



WESTERN AND CENTRAL AFRICA EDUCATION STRATEGY

**FROM SCHOOL TO JOBS: A JOURNEY FOR THE YOUNG
PEOPLE OF WESTERN AND CENTRAL AFRICA**

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Foreword

Education is the cornerstone of development. Indeed, it is an essential driver of stability, social cohesion, and peace. Our countries need to invest in learning today to build the Western and Central Africa of tomorrow.

This strategy is about the journey of six-year-old Ama and all our children in the region — from very early in her life when she is part of a stimulating environment that prepares her for lifelong learning, from the day she enters the classroom for her first day of school, and until she completes her tertiary education with all the skills required for her to obtain a good job and fulfill her aspirations as an accomplished young person. Ama will need the support to complete her schooling in a safe and nurturing environment with textbooks and well-trained teachers.

Despite progress in access to education over the years, 80 percent of 10-year-old children in Western and Central Africa are unable to read and understand a simple text, and more than 32 million children remain out of school, the largest share of all regions worldwide. Even before the pandemic, the world was already experiencing a learning crisis. If we are to take on this global challenge, we must focus on Western and Central Africa, a region with half a billion people and amongst the youngest population in the world.

Putting our young people first is at the heart of our work. The future of any society lies in its ability to provide its children and youth with the tools and opportunities to flourish as individuals, and to contribute to the collective development of the society and country. This can only be achieved through an education system that is accessible to everyone. Such a system must be fair and adapted to the needs of the current and future populations, as well as the labor market.

This document is a roadmap for World Bank investments in improving educational outcomes at all levels in our countries. It is not a strategy for the education sector; rather, it is a strategy to bring a whole-of-society and a whole-of-government approach to foster strong cross-sector collaboration and partnerships to improve learning and equip our youth with the right skills for good jobs. It also builds on the Sahel Education White paper, which proposes solutions to the Sahel subregion's unique challenges. Finally, it aligns with the World Bank Africa Human Capital Plan and the African Union's 2063 Africa Agenda.

I believe we can achieve the vision of a region where no one is left behind. To accomplish this, we first need a strong political commitment to advance reforms, putting education at the cornerstone of our countries' development strategies and prioritizing investments accordingly. Countries in the region can learn from their own experiences and expand and adapt existing high-impact interventions to local country contexts. Together with all our partners, we can achieve the ambitious goal of educating all young people. We owe this to Ama and all the girls and boys of today and future generations!

Ousmane Diagana

Vice President, Western and Central Africa Region, World Bank Group



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Abbreviations

ACE	Africa Higher Education Center of Excellence	NQF	national qualifications framework
AFW	Western and Central Africa	NREN	national research and education network
ASA	advisory services and analytics	ODA	official development assistance
EdoBEST	Edo Basic Education Sector Transformation	OECD	Organisation for Economic Co-operation and Development
EMIS	education management information system	OOS	out-of-school
FCV	fragility, conflict, and violence	PASEC	Programme for the Analysis of Education Systems
GDP	gross domestic product	PFM	public financial management
GER	gross enrollment ratio	PPP	public-private partnerships
GP	Global Practice	STEM	science, technology, engineering, and mathematics
HCI	Human Capital Index	SWEDD	Sahel Women’s Empowerment and Demographic Dividend
ICT	information and communications technology	TVET	technical and vocational education and training
IDA	International Development Association		
IDP	internally displaced person		
NEET	not in education, employment, or training		



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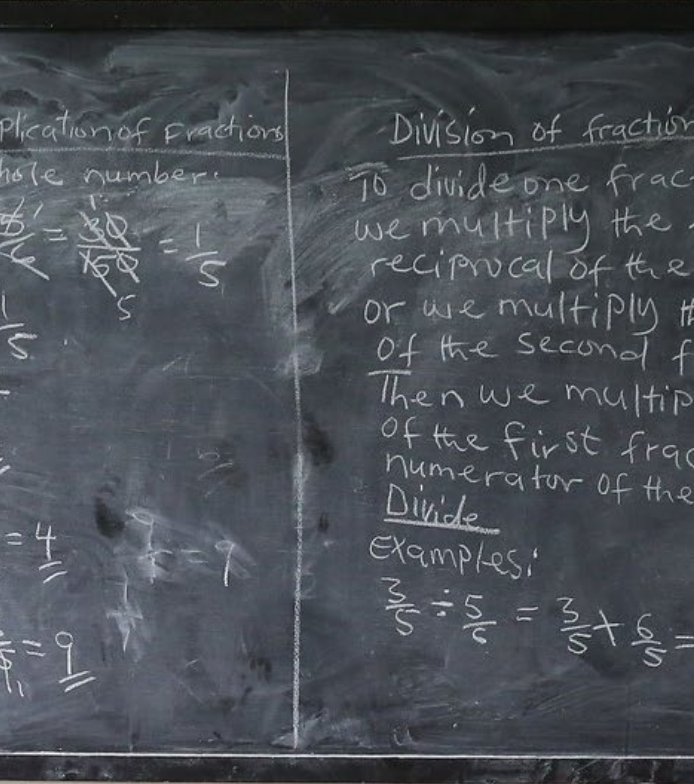
$\frac{4}{7} \div \frac{2}{3} = \frac{4}{7} \times \frac{3}{2} = \frac{12}{14} = \frac{6}{7}$

