In addition to analysis across West African countries, more detailed analysis is also conducted for Sierra Leone and The Gambia to illustrate differences between countries in approaches and policies. Overall, the study suggests that progress is being achieved in many countries, but much remains to be done. The next step will be to provide more detailed guidance to countries on how to improve their teaching profession.

A particular challenge that needs to be discussed in more depth is the fact that some countries struggle in generating enough teachers to meet their needs. Respondents to the small online survey of Ministry and other education officials were divided when asked if the teacher education institutions of their country were producing enough teachers to meet their needs. When asked about factors contributing to shortages of qualified teachers, many respondents mentioned that teacher training institutions may produce enough teachers but only a limited number can be recruited by government, probably because of budget constraints. Two other factors leading to shortages were: (i) many graduates of the teacher education institutions do not want to teach; and (ii) in some countries, the teacher training institutions are not producing enough teachers. Limitations from government policies on hiring across regions within the country or from other countries were not much of a factor for shortages according to respondents, but some mentioned the issue of the recruitment of unqualified teachers for political reasons on teacher policies and especially teacher shortages, see UNESCO and International Task Force on Teachers for Education 2030, 2023a, 2023b; a global report on these issues will be released in February 2024).

APPENDICES

APPENDIX 1: AFRICA EDUCATES HER CAMPAIGN

The African Union's International Centre for Girls' and Women's Education in Africa (AU/CIEFFA) launched an advocacy campaign, #AfricaeducatesHer, in September 2020 to rally African Union Member States to safeguard girls' education in Africa and ensure that girls continue learning during and post the COVID-19 related school closures and disruptions. During the pandemic, schooling was disrupted for 236 million students across nearly all African countries, a number which disproportionately affected the marginalized including girls. It was against this backdrop that AU/CIEFFA, a specialized institution of the AU under the department of Education, Science, Technology, and Innovation (ESTI), mandated to coordinate and promote girls and women's education in Africa launched this bold and ambitious campaign.

Phase I of the campaign had the following objectives: Building awareness around the importance of keeping girls in schools during and after COVID-19; Documenting the different innovations and efforts by African youth to address the impacts of COVID-19 on girls' and women's education at the national or community levels; Capturing the voice and learning experiences of female learners in formal education during the COVID-19 and beyond on the continent; Ensuring re-integration of out of school girls in Africa through policy reform; and Sharing of best practices and initiatives as girls' education responses to the COVID-19 led at community and national levels within the AU Member States.

Post COVID19, in Phase II, #AfricaEducatesHer has sought to amplify the voices of the most vulnerable and marginalized groups on education by highlighting the challenges and issues they have experienced at the primary, secondary and tertiary education levels during and post-pandemic. The campaign seeks to work with multi-sectoral and multi-disciplinary organizations, African Union Member States and youth to offer solutions and recommendations at the continental, national and community levels to promote, encourage, and protect girls' right to education. Past and emerging challenges affecting girls' and women's education were identified and categorized into 4 main categories: (i) socio-cultural, (ii) economic and health, (iii) psychological, and (iv) political and environmental. Various stakeholders are implementing initiatives in line with the #AfricaEducatesHer campaign and to champion girls' education in the continent. Initiatives include lobbying governments for policy reform, advocacy on print, TV and digital media, research and data collection, offering mentorship to girls on STEM, providing digital literacy to girls, providing after school meal programs, providing WASH facilities and sanitary towels, tutoring STEM related subjects, involving traditional leaders to conducts awareness on eliminating harmful cultural practices, and donating books and stationery to various schools. Recognizing the power of multi-sectoral collaborations and partnerships to champion girls' and women's education, the African Union CIEFFA has embarked on a mapping exercise to map stakeholders working on the intersections of education and gender equality and humanitarian contexts. Some of these stakeholders include: African Union Member States; Youth; Development Partners; Civil Society Organizations; Media; and Academia and Think tanks.

As the year 2024 has been declared the Year of Education by the African Union, there has been a recommendation for AU Member States to domesticate and implement the #AfricaEducatesHer Campaign to enhance awareness around issues that have hindered girls and women from accessing education during and post-pandemic. Thus far, two Member States (Uganda and Côte d'Ivoire) have launched the campaign nationally, a commitment that is necessary and demonstrates progress. Furthermore, youth and development partners around the continent are implementing the campaign through their various on the ground initiatives and pledges. A targeted campaign song by young artists

from Nigeria (Ifé), Uganda (Afrie), and Burkina Faso (Smarty) has gathered over 8,000 views on Youtube (https://www.youtube.com/watch?v=V5N5Q9QbLME).

APPENDIX 2: DATA AND METHODOLOGY

Investment Case

Three main types of surveys were used for the quantitative analysis. In the 2018 report, estimates of the gains from education and losses in earnings due to low educational attainment for women were based on household and labor force surveys from the World Bank's International Income Distribution Database (I2D2). The analysis built on previous work to measure human capital wealth for 141 countries as part of an analysis of the changing wealth of nations. In a nutshell, human capital wealth is defined as the present value of the future incomes of the labor force, and it can be compared to other sources of wealth such as natural or produced capital. The estimates of human capital wealth were disaggregated by gender. When using surveys from the I2D2 database and when estimating human capital wealth, the regression analysis was conducted for each country separately. For this update, apart from additional work with those data, wage regressions were also estimated with data from the 10 countries that participated in the EHCVM household surveys led by the World Bank and the West African Economic and Monetary Union.

The second key source of data for the estimations is a set of publicly available Demographic and Health Surveys (DHS). Building on previous work on the economic impacts of child marriage, detailed analysis of the correlates of selected development outcomes was implemented for the 2018 report with the most recent DHS for 13 African countries. The choice of these countries was guided by policy considerations and the fact that most have low levels of educational attainment for girls and high levels of child marriage. As with surveys from the I2D2 database, regression analysis was conducted for each country separately when using DHS data. This work was substantially expanded for this study, with analysis of 27 DHS surveys covering 22 countries (for some countries, estimates were obtained with multiple DHS rounds). Limited analysis was also conducted with MICS datasets with similar results although these are not reported here.

The third main source of data used only in the 2018 report was the Gallup World Poll which covers more than 150 countries, including close to 50 African countries. The Poll typically surveys 1,000 individuals in each country. Because the samples at the country level are relatively small, the regression analysis for this study was conducted with the pooled data (given large samples, statistical significance is easier to obtain).

In terms of methodology, as for the 2018 report, this study aims to estimate the potential impacts of low educational attainment for girls and child marriage on development outcomes and the economic costs associated with some of these potential impacts. The term potential 'impact' is used for simplicity and for the study to be readable to non-technical audiences, but one must be careful about not necessarily inferring causality. Estimates of potential impacts are obtained through regression analysis to control for other variables that may affect the outcomes of interest. Different types of regression techniques are used depending on the outcomes of interest. In some cases, simulations or statistical analysis are used. What is measured are thus statistical associations, and not necessarily impacts as could be observed with randomized control trials or quasi-experimental methods. Said differently, the regression analysis provides estimates of likely potential impacts, but there is always a risk of bias (and in some cases upward bias) in the measures of the likely potential impacts reported due to the risk of omitted variables bias.

To reduce the risk of bias in coefficient estimates, different specifications for the regressions have been used, and we typically report results obtained with the largest number of controls. In addition, we report only the direct potential impact of educational attainment and child marriage on outcomes of interest. Because educational attainment and child marriage may affect other variables included in the controls, we tend to underestimate total potential effects. This is done on purpose to be conservative in the claims made about the benefits of educating girls and ending child marriage. Based on measures of likely potential impacts, potential costs associated with selected potential impacts are then computed in the 2018 report but not updated here. Cost estimates were provided only for a few potential impacts. These potential costs rely on assumptions and are thus tentative. The estimated costs represent an order of magnitude of potential costs rather than precise estimations. More details on the data sources and methodologies used for estimations and how they relate to key findings are available from the authors.

Gender Inequality in Human Capital Wealth

This study provides briefly measures of gender inequality in human capital wealth. The estimation relies on World Bank estimates of human capital wealth (Lange et al., 2018; World Bank, 2021) defined as the discounted value of future earnings for a country's labor force. In practice, we estimate how likely it is that various types of individuals will be working, and how much they will earn when working. By "various types" of individuals, we mean individuals categorized by age, sex, and level of education. Essentially, we use household surveys to construct a dataset that captures (1) the probability that individuals are working depending on their age, sex, and years of education; and (2) their likely earnings when working, again, by age, sex and years of schooling. This is done separately for men and women, and results in estimates of human capital wealth by gender. Typically, women earn significantly less than men on average, whether this is due to lower labor force participation, fewer hours of paid work when working, or lower earnings per hour worked. Estimates of the likelihood of working for individuals are based on observed values in household and labor force surveys. Estimates of expected earnings are based on wage regressions. The regressions are used to compute expected earnings throughout individuals' working life, considering their sex, education level, and assumed experience (computed based on age and the number of years of education completed). Expected earnings are computed for all individuals in the surveys from age 15 to age 65, noting that some individuals may go to school beyond age 15. The analysis also considers the life expectancy of the labor force. In countries with high life expectancy, workers are expected to work until age 65, but in other countries they may not be able to. For simplicity, when estimating the present value of future earnings, the same discount factor for future earnings is applied to all countries.

Role of Teachers and School Leaders

The study relies in part on an analysis of professional standards and competencies for teachers and school leaders done at UNESCO IICBA for West Africa. That analysis is based on several data sources. The first data source is the national EHCVM surveys already mentioned which are comparable across countries and used to assess the standards of living of teachers and their education level, as well as other characteristics. These household surveys were implemented in 10 countries by the World Bank as part of a collaboration with WAEMU (West African Economic and Monetary Union). In addition, online survey on policies and practices for West African countries were implemented with senior officials from Ministries of Education and Teacher Service Commissions (in the countries with such Commissions). In countries with no national commission or similar agency, two different Departments (whose functions pertain to teacher education and regulation) from the same Ministry were asked to complete the survey, so that the two responses per country could be checked for consistency. In total, twelve officials completed the survey yielding data for eight countries. The sample is small but it targets key informants on policies. In addition, interviews were

conducted with key informants from Benin, Burkina Faso, Côte d'Ivoire, Liberia, and Nigeria, plus the Acting Head of Education at ECOWAS' Directorate of Education, Science and Culture.

For Sierra Leone and The Gambia, more in-depth situational analyses were conducted for Sierra Leone and The Gambia. Questionnaires were designed for teachers and school leaders with over 40 questions on professional standards, teacher education (pre-service and in-service) and working conditions. Links to the online questionnaires were sent randomly to 1,000 teachers and 1,000 school leaders in each of the two countries, ensuring that individuals in various school districts in the countries would receive links in accordance with the proportion of their teachers and school leaders. In Sierra Leone, 453 teachers and 406 school leaders responded, suggesting high response rates. In The Gambia, 183 teachers and 36 school leaders submitted responses to the survey. The response rate for teachers was considered adequate, but for school leaders it was low, hence statistical analysis was conducted in that country only for teachers. In addition, interviews were conducted with officials from Ministries of Education, Teacher Training Institutions, Teacher Unions, school principals as well as teachers, and a wide range of other stakeholders. In addition, in Sierra Leone, brainstorming sessions were held with the Management Team of Teacher Service Commission, the agency established by law to employ and regulate teachers. This enabled the research team to regularly review data collected and understand them in the context of the work of the Commission. In The Gambia, focus groups were held with key informants from various agencies.

APPENDIX 3: REVIEW OF INTERVENTIONS TO DELAY MARRIAGE IN THE 2018 REPORT

The policy analysis in the 2018 report focused on interventions targeting adolescent girls. Building on a recent review by Botea et al. (2017), three types of interventions were discussed: (1) programs providing life skills and sexual and reproductive health (SRH) knowledge; (2) programs expanding economic opportunities; and (3) programs keeping girls in school or enabling them to return to school. The focus on these three types of interventions stemmed from a body of evidence showing that they can have positive impacts. Each of these three types of programs was hypothesized to potentially delay marriage/childbearing and increase educational attainment in different ways, hence they had different theories of change for life skills and SRH knowledge^{xxxviii}, life skills together with economic opportunities^{xxxix} and incentives for schooling or delayed marriage^{xl}. Close to 40 interventions are reviewed by Botea et al (2017). To be included in the review, interventions had to fulfill the following selection criteria: (1) Target girls aged 10-19, either exclusively or as part of a broader target group; (2) Provide life skills and sexual and reproductive health (SRH) knowledge, economic opportunities, or education opportunities; (3) Demonstrate results in terms of improving the health of young women, especially for SRH, or delay marriage or childbearing; and (4) Have been tested in a developing country, in sub-Saharan Africa or other low income settings. Key conclusions from the analysis were as follows.

The first category of programs emphasizes the empowerment of girls by providing life skills and reproductive health knowledge. The typical intervention is that of a "safe space club" for adolescent girls. These clubs are delivery platforms for convening girls with a trusted adult mentor at a specific time and place. The approach was pioneered by BRAC in South Asia and the Population Council in Africa and Latin America. The clubs have proven effective when implemented well. By combining socializing, fun, and access to mentors, the clubs are attractive for girls to attend. From there, other services are delivered. Clubs can be held in a variety of settings, including schools or community centers. Girls meet regularly and are able with the help of the mentors to discuss a range of issues, including those related to SRH. They learn "life skills" in those meetings, including "soft" or socio-emotional skills such as critical thinking and

problem solving, communication and negotiation (for example within one's household). One of the objectives is often to boost the girls' self-awareness and self-esteem, so that they can explore and fulfill their own aspirations. In many cases, safe space clubs are also used to impart "hard" skills, such as basic literacy and numeracy, or basic business skills.

These programs have helped improve SRH knowledge and behaviours. This includes an increase in girls undergoing HIV testing or counseling; an increase in the use of modern contraception or other methods of family planning; a reduction in the desire for practicing female genital mutilation for daughters in countries where the practice is prevalent; a reduction in the risk of intimate partner violence when the program also reaches out to men; an increase in self-esteem; and gains in specific skills taught during safe space sessions, for example in the areas of financial literacy or basic literacy and numeracy. At the same time, without additional interventions related to schooling or employment and livelihoods, it is not clear that safe spaces are sufficient to delay marriage and childbearing (though that may not have been a primary goal of these projects). Therefore, it is important to consider programs whereby safe spaces have been combined with livelihood opportunities and incentives to remain in school, usually with larger impacts on the age at marriage and childbearing.

The second category of programs combine an emphasis on empowering girls, often through safe spaces, with in addition a focus on providing livelihood opportunities. These programs are appropriate for girls who are not in school. For these girls, building skills for income-generation may provide an alternative to early marriage and childbearing. Two groups of interventions are distinguished: livelihood interventions and financial literacy/access to financial services. Impacts on the age at marriage and early childbearing tend to be larger than with life skills/SRH knowledge alone, but not in all cases. Given their focus on economic opportunities, the programs often have some success in increasing earnings, employment, and/or savings. Several of the programs also succeed in increasing the use of modern contraceptives and SRH knowledge, which may help delay childbearing. In some cases, the programs also succeed in delaying the age at marriage and reducing teen pregnancies, as was the case for the BRAC Uganda Empowerment and Livelihoods for Adolescent Girls (ELA)^{xli}. The message from the review is that adding a livelihood dimension to life skills and SRH knowledge programs may help delay marriage and childbearing, but not in all cases. The focus on economic opportunities may also help in ensuring regular participation by girls in the programs.

The third set of programs focuses on keeping girls in school or enabling them to return if they dropped out. A few programs directly aim at delaying marriage. The literature, including a recent review by Kalamar et al. (2016), suggests that there are multiple intervention options available to keep girls in school and delay marriage. In a few cases, evaluations are also available for programs focusing directly on delaying marriage through financial incentives, often with the additional benefit of enabling girls to remain in school. The programs providing incentives for schooling succeed quite often in keeping girls in school and sometimes delay marriage and childbearing. Some of these programs enable girls who dropped out of school to go back. Not all programs succeed in all areas, but the evidence is broadly convincing that in comparison to the other two types of programs reviewed above, those focusing on schooling for girls, or in some cases on delaying marriage with financial incentives, may be more successful in indeed delaying marriage and childbearing. At the same time, however, all three intervention types hold promise and multiple interventions are needed to reach different profiles of girls.

The interventions mentioned above were not meant to be exhaustive. For example, to improve educational attainment for girls, additional interventions are needed. The three types of interventions listed above were selected because their evaluations looked at changes in SRH knowledge, child marriage,

and/or early childbearing. In the case of educational attainment, there is a much broader literature on what is needed to achieve gains^{xiii}. Basic conditions need to be in place, and they matter quite a bit, especially in low-income countries. First, there is a need to build new schools closer to where children (boys and girls) live. In many countries, access to lower secondary education remains extremely low in part because there just are not enough secondary schools. Building schools closer to populated areas means that girls do not have to walk too far to go to school and parents can be more comfortable with their daughters' safety on their way to and from school. In cases where schools cannot be built nearby, providing modes of transportation for girls to go to school is an option. Second, access to water, latrines and hygienic facilities are important for adolescent girls. Building and upgrading schools with separate water, sanitation, and hygiene (WASH) facilities is also an important intervention that should be pursued. Third, an unacceptably high percentage of girls in many countries are at risk of violence and sexual harassment in school. There is a need for specific interventions to deal with these risks too.