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The World Bank's Education Strategy for Western and Central Africa

PHOTO BY: © DOMINIC CHAVEZ/WORLD BANK

Education systems in Western and Central Africa (AFW) suffer from chronic underperformance.

The COVID-19 pandemic has aggravated this crisis by forcing school closures, decreasing household incomes, and straining national budgets. Improving education outcomes in AFW promises enormous returns, though it will not be easy. Despite recent progress, the region remains at the bottom of global human capital rankings. Nonetheless, AFW countries can make strides by drawing on the large and growing body of knowledge and experience—their own and that of others—about how to improve learning outcomes and workforce skills. Doing so would make human capital central to economic strategies for growth and poverty reduction and would help economies thrive through better jobs, improved standards of living, healthier and longer lives, and peace and security at home and abroad. Improving education outcomes in the region requires continual recommitment, rethinking, reassessment, and recalibration of effort as opportunities and threats evolve. Together AFW countries can tackle these difficult challenges with confidence that today's investments in education will build the human capital for a brighter future for all.

This Regional Education Strategy articulates the World Bank's plan (2022–25) for supporting education in AFW countries. Based on global and regional evidence, lessons learned, and consultations with diverse stakeholders, the strategy identifies key challenges and outlines strategic priorities, policy options, and high-impact interventions to increase

access to education, improve education quality, and equip youth with labor market–relevant skills that address the region's challenges. These outcomes require collaboration on goal-oriented problem-solving across numerous sectors rather than on stand-alone sector-specific interventions. The strategy also aims to guide World Bank senior management, country teams, and staff across various sectors to coordinate for better education outcomes and thus expand prospects for economic development, poverty reduction, and shared prosperity. Clarifying strategic priorities can help engage policy makers, including national ministers of finance and education, as well as members of civil society and development partners.

Because the AFW region is so heterogeneous, the strategy highlights responses to region-wide challenges with country-specific strategies. The rest of this overview is structured as follows: The first section describes the vision underlying the strategy. The second elaborates on the case for investing in education in the context of the region's megatrends. The third sets out the strategy's goals and identifies actions in three domains: strengthening strategic leadership, investing in high-impact interventions (organized under three pillars), and enhancing implementation capacity. These actions will help achieve the strategy's goals while navigating cross-cutting challenges to rebuild resilient education systems. Finally, the fourth section details the World Bank's education portfolio in the region and discusses how the Bank can support efforts to achieve the Strategy's goals.

Vision for the Strategy

The strategy envisions a bright future for AFW where all girls and boys arrive at school ready to learn, acquire quality learning, and enter the job market with the skills to become productive and fulfilled citizens. Realizing this vision calls for a comprehensive whole-of-government approach that includes all stakeholders to address challenges across the learning life cycle for students from pre-school to tertiary education, including technical and vocational education and training (TVET), as well as training options for those already in the workforce.

The strategy aims to help countries build the human capital needed for sustained economic growth and social development. It supports AFW countries in minimizing learning losses from the COVID-19 pandemic and rebuilding their education systems for greater

resilience to future disruptions. It also seeks to reorient systems toward new digital and green economic opportunities, aligning them with regional and global initiatives to develop human capital.¹ As an integral part of the World Bank's Western and Central Africa Region Priorities 2021–25, this strategy complements other Bank initiatives in education and human capital, such as the Africa Human Capital Plan, the Bank's strategic education policy approach, the International Development Association 20th replenishment (IDA20) commitments,² and the Digital Economy for Africa Initiative.³ The strategy is complemented by the Sahel Education White Paper (World Bank 2021c), which highlights and proposes solutions to that subregion's unique challenges,⁴ such as pervasive adult illiteracy and exceptionally low and inequitable access to quality basic education, especially in fragile settings.