For specific challenges, such as gender-based violence, additional specific interventions may also be needed. Some African countries have high levels of intimate partner violence (IPV). International evidence suggests that prevention programs can help in reducing the prevalence of IPV, especially when they address the harmful social norms that are leading to gender-based violence. The most successful interventions tend to be community-based and have multiple components to work with men, women, leaders and service providers. There is also promising evidence to recommend economic empowerment interventions for women that are combined with gender transformative training and engagement of male partners and family members. Lessons can be learned from existing programs such as SASA!^{xliii}.

REFERENCES

- Abramsky, T., K. Devries, L. Kiss, J. Nakuti, N. Kyegombe, E. Starmann, B. Cundill, L. Francisco, D. Kaye, T. Musuya, L. Michau, and C. Watts. 2014. Findings from the SASA! Study: A Cluster Randomized Controlled Trial to Assess the Impact of a Community Mobilization Intervention to Prevent Violence against Women and Reduce HIV Risk in Kampala, Uganda, *BMC Medicine* 12:122.
- Acemoglu, D. 2010. Theory, General Equilibrium and Political Economy. NBER Working Paper No. 15944. Boston, MA: National Bureau of Economic Research.
- Acemoglu, D., D. H. Autor, and D. Lyle. 2004. Women, War, and Wages: The Effect of Female Labor Supply on the Wage Structure at Midcentury, *Journal of Political Economy* 112(3): 497-551.
- African Union Commission. 2015. *Agenda 2063: The Africa We Want.* Addis Ababa: African Union Commission.
- African Union Commission. 2016. *Continental Education Strategy for Africa (CESA 16–25)*. Addis Ababa, African Union Commission.
- African Union Commission. 2017. *Study on Teacher Training, Working, and Living Conditions in Member States.* Addis Ababa: African Union Commission.
- African Union Commission. 2019a. *African Continental Framework of Standards and Competencies for the Teaching Profession*. Addis Ababa, Ethiopia: African Union Commission.
- African Union Commission. 2019b. *African Continental Teacher Qualification Framework*. Addis Ababa, Ethiopia: African Union Commission.
- African Union Commission. 2019c. *African Continental Guidelines for the Teaching Profession*. Addis Ababa, Ethiopia: African Union Commission.
- African Union Commission. 2021. *Note Verbale to African Union Member States on Teacher Professional Guidelines.* Addis Ababa, Ethiopia: African Union Commission.
- African Union Commission. 2023. *AU Continental Strategy on Education for Health and Well-being of Young People of the African Union*. Addis Ababa, Ethiopia: African Union Commission.
- African Union and European Commission. 2018a. *African quality rating mechanism (AQRM): Consolidated evaluation report (Fifteen higher education institutions)*. Addis Ababa, Ethiopia: African Union.
- African Union and European Commission. 2018b. *African Standards and Guidelines for Quality Assurance in Higher Education (ASG-QA)*. Addis Ababa, Ethiopia: African Union.
- Angrist, J. D. 1995. The Economic Returns to Schooling in the West Bank and Gaza, *American Economic Review*, 85(5): 1065-87.
- Antecol, H., O. Eren, and S. Ozbeklik. 2012. The Effect of Teacher Gender on Student Achievement in Primary School: Evidence from a Randomized Experiment. IZA DP No. 6453.
- Azmeraw, E., Mura, E. Moritani, K. and Wodon, Q. (2024a). Lessons from a Transformative Pedagogy Project for Peace, Resilience, and the Prevention of Violent Extremism: Part 1: Country-level Implementation. UNESCO IICBA Discussion Paper. Addis Ababa, Ethiopia.
- Azmeraw, E., Mura, E. Moritani, K. and Wodon, Q. (2024b). Lessons from a Transformative Pedagogy Project for Peace, Resilience, and the Prevention of Violent Extremism: Part 2: Insights from Surveys of Beneficiaries. UNESCO IICBA Discussion Paper. Addis Ababa, Ethiopia.
- Bandiera, O.; N. Buehren, R. Burgess, M. Goldstein, S. Gulesci, I. Rasul, and M. Sulaiman. 2014. Empowering Adolescent Girls: Evidence from a Randomized Control Trial in Uganda. Mimeo. Washington, D.C.: The World Bank.
- Banerjee, N., E. Stearns, S. Moller, and R. A. Mickelson. 2017. Teacher Job Satisfaction and Student Achievement: The Roles of Teacher Professional Community and Teacher Collaboration in Schools. *American Journal of Education*, 123(2).

- Bagamboula Mayamona, G, J. C. Boungou Bazika, and Q. Wodon. 2022. Educating Girls and Ending Child Marriage in Central Africa: Insights from Qualitative Fieldwork Part I: The Democratic Republic of Congo, *Journal of Global Catholicism*, 7(1): 32-59.
- Boungou Bazika, J. C., W. U. Mféré Akiana, and Q. Wodon. 2022. Educating Girls and Ending Child Marriage in Central Africa: Insights from Qualitative Fieldwork Part II: The Republic of Congo, *Journal of Global Catholicism*, 7(1): 60-89.
- Barageine, J. K., E. Faxelid, J. K. Byamugisha, and B. Rubenson. 2016. 'As a Man I Felt Small': A Qualitative Study of Ugandan men's Experiences of Living with a Wife Suffering from Obstetric Fistula, *Culture, Health and Sexuality*, 8(4): 481-94.
- Bashir, S., M. Lockheed, E. Ninan, and J. Tan. 2018. *Facing Forward: Schooling for Learning in Africa*. Washington, DC: The World Bank.
- Bergmann, J., R. Comba, A. Le Nestour, and K. N. Samati. Undated. Data Must Speak: Giving All Girls a Chance for Promotion and Success, Policy Brief. Florence, Italy: UNICEF Innocenti.
- Bergmann, J., M. C. Alban Conto, and M. Brossard. 2022. Increasing Women's Representation in School Leadership: A promising path towards improving learning. *Innocenti Research Briefs*. Florence, Italy: UNICEF Innocenti.
- Beteille, T. and D. Evans. 2018. Successful Teachers, Successful Students: Recruiting and Supporting Society's Most Crucial Profession. Washington, DC: The World Bank.
- Belfield, C., A. Klapp, and . M. Lebvin. 2015. The Economic Value of Social and Emotional Learning, *Journal of Benefit-Cost Analysis*, 6(03).
- Black, M. M., S. P. Walker, L. C. H. Fernald, C. T. Andersen, A. M. DiGirolamo, C. Lu, D. C. McCoy, G. Fink, Y. R. Shawar, J. Shiffman, A. E. Devercelli, Q. T. Wodon, E. Vargas-Baron, and S. Grantham-McGregor. 2016, Early Childhood Development Coming of Age: Science through the Life Course, *The Lancet*, 389 (10064): 77-90.
- Botea, I., S. Chakravarty, and S. Haddock, and Q. Wodon. 2017. Interventions Improving Sexual and Reproductive Health Outcomes and Delaying Child Marriage and Childbearing for Adolescent Girls, *Ending Child Marriage Notes Series*. Washington, DC: The World Bank.
- Buehren, N. 2015. The Cost of the Gender Gap in Agricultural Productivity in Malawi, Tanzania, and Uganda. Mimeo. Washington, D.C.: The World Bank
- Bush et al. 2021. Assessing successful school leadership: What do we know? *Educational Management Administration & Leadership*, 49(5), 687–689.
- Bush. T., F. Maringe, D. Glover, et al. 2022. School Leadership in Africa. A Review of Empirical Research. VVOB.
- Bush, T., J. Kirezi, R. Ashford, and D. Glover. (2022). School Leadership and Gender in Africa: A Systematic Overview, *Research in Educational Administration & Leadership*, 7(4): 680-712.
- Canning, D., S. Raja, and A. S. Yazbeck. 2015. *Africa's Demographic Transition Dividend or Disaster?*, Washington, DC: The World Bank.
- Chowa, G., D. Ansong, and I. Osei-Akoto. 2012. Parental Involvement and Academic Performance in Ghana. Publication No. 12-42.
- Coudouel, A., J. Hentschel, and Q. Wodon. 2022. Poverty Measurement and Analysis, in J. Klugman, editor, A Sourcebook for Poverty Reduction Strategies, Volume 1: Core Techniques and Cross-Cutting Issues, Washington, DC: The World Bank.
- Mathews, S., P. Achyut, L. October, and L. Makola. 2021. *Evidence Review: Prevention of Violence against Children through Schools in the Global South*. Raising Voices, Uganda and University of Cape Town, South Africa.
- Cogaltay, N., M. Yalcin, and E. Karadag. 2016. Educational leadership and job satisfaction of teachers: a meta-analysis study on the studies published between 2000 and 2016 in Turkey. *Eurasian Journal of Educational Research*, 62, 255-282.

- CRANK (Child Marriage Research to Action Network). 2023. Evidence Review: Child marriage interventions and research from 2020 to 2022. London, UK: Girls Not Brides, UNICEF, and UNFPA.
- Department of Economic and Social Affairs. 2014. Guidelines for Producing Statistics on Violence against Women— Statistical Surveys, Department of Economic and Social Affairs Statistics Division, New York: United Nations.
- DeVries, K. M., L. Knight, J. C. Child, A. Mirembe, J. Nakuti, R. Jones, J. Sturgess, E. Allen, N. Kyegombe, J. Parkes, E. Walakira, D. Elbourne, C. Watts, and D. Naker. 2015. The Good School Toolkit for Reducing Physical Violence from School Staff to Primary School Students: A Cluster-randomised Controlled Trial in Uganda, *The Lancet Global Health*, 3, e378-e386.
- Dowd, C., A. Shell, V. Thamaini, and L. Trackman. 2018. Forum for African Women Educationalists' Gender Responsive Pedagogy: A Literature and Practice Review. Ipswich, MA: Creative Action Institute.
- Duflo, E. 2004. The Medium Run Effects of Educational Expansion: Evidence from a Large School Construction Program in Indonesia, *Journal of Development Economics*, 74(1): 163-97.
- Education International. 2015. Addendum to Education Policy Paper: Leadership in educational institutions. Brussels: Education International.
- Elonga Mboyo, J. P. 2019. Reimagining Ubuntu in schools: A perspective from two primary school leaders in the Democratic Republic of Congo. *Educational Management Administration & Leadership*, 47(2): 206–223.
- Evans, D. K., and F. Yuan. 2022. What We Learn about Girls' Education from Interventions That Do Not Focus on Girls, *The World Bank Economic Review*, 36(1): 244–267.
- Farrington, D. and M. Ttofi. 2009. School-Based Programs to Reduce Bullying and Victimization. *Campbell Systematic Reviews* 2009:6.
- Finkelhor, D., A. Shattuck, H. A. Turner, R. Ormrod, and S. L. Hamby. (2011. Polyvictimization in Developmental Context. *Journal of Child & Adolescent Trauma*, *4*, 291–300.
- FAWE (Forum for African Women Educationist). 2018. Gender Responsive Pedagogy: A Literature and Practice Review. Mimeo. Nairobi, Kenya: FAWE.
- FAWE (Forum for African Women Educationist). 2020. Gender Responsive Pedagogy Toolkit for Teachers and Schools, 2nd Edition. Nairobi, Kenya: FAWE.
- Field, E. and A. Ambrus. 2008. Early Marriage, Age of Menarche, and Female Schooling Attainment in Bangladesh. *Journal of Political Economy* 116(5): 881-930.
- Harris-van Keuren, C. 2023. *Learning at Scale: Time and Money*. Washington, DC: Center for Global Development and RTI International.
- Hoddinott, J., J. R. Behrman, J. A. Maluccio, P. Melgar, A. R. Quisumbing, M. Ramirez-Zea, A. D. Stein, K.
 M. Yount, and R. Martorell. 2013. Adult Consequences of Growth Failure in Early Childhood,
 American Journal of Clinical Nutrition 98(5): 1170-8.
- Hoque. K.E., A. Z. Abdul Razak, M. F. Zohora, and R. Islam. 2013. Impact of Teacher-Gender on Primary Students' Achievement: A Study at Malaysian Standpoint. *Journal of Sociological Research*, 4, (1) 124-144.
- Hwang, N. and B. Fitzpatrick. 2021. Student–Teacher Gender Matching and Academic Achievement. *AERA Open* 7, (1), 1–11.
- Horton S., and R. Steckel. 2013. Global economic losses attributable to malnutrition 1900-2000 and projections to 2050, in B. Lomborg, editor, *The Economics of Human Challenges*, Cambridge, U.K.: Cambridge University Press.
- International Task Force on Teachers for Education 2030. 2019. *Teacher Policy Development Guide.* Paris, France: UNESCO.
- Jorgensen, D.W. and B.M. Fraumeni. 1992a. The Output of Education Sector, in Z. Griliches (ed.). *Output Measurement in the Service Sectors*. Chicago, IL: University of Chicago Press.

- Jorgensen, D.W. and B.M. Fraumeni. 1992b. Investment in Education and US Economic Growth. *Scandinavian Journal of Economics*, 94(Supplement): 51–70.
- Kalabo, O. M. 2017. Situating School Leadership in African Discourses: Reflections from Zambia. *International Journal of Science and Research*, 6(11).
- Kalamar, A. M., S. Lee-Rife, and M. J. Hindin. 2016. Interventions to Prevent Child Marriage among Young People in Low- and Middle-Income Countries: A Systematic Review of the Published and Gray Literature, *Journal of Adolescent Health*, 59: S16-S21.
- Klugman, J., L. Hanmer, S. Twigg, T. Hasan, and J. McCleary-Sills. 2014. *Voice and Agency: Empowering Women and Girls for Shared Prosperity.* Washington, DC: The World Bank.
- Lange, G. M., Q. Wodon, and K. Carey. 2018. *The Changing Wealth of Nations 2018: Sustainability into the 21st Century*. Washington: The World Bank.
- Leithwood, K. A., 2006. Successful school leadership: What it is and how it influences pupil learning. DfES Publications.
- Leithwood, K., K. S. Louis, S. Anderson, and K. Wahlstrom. 2004. Review of Research: How leadership influences student learning. University of Minnesota, Center for Applied Research and Educational Improvement.
- Le Nestour, A., O. Fiala, and Q. Wodon. 2018. Global and Regional Trends in Child Marriage: Estimates from 1990 to 2017, Mimeo, London and Washington, DC: Save the Children UK and World Bank.
- Magunda, A. S. and R. Nabitaka. 2022. The relationship between parents involvement and student academic performance in Uganda. *International Journal of Advance Research and Innovative Ideas in Education*, 8(6), 1531-1540.
- Mahuro, G.M. and N. Hungi. 2016. Parental Participation Improves Student Academic Achievement: A Case of Iganga and Mayuge Districts in Uganda. Cogent Education, 3.
- Male, C., and Q. Wodon. 2018. Girls' Education and Child Marriage in West and Central Africa: Trends, Impacts, Costs, and Solutions, Forum for Social Economics, 47(2): 262-74.
- Malhotra, A. and S. Elnakib. 2021. Evolution in the Evidence Base on Child Marriage: 2000-2019. New York: UNFPA-UNICEF Global Programme to End Child Marriage.
- McKinsey Global Institute. 2015. The Power of Parity: How Advancing Women's Equality Can Add \$12 Trillion to Global Growth. London: McKinsey Global Institute.
- Montenegro, C. E., and H. A. Patrinos. 2014. Comparable Estimates of Returns to Schooling Around the World, Policy Research Working Paper No. 7020, Washington, DC: The World Bank.
- Nayihouba, A., and Q. Wodon. 2024. Ending Learning Poverty in West Africa: Insights from PASEC Data. IICBA Discussion Paper. Addis Ababa, Ethiopia: UNESCO International Institute for Capacity Building in Africa.
- Neufeld, A. 2014. School Leadership and Student Achievement: Supporting a Framework of Leadership Actions Known to Improve Student Outcomes. *BU Journal of Graduate Studies in Education*, 6, (2), 45-49
- Nguyen, M. C., and Q. Wodon. 2014. Impact of Child Marriage on Literacy and Educational Attainment in Africa, Background Paper for Fixing the Broken Promise of Education for All. Paris and New York: UNESCO Institute of Statistics and UNICEF.
- Nove, A., Z. Matthews, S. Neal, and A. V. Camacho. 2014. Maternal mortality in adolescents compared with women of other ages: evidence from 144 countries, *The Lancet Global Health* 2(3): 155-64.
- Nwokeocha, S., E. D. Kah, H. Njora, A. Sessay, and Q. Wodon. 2023a. West Africa Investing in Teachers and School Leaders: Professional Standards, Working Conditions, and Teacher Education, IICBA Study No. 2023-4, Addis Ababa, Ethiopia: UNESCO International Institute for Capacity Building in Africa.
- Nwokeocha, S., E. D. Kah, H. Njora, and Q. Wodon. 2023b. Republic of The Gambia Situation Analysis of the National Framework of Professional Standards and Competencies for Teachers and School

- *Leaders*, IICBA Study No. 2023-3, Addis Ababa, Ethiopia: UNESCO International Institute for Capacity Building in Africa.
- Nwokeocha, S., A. Sessay, H. Njora, and Q. Wodon. 2023c. *Republic of Sierra Leone Situation Analysis of the National Framework of Professional Standards and Competencies for Teachers and School Leaders*, IICBA Study No. 2023-2, Addis Ababa, Ethiopia: UNESCO International Institute for Capacity Building in Africa.
- Onagoruwa, A., and Q. Wodon. 2018. Measuring the Impact of Child Marriage on Total Fertility: A Study for Fifteen Countries, *Journal of Biosocial Science*, forthcoming.
- Perlman, D., F. Adamu, and Q. Wodon. 2018. Why Do Adolescent Girls Drop Out of School in Niger? A Combined Quantitative and Qualitative Analysis, *Marchés et Organisations* 32(2): 179-94.
- Perlman, D., and Q. Wodon. 2023. Nigeria: Pathways to Choice A Program to Educate Girls and Delay Marriage. Knowledge Brief 2023-12. Addis Ababa, Ethiopia: UNESCO IICBA.
- Perlman, D., F. Adamu, M. Mandara, O. Abiola, D. Cao, and M. Potts. 2016. Pathways to Choice: Delaying Age of Marriage through Girls' Education in Northern Nigeria, in S. Dworkin, M. Gandhi, and P. Passano, editors. *Women's Empowerment and Global Health: A Twenty-First-Century Agenda*. Berkeley, CA: University of California Press.
- Plan International República Dominicána. 2017. Niñas esposadas: Caracterización del Matrimonio Infantil Forzado en las provincias de Azua, Barahona, Pedernales, Elías Piña y San Juan. *Planteamientos*, No2.
- Psacharopoulos. G., and H. A. Patrinos. 2018. Returns to Investment in Education: A Decennial Review of the Global Literature, *Education Economics*. forthcoming.
- Qvist, H.-P. Y., A. Holm, and M. D. Munk. 2016. Demand and Supply Effects and Returns to College Education: Evidence from a Natural Experiment with Engineers in Denmark, CHCP Working Papers 2016-4, London, ON: Department of Economics, University of Western Ontario.
- Rashid, H.A. 2023. Impact of School Leadership on Student Achievement. [https://limbd.org/impact-of-school-leadership-on-student-achievement/]
- Savadogo, A., and Q. Wodon. 2018a. To What Extent Could Ending Child Marriage Reduce Intimate Partner Violence in sub-Saharan Africa? Education Global Practice. Washington, DC: The World Bank.
- Savadogo, A. and Q. Wodon. 2018b. Impact of Child Marriage on Women's Earnings across Multiple Countries. Education Global Practice. Washington, DC: The World Bank.
- Setlodi, I. I. (2019). Ubuntu Leadership: An African panacea for Improving Education, *Africa Education Review*, 16(2): 126–142.
- Shell, D. L., C. S. Hurt, and H. White. 2023. Principal characteristics' effect on teacher retention: A systematic review. *Educational Research and Reviews*, 18(6).
- Sinyolo, D. 2018. Towards Inclusive Quality School Leadership, Words of Education. Brussels: Education International.
- Stern, J., M. Jukes, J. DeStefano, J. Mejia, P. Dubeck, B. Carrol, R. Jordan, C. Gatuyu, T. Nduku, C. Van Keuren, M. Punjabi, ad F. Tufail. 2023. Learning at Scale: Final Report. Washington, DC: Center for Global Development and RTI International.
- Stern, J., M. Jukes, J. DeStefano, J. Mejia, P. Dubeck, B. Carrol, R. Jordan, C. Gatuyu, T. Nduku, C. Van Keuren, M. Punjabi, ad F. Tufail. 2023b. Learning at Scale: Final Report. Washington, DC: Center for Global Development and RTI International.
- Tedla B., and N. Kilango. 2022. The role of school leadership toward improving student's achievement: A case study of secondary schools in Changchun China. *Journal of Positive School Psychology*, 6 (4) 6744-6755.
- Tsimpo, C., and Q. Wodon. 2021. Not All Catholic Schools Are Private Schools: Does It Matter for Student Performance?, *International Studies in Catholic Education*, 13(2): 175-189.
- UNESCO. 2015. A Guide for Gender Equality in Teacher Education Policy and Practices. Paris, France: UNESCO.

- UNESCO. 2019. Development of an International Guidance Framework for Professional Teaching Standards: Review of Research, Comparative Cross-Country Mapping, & Draft Teaching Standards Framework. Paris. France: UNESCO.
- UNESCO. 2020. Global Education Monitoring Report 2020: Inclusion and Education All Means All. Paris, UNESCO.
- UNESCO. 2021a. From Access to Empowerment: Operational Tools to Advance Gender Equality in and through Education. Paris, France: UNESCO.
- UNESCO.2021b. *An Unfulfilled Promise: 12 Years of Education for Every Girl.* UNESCO's Global Education Monitoring (GEM) Report. Paris, France: UNESCO.
- UNESCO. 2023a. Education Sector Management Report 2022. Paris, France: UNESCO.
- UNESCO, 2023b. *UNESCO's Efforts to Achieve Gender Equality in and through Education: 2022 Highlights.* Paris, France: UNESCO.
- UNESCO, 2023c. School Violence: Why Gender Matters and How to Measure School-related Gender-based Violence. Paris, France: UNESCO.
- UNESCO. 2024. Peace Education in the 21st Century: An Essential Strategy for Building Lasting Peace. Paris: UNESCO.
- UNESCO and Education International. 2019. *Global Framework of Professional Teaching Standards*. Paris: UNESCO.
- UNESCO and International Task Force on Teachers for Education 2030. 2022. World Teachers' Day 2022 Factsheet: Transforming Education from within Current Trends in the Status and Development of Teachers. Paris, France: UNESCO.
- UNESCO and International Task Force on Teachers for Education 2030. 2023a. *Supporting Teachers through Policy Development: lessons from sub-Saharan Africa*. Paris: UNESCO.
- UNESCO and International Task Force on Teachers for Education 2030. 2023b. *Global Report on Teachers:*Addressing Teacher Shortages Highlights. Paris, France: UNESCO.
- UNESCO-IICBA. 2016. *Teaching Policies and Learning Outcomes in Sub-Saharan Africa*. Addis Ababa: UNESCO-IICBA.
- UNESCO IICBA. 2017. *Teacher Support and Motivation Framework for Africa: Emerging Patterns.* Addis Ababa, Ethiopia: UNESCO IICBA.
- UNESCO IICBA. 2022. *Transformative pedagogy: a teachers' guide for peace and resilience building in North Africa*. Addis Ababa, Ethiopia: UNESCO IICBA.
- UN Women. 2016. Global Guidance on Addressing School-related Gender-based Violence. New York: UN Women.
- Unterhalter, E., A. North, M. Arnot, C. Lloyd, L. Moletsane, E. Murphy-Graham, J. Parkes, and M. Saito. 2014. Girls' Education and Gender Equality. London: Department for International Development.
- VVOB. 2022. School Leadership in Africa: A Review of Empirical Research. Brussels, Belgium: VVOB.
- Wils, A. 2015. Reaching education targets in low and lower-middle income countries: Costs and finance gaps to 2030, Background paper prepared for the UNESCO Education for All Global Monitoring Report, Paris: UNESCO.
- Wodon, Q. 2016. Early Childhood Development in the Context of the Family: The Case of Child Marriage, *Journal of Human Development and Capabilities*, 17(4): 590-98.
- Wodon, Q. 2018a. Estimating the Economic Impacts and Costs of Child Marriage Globally: Methodology and Estimates. Education Global Practice. Washington, DC: The World Bank.
- Wodon, Q. 2018b. Education Budget Savings from Ending Child Marriage and Early Childbirths: The Case of Niger, *Applied Economics Letters*, 25(10): 649–52.
- Wodon, Q. 2022a. What Is the Potential Cost of Gender Inequality in Lost Earnings? Global Estimates Based on the Changing Wealth of Nations, in B. Dallago and S. Casagrande, editors, *The Routledge Handbook of Comparative Economic Systems*, London UK: Routledge.

- Wodon, Q. 2022b. Wodon, Q., B. de la Brière, C. Malé, C. Montenegro, H. Nguyen, and A. Onagoruwa . 2020. *How Large Is the Gender Dividend? Measuring Selected Impacts and Costs of Gender Inequality*. Washington, DC: The World Bank.
- Wodon, Q., C. Fèvre, C. Malé, A. Nayihouba, and H. Nguyen. 2021. *Ending Violence in Schools: An Investment Case*. Washington, DC: The World Bank and the Global Partnership to End Violence against Children.
- Wodon, Q., C. Male, C. Montenegro, H. Nguyen, and A. Onagoruwa. 2018a. *Educating Girls and Ending Child Marriage: A Priority for Africa*, Washington, DC: The World Bank.
- Wodon, Q., C. Male, C. Montenegro, H. Nguyen, and A. Onagoruwa. 2018b. *Missed Opportunities: The High Cost of Not Educating Girls*. Washington, DC: The World Bank.
- Wodon, Q., C. Male, and A. Onagoruwa. 2020. A Simple Approach to Measuring the Share of Early Childbirths Likely Due to Child Marriage in Developing Countries, *Forum for Social Economics*.
- Wodon, Q., C. Male, A. Nayihouba, A. Onagoruwa, A. Savadogo, A. Yedan, J. Edmeades, A. Kes, N. John, L. Murithi, M. Steinhaus, and S. Petroni. 2017. *Economic Impacts of Child Marriage: Global Synthesis Report*, Washington, DC: The World Bank and ICRW.
- Wodon, Q., C. Nguyen and C. Tsimpo. 2016. Child Marriage, Education, and Agency in Uganda, *Feminist Economist*, 22(1): 54-79.
- Wodon, Q., P. Tavares, O. Fiala, A. Le Nestour, and L. Wise. 2017. Child Marriage Laws and their Limitations. *Ending Child Marriage Notes Series*. London and Washington, D.C.: Save the Children and The World Bank.
- Wodon, Q., and B. de la Brière. 2018, Unrealized Potential: The High Cost of Gender Inequality in Earnings. The Cost of Gender Inequality Notes Series. Washington, DC: The World Bank.
- World Bank. 2001. Engendering Development through Gender Equality in Rights, Resources, and Voice, Washington, DC: The World Bank.
- World Bank. 2006. Where Is the Wealth of Nations? Measuring Capital for the 21st Century, Washington, DC: The World Bank.
- World Bank. 2011. *The Changing Wealth of Nations? Measuring Sustainable Development in the New Millennium*, Washington, DC: The World Bank.
- World Bank. 2012. World Development Report 2012: Gender Equality and Development. Washington, DC: The World Bank.
- World Bank. 2013. What Matters Most for Teacher Policies: A Framework Paper. SABER Working Papers Series, Number 4. Washington, DC: The World Bank.
- World Bank. 2020a. *Realizing the Future of Learning: From Learning Poverty to Learning for Everyone, Everywhere.* Washington, DC: The World Bank.
- World Bank. 2020a. *Realizing the Future of Learning: From Learning Poverty to Learning for Everyone, Everywhere*. Washington, DC: The World Bank.
- World Bank. 2020b. Cost-effective Approaches to Improve Global Learning What does Recent Evidence Tell Us are "Smart Buys" for Improving Learning in Low- and Middle-income Countries? Washington, DC: The World Bank.
- World Bank. 2021. *The Changing Wealth of Nations 2021 : Managing Assets for the Future.* Washington, DC: The World Bank.
- World Bank. 2023a. Cost-effective Approaches to Improve Global Learning What does Recent Evidence Tell Us are "Smart Buys" for Improving Learning in Low- and Middle-income Countries? Washington, DC: The World Bank.
- World Bank. 2023b. *Global Education Policy Dashboard Reference Guide*. Washington, DC: The World Bank.
- World Bank. 2015. Global Monitoring Report 2015/16: Development Goals in an Era of Demographic Change, Washington, DC: The World Bank.

- World Bank. 2018. World Development Report 2018: Learning to Realize Education's Promise. Washington, DC: The World Bank.
- World Bank, UNESCO, UNICEF, FCDO, USAID, and Bill & Melinda Gates Foundation. 2022. *The State of Global Learning Poverty: 2022 Update.* Washington, DC: The World Bank.
- World Economic Forum. 2022. The Global Gender Gap Report 2022. Geneva: The World Economic Forum.

ENDNOTES

¹The 2018 study was prepared ahead of – and presented at the second African girls' summit on ending child marriage organized by the African Union in Ghana organized by AU/CIEFFA and the Government of Ghana.

iii Data for the latest round of TIMMS for 2019 suggest at in grade 8, there is broadly across countries gender equity in average achievement in mathermatics, in that in some countries boys outperform girls while in others, girls outperform boys and in a third group of countries there are no statistically significant differences in performance. In addition to those studies, this study also builds on analyses of the economic impacts of child marriage (Wodon et al., 2017) and the cost of gender inequality (Wodon et al., 2020). Estimates have been updated for this study.

^v The terms 'economic benefits' or 'costs' are to be understood in a broad sense. For example, as argued in the 2018 report, women with low educational attainment are more likely on average to suffer from feelings of pain, worry, sadness, stress, and anger after controlling for many other factors that could be correlated with these perceptions. This is a true cost associated with low educational attainment even if no monetary value for this cost is provided. These non-monetary costs should not be underestimated when considering programs and policies in various areas. ^{vi} Low educational attainment for girls and child marriage have implications not only for individuals and households, but also for nations and the continent. By raising standards of living through higher earnings and lower population growth, educating girls and ending child marriage would lead to reductions in poverty. Furthermore, since girls and women from lower socio-economic backgrounds are most affected by low levels of educational attainment and child marriage, educating girls and ending child marriage would contribute to reducing inequality.

vii For some outcomes, the magnitude of potential effects can be corroborated by evidence from empirical studies that are able to more credibly established causal relationships. For other outcomes, fewer such studies are available. viii There is a large literature on the potential impact of educational attainment on earnings that applies to boys and girls alike. The benefits from educational attainment are typically measured through regression analysis whereby the potential effect on earnings of educational attainment and experience is estimated. In some models, the focus is the correlation between years of schooling and earnings, and the implicit gain associated with each additional year of schooling. Other models look at the potential impact on earnings of different levels of schooling, such as having a primary, secondary, or tertiary education. Apart from educational attainment and experience (typically proxied by age), the models may also control for other variables such as location and the sector of activity.

When educational attainment was measured in levels, all individuals with some primary education or primary education completed but no education at a higher level are combined in a single category for primary education. The same was done for secondary and tertiary education. Thus, there was no distinction as to whether individuals had completed or not a cycle of study. This was done due to data limitations and comparability issues between countries, and because the analysis was conducted for 38 countries (with a few variations depending on the model used). When doing work for a single country or a few countries, it is easier and good practice to disaggregate levels of education further as done in this study for other domains of impact with Demographic and Health Surveys.

^x The additional controls were location (urban versus rural) and sector of activity (agriculture, industry, services, and others). These controls are limited due to the need to keep comparability across datasets between countries. While estimates obtained with these additional controls are not necessarily superior to those without them, the availability of both types of estimates provides a robustness test for the magnitude of the gains from education.

child marriage contributes to girls dropping out of school prematurely, which can affect earnings. By reducing educational attainment for girls, child marriage curtails their future earnings. In Wodon et al. (2018a, 2018b), estimates of the potential gains in expected earnings and productivity that could result from ending child marriage were obtained relying on wage regressions and simulations of earnings with lower fertility and higher education. This was done using a parametrization that accounted for the estimated impact of child marriage on both fertility and educational attainment for girls. When considering only the women who marry early, the gains in earnings from ending child marriage ranged from 1.4 percent to 15.6 percent of baseline earnings, depending on the country. Most of the gains came from a better education level for some of the women who married early (if they had married later, some would have had higher educational attainment), as opposed to the impact on fertility. When considering all women – those who did not marry early as well as those who did, the impact as a share of women's total earnings was smaller since only some of the women marry early and thereby have a positive likelihood of gains. The gains in earnings or expected productivity for all women ranged from 0.5 percent to 4.4 percent of base earnings depending

^{II} For sub-Saharan Africa the latest estimates at the time of writing are for 2021.

on the country. When including men as well (whose earnings are assumed not to be affected), the gains in the population's earnings ranged from 0.17 percent to 1.68 percent of the wage bill. On average, across the 12 African countries for which estimates were obtained, losses in earnings from child marriage were estimated at one percent. African countries for which estimates were obtained, losses in earnings from child marriage were estimated at one percent. African countries for which may affect women's labor force participation and the nature of their employment. Yet the question to be considered here is whether controlling for educational attainment, additional effects from child marriage are likely to be observed. This may not be the case, but even if some effects are observed, they may not be large. In Wodon et al. (2017), regression analysis with DHS data suggested that controlling for other factors, child marriage may not affect labor force participation much.

xiii By increasing earnings and labor force participation for women, higher levels of educational attainment and a reduction in child marriage should contribute to poverty reduction in the future in several ways. Poverty is usually measured by comparing a household's level of income or consumption per capita (or per equivalent adult) with a poverty line that captures the resources needed by households to meet their basic needs. The most important pathways for potential impact are therefore likely to be related to (1) higher earnings and consumption for women and their household; and (2) a reduction in household size and household needs through lower fertility. Higher educational attainment and ending child marriage for women should help not only by increasing the numerator (higher income or consumption), but also by reducing the denominator (smaller household size).

xiv Average gains from educational attainment are computed treating all countries equally; in other words, a small country has the same weight as a large one.

Prosperity (Kulgman et al., 2014). The report documents constraints facing women and girls worldwide, from high levels of gender-based violence to social norms and laws that curtail their decision-making in multiple areas such as working, owning property, working, or even making simple decisions within the household. Some of the findings in that report are similar to those documented here in terms of the negative impacts of low educational attainment for girls, child marriage, and early childbearing. The Voice and Agency report notes that constraints faced by women and girls stem from their limited endowments (health, education, and assets) and economic opportunities. In addition, social norms about gender roles are also limiting. For example, even when women work outside of the home, they typically remain responsible for housework and childcare. Social norms often restrict women's mobility and ability to network. They tend to be under-represented in politics and government. Unequal power relationships lead among others to gender-based violence, and legal discrimination remains pervasive, as is the case when women need their husband's consent to work. Lack of protection and discrimination under the law may interact with social norms interact, as is the case when women have limited land rights. While this report does not discuss the issues of the drivers of low educational attainment for girls, child marriage, and early childbearing in detail, there is no doubt that social norms play an important role.

^{xvi} For educational attainment, estimates of primary completion rates are computed for girls ages 15 to 18. At the lower secondary and upper secondary levels, the estimates are computed respectively for girls ages 18-20 and 21-24. The choice of those age groups stems from the fact that for boys and girls alike, an education cycle is often completed at an older age because of late entry in primary school, repetition, or time out of school. More than the specific values of the indicators which can be sensitive to the age brackets used for measurement, the focus in this brief is on the relationships between indicators. The maps make it clear that states with lower levels of educational attainment tend to have a higher prevalence of child marriage and early childbearing, as expected. Also as expected, the prevalence of early childbearing tends to be lower than that of child marriage as girls tend to be married before they have their first child.

xvii The term "total fertility" is defined in this study as the number of live births that a woman has over her lifetime. This definition is needed for individual-level econometric work to measure the (marginal) impact of child marriage on fertility. By contrast traditional "total fertility rates" are population-level estimates. Our definition of "total fertility" is thus similar, but not exactly the same as "total fertility rates" traditionally measured. The econometric analysis is conducted for women ages 35-49 for sample size considerations (this may underestimate total fertility somewhat, as women may still have children after the age of 49).

killi Because the models considered the number of children that women have towards the end of their reproductive life, they accounted implicitly for desired fertility and substitution effects in the timing of birth when considering the implications of ending child marriage or achieving universal primary or secondary education.

xix The advantage of demographic projection tools is that they rely on age-specific fertility rates, which is exactly what is needed when simulating the potential impact of ending child marriage and early childbearing since these are age-

specific, affecting girls aged below 18. The approach used for the 2018 study consisted of reporting results from simulations obtained for child marriage and early childbearing and simply scaling those results to account for the potential impact on total fertility rates of universal primary or secondary education in comparison to the potential impact of child marriage. Analysis was conducted for 13 countries and average results across countries reported.

xx In harsh conditions, toxic stress responses on the part of children can have damaging effects on learning, behavior, and health later in life. There is even evidence that when children are exposed to intimate partner violence in utero, they tend on average to have worse health at birth and increased mortality rates.

xxi A child is stunted if she has a height more than two standard deviations below the median reference height for her age. Stunting often results from persistent insufficient nutrient intake and infections. It may lead to delayed motor development and poor cognitive skills that can affect school performance and productivity later in life.

xxii The variables pertain to (i) women's decision-making in regard to health care (as mentioned in the previous section), household purchases, visits to friends and relatives, and the use of husband's earnings; (ii) women's ability to refuse to have sex with her husband or to negotiate their husband's use of a condom; (iii) whether women feel that a husband is justified in beating his wife under the certain circumstances; and finally (iv) whether women needed their husband's permission to get medical assistance if needed.

Research has found that social exclusion decreases the likelihood of prosocial behavior, and this may be one of the channels underlying the correlation between low educational attainment and the measured altruistic behaviors. Another hypothesis is that women with higher levels of education tend to in a better position in life, and thereby are more able to help others. Even though we control among others for household per capita income and women's employment status in the regressions, a higher level of educational attainment is likely to be associated with a position in life where women have a higher ability to help others. By contrast, women who are less educated tend to be poorer and they may struggle just to make ends meet. They may not have the social networks nor the resources that would enable them to volunteer, donate to charity, or help strangers. In other words, it is not that women who are better educated are intrinsically more altruistic than those who are less well educated. Rather, those who are better educated are on average likely to be in a better position to help others. This is a conjecture, but a reasonable one to interpret the results from the analysis.

background. Therefore, friends of better educated women may have the (financial) ability to help them especially when they are in need, while friends of women with lower levels of educational attainment may not have that ability.

***Volume In many countries, there is a need to build secondary schools closer to where girls live or provide modes of transportation and in some cases boarding to enable them to attend schools, especially at the secondary level. Providing adequate water, sanitation and hygiene facilities for girls is also important, as is the need to address the risk of violence and sexual harassment either at or en route to school. It is also essential to ensure that schools improve learning outcomes and provide girls with appropriate skills. Among various entry points that can be used to that end, the following can be mentioned (1) reducing disadvantages that girls face in remote communities due in part to poor targeting of Government resources; (2) creating a more inclusive school culture for girls; (3) providing girls with role models—including through female teachers; and (4) raising the returns to secondary education for women at the local level through better employment opportunities. This list is by no means exhaustive and the appropriate entry points vary between countries.

early childbearing, and low educational attainment for girls are rooted in social norms that perpetuate gender inequality. To tackle this challenge, beyond general conditions that education systems should meet and targeted interventions to reach vulnerable girls, additional community-based interventions that involve all members of the community may be an effective means of changing these norms. Such interventions should target men and community leaders apart from women. Finally, adequate laws – for example on the minimum age for marriage without exceptions for parental and judicial consent are essential but not sufficient on their own to achieve change. The Convention on the Rights of the Child emphasizes the need for full and informed consent for marriage. It notes that children typically do not have the ability to provide full and informed consent. This is one of the reasons why 18 is recommended as the minimum age for marriage. In Uganda for example, the 1995 Constitution sets the minimum age of marriage at 18 years (Article 31), but national laws have other provisions. The Marriage Act of 1904 sets the minimum age for consent at 21 years but allows written consent of the father, mother, guardian, or registrar for the marriage of minors. The Marriage and Divorce of Mohammedans Act of 1906 is silent on the minimum age for consent. Both the Hindu Marriage and Divorce Act of 1961 and the Customary Marriages (Registration) Act 1973 set the minimum age for consent at 16 years for girls and 18 years for boys. They allow marriage of minors upon

consent of parents or a guardian. As discussed by Wodon, Tavares et al. (2017), such exceptions allowing girls to be married early with parental or judicial consent should be avoided.

Measurement of learning poverty is complex and based primarily on data from international student assessments that have been harmonized so that results on the various assessments can be read on a common scale. As for the measurement of monetary poverty, results depend on where the bar is set not to be learning poor. A common learning poverty line makes sense for international comparisons, but it may be problematic at the country level for measuring progress, especially when the bar to not be learning poor is set up relatively high^{xxvii} It is also important to realize that as is the case for any statistical measures, measures of learning poverty have standard errors, which are further magnified by the fact that various student assessment instruments are used for measurement (this potential source of error is often not recognized when reporting on learning poverty measures).

xxviii To understand how learning poverty is measured, denote as learning deprived (LD) the share of children who are in school and do not achieve minimum proficiency in reading. For children who are out of school, the assumption is that they are all learning-poor. If the share of out-of-school children is denoted by OOS, then learning poverty is defined as LP=OOS+[(1-OOS)×LD]. For example, if a country has 10 percent of its children of primary school age out of school (OOS=0.1) and if learning deprivation among children in school is estimated at 80 percent (LD=0.80), then the national estimate of learning poverty would be 82 percent since LP=0.1+[(1-0.1)×0.8]=0.82. In countries where learning deprivation is high, which is the case for most sub-Saharan African countries, even if few children are out of school, learning poverty is high.

xxix This discussion is adapted in part from Wodon (2022b).

xxx All of this may sound conceptual or even abstract, but the World Bank has made tools available to support teachers and principals in improving instruction, including TEACH and COACH. TEACH is a classroom observation tool that can be used for system diagnostic as well as for professional development. As a system diagnostic tool, TEACH allows school networks to monitor the effectiveness of their policies to improve teacher practices. As a professional development tool, TEACH can be used to help teachers improve how they teach. The initial version of the TEACH was intended for use in primary schools (grades 1-6), but other versions are under preparation for early childhood education and for secondary schools. What Does TEACH Measure? The tool differs from other classroom observation tools in that it captures (i) the time teachers spend on learning and the extent to which students are on task, and (ii) the quality of teaching practices that help develop students' socioemotional and cognitive skills. As part of the Time on Task component, 3 snapshots of 1-10 seconds are used to record both the teacher's actions and the number of students who are on task throughout the observation. The Quality of Teaching Practices component, on the other hand, is organized into 3 primary areas as shown below: Classroom Culture, Instruction, and Socioemotional Skills. These areas have 9 corresponding elements that point to 28 behaviors. The behaviors are characterized as low, medium, or high, based on the evidence collected during the observation. These behavior scores are translated into a 5-point scale that quantifies teaching practices as captured in two 15-minute lesson observations. A second tool is COACH, which aims to help countries improve in-service teacher professional development (TPD) programs and systems to accelerate learning. The types of TPD considered include one-to-one coaching, group training sessions and workshops, as well as other approaches. This can include in-person and remote or hybrid modalities. While TEACH helps in identifying teachers' professional development needs, COACH leverages these insights to tailor the support teachers receive to improve their teaching. Could the TEACH and COACH tools be used by Catholic school networks to provide professional development opportunities to their teachers? Again, they could indeed. Information on both tools is available from the World Bank and both tools are provided at no cost. One of the rationales for developing the tools was that they would be freely available, but there may be a cost in providing training on how to use the tools (this is typically done through training of trainers).

xxxi For example, programs that may prove effective in trials may have smaller positive effects when they are being scaled up nationally. One reason could be the fact that teams managing experiments may be highly performing and especially motivated (including to make the experiment "work"), but this level of commitment may be difficult to sustain when pilot programs are being scaled up nationally.

^{xxxii} Grade 2 tests for reading and language assess three main areas: listening comprehension, familiarization with written language and reading/decoding, and reading comprehension. For mathematics, the grade 2 test measures pupils' core competencies in two main areas: arithmetic, and geometry, and space and measurement. For grade 6, the test aims to evaluate student's ability to understand, learn and adapt their knowledge to situations encountered in daily life. The language test assesses pupils' comprehension of informative texts and documents, including the

ability to extract information from literary texts. For mathematics, the test considers the ability of students to assimilate concepts and apply them in diverse situations.

This implies that two in three pupils are in a range of 400 points to 600 points, and most students are in the 250 to 750 range. A score of 500 does not mean that a student is doing well (most students do not achieve proficiency).

xxxiv On the importance of female heads of school, see also Bergmann et al. (2022).

xxxv As an example of research on girls' education from the Data Must Speak initiative at UNICEF, see the brief on results for Togo by Bergmann et al. (undated).

The modules are School Information, Teacher Presence, Teacher Survey, Classroom Observation, Teacher Assessment, Early Learner Direct Assessment, School Management Survey, and 4th-grade Student Assessment.

xxxvii This section follows broadly the executive summary and analysis in Nwokeocha (2023a, 2023b, 2023c).

xxxviii By increasing knowledge and awareness, life skills can increase young women's perceived risk of becoming pregnant at an early age and the desire to avoid early pregnancies (through family planning). Through these channels, life skills may lead to better health outcomes for the girls and their children. By increasing girls' confidence and self-esteem, life skills may also increase girls' aspirations. With increased aspirations, girls may have a greater desire to delay marriage and childbearing. Finally, life skills can increase young women's communication and decision-making skills, leading to increased abilities to negotiate their preferences for delayed marriage and childbearing. At the same time, while life skills and SRH knowledge may empower girls, they may not be sufficient to delay marriage and childbearing if social norms curtailing agency for girls are not also addressed at the same time. xxxix Programs increasing earnings potential for young women may increase their ability to plan marriage and childbearing decisions in three ways. First, the ability to make an economic contribution expands the role of women beyond that of sex and reproduction. This can increase their desire to limit or space childbearing. The transformation of girls from economic liabilities into assets in the eyes of their societies and families can also alleviate external pressures on girls to marry or have children early. Second, the loss in earnings associated with childrearing is an opportunity cost which may increase women's desire to limit or space births and exercise reproductive control. Third, a young women's increased earnings may improve her bargaining power within the household and allow her to effectively exercise reproductive control by negotiating delays in sexual debut or marriage, and negotiating the terms of sex including the use of contraceptives. Creating income-generating opportunities for women can therefore contribute to female empowerment beyond the economic realm by widening personal choice and control over SRH. xl In many communities, the economic, cultural, and social environment does not provide viable alternatives to marriage for adolescent girls. Once girls drop out of school, possibly because of poor quality or high cost, it may be difficult for parents not to get their daughter married. In those communities, improving the provision of quality and affordable primary and secondary education may be one of the best way to delay marriage and childbearing as parents often see schooling as a viable alternative to marriage for their daughters. Incentives and programs to keep girls in school may also lead to "tipping points" in communities whereby more and more girls remain in school and are able to delay marriage. A few interventions have also aimed to delay marriage through financial incentives conditional on not marrying early, with additional schooling often as an additional benefit.

xii The ELA project in Uganda aimed to increase economic empowerment for adolescent girls in rural areas by providing life skills training, skills related to income-generation, and access to microfinance. The program has demonstrated strong positive impacts on economic, health, and agency outcomes for girls. Among other outcomes, the program (1) increased the likelihood of engaging in income-generating activities by 32 percent; (2) increased self-reported routine condom use by those sexually active by 50 percent; (3) reduced fertility rates by 26 percent; and (4) reduced reporting of unwanted sex by 76 percent. There were also reductions in teenage pregnancies and child marriage. To gather further evidence on the effectiveness of the intervention in promoting entrepreneurship, the evaluation looked at the impact of the program on the willingness to compete in an experimental setting, including for the girls' brothers. The results suggest that programs that target adolescent girls' empowerment such as ELA may also have spillover effects on their brothers and shift gender dynamics in the community.

xiii Because multiple reasons may contribute to gender gaps in educational attainment and learning, the types of interventions that could be implemented to reduce these gaps are multiple. For example, Unterhalter et al. (2014) assessed the evidence on the impact of interventions for girls' education focusing on (i) providing resources (including transfers) and infrastructure, (ii) changing institutions, and (iii) changing norms and including the most marginalized in education decision making. The review summarized the impact of different types of interventions on three outcomes: participation, learning, and empowerment. For each type of intervention and category of

outcome, the evidence on the likelihood of impact was classified as strong, promising, limited, or needed (i.e., weak). For participation, the evidence on the impact of conditional cash transfers, information about the potential employment returns to education, and the provision of additional schools in underserved and unsafe areas was found to be strong. This was also the case for the evidence on some interventions related to teacher training, group-learning, and measures to promote girl-friendly schools, as well as learning outside the classroom, for example through tutoring. Several of these interventions (group-learning, programs for learning outside the classroom, and scholarships linked to student performance) were also found to have impacts on learning. The evidence on the impact of interventions on empowerment was generally weaker.

xiiii SASA! means "Now!" in Kiswahili. The program was developed by Raising Voices and it has been implemented in Uganda by the Center for Domestic Violence Prevention. It appears to be the first community-based violence prevention program in sub-Saharan Africa to be rigorously evaluated. The program employs multiple strategies to build a critical mass of engaged community members, leaders, and institutions, including local activism, media and advocacy, communication materials, and training. The Activist Kit that is central to SASA! community engagement and mobilization involves four phases: Start, Awareness, Support, and Action. The content evolves with each phase, with power as a central theme. Results from a randomized controlled trial suggest positive effects after three years of programming. In comparison to control communities, SASA! communities reported (i) a reduction in levels of violence against women of 52 percent; (ii) an increase in the share of women and men who believe it is acceptable for women to refuse sex of 28 percent; and (iii) an increase of 50 percent in the share of men and women who believe that physical violence against a partner is unacceptable (Abramsky et al., 2014).



Stay in touch



info.iicba@unesco.org



www.iicba.unesco.org



@UNESCOIICBA



@iicba

Address

UNESCO - International Institute for Capacity Building in Africa (IICBA) Menelik Avenue, UNECA Compound, Congo Building 1st floor Addis Ababa, Ethiopia, P.O. Box 2305
Tel. +251 115 445 284/ +251 115 445 435