1 A key regional initiative is Agenda 2063 (African Union 2013), which envisions a region of well-educated, skilled citizens prepared for a knowledge society of science, technology, and innovation where no child misses school due to poverty or discrimination. This strategy resonates with the aspirations of Agenda 2063, especially Aspiration 6: "an Africa whose development is people-driven, relying on the potential of African people, especially its women and youth, and caring for children." A key global initiative is the United Nations Sustainable Development Goals.

2 The strategy supports all World Bank human capital policy commitments as well as those under other special themes such as climate change, gender and development, FCV, and jobs and economic transformation. The strategy is also consistent with commitments under all the crosscutting themes, including crisis preparedness, governance and institutions, debt, and technology.

3 For additional details, see <https://www.worldbank.org/en/programs/all-africa-digital-transformation>.

4 The Sahel subregion consists of Burkina Faso, Chad, Mali, Mauritania, and Niger.



Improving the Learning Life Cycle

Regional Context

The AFW region comprises 22 countries⁵ with a combined population of half a billion people, projected to reach 1 billion by 2050. In addition to the hundreds of local languages spoken, the primary official languages in the region include English, French, Spanish, Portuguese, and Arabic. The geography ranges from semiarid areas in the Sahel to large coastal zones on the Atlantic Ocean and lush tropical forests. The region hosts the most populous country in Sub-Saharan Africa, Nigeria, with more than 200 million people, as well as small states like Cabo Verde. Half of the countries face situations of fragility, conflict, and violence (FCV). Some 48 percent of the region's population now resides in cities as a result of rapid urbanization, which is expected to continue.

The economies of AFW countries are diverse. Some depend heavily on agriculture, a sector that accounted for 42 percent of employment in the region in 2019.⁶ Others rely on natural resources such as oil (Gabon, Nigeria, Republic of Congo), gold (Mali, Guinea, Burkina Faso), cocoa (Côte d'Ivoire, Ghana), and cotton (Benin, Burkina Faso). The region experienced high economic growth from 2005 to 2015, powered by high commodity prices, but since then growth rates have slowed. The combined gross domestic product (GDP) of the 22 countries in the region in 2019 was estimated at US\$711 billion,

about one quarter the GDP of the United Kingdom or France.

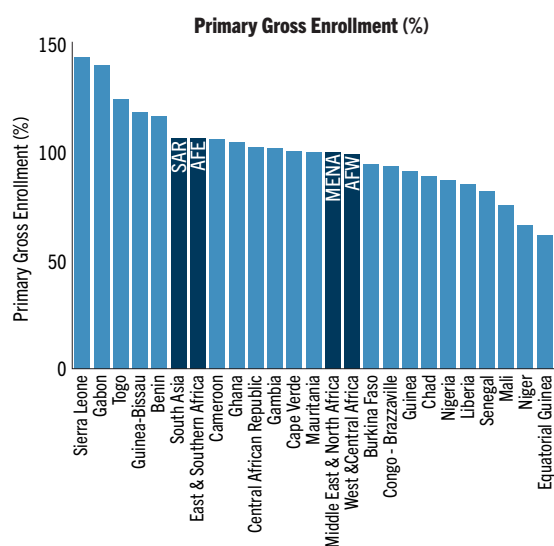
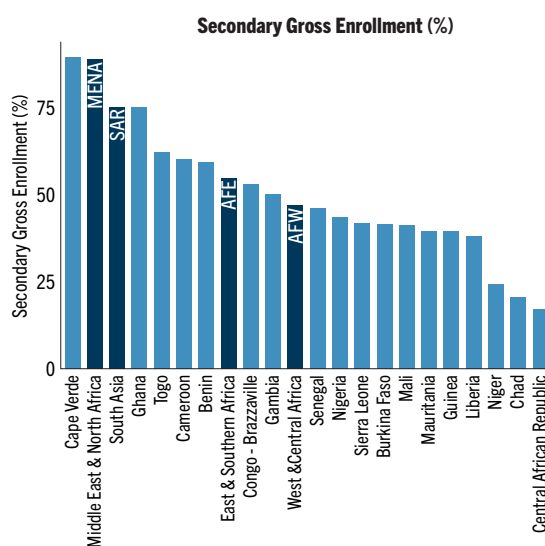
Enhancing Progress in Education

Access to basic education has expanded rapidly but is still lower than in other world regions. In 2020, average net primary school enrollment in AFW was nearly 90 percent, up from less than 50 percent in the 1990s. Secondary enrollment more than doubled in the last decade to an average of 55 percent. However, in a region where early childhood education is free of charge in just five countries, only 31 percent⁷ of AFW's children, on average, benefitted from this good head start to their education. While enrollment in primary education is approaching universal coverage, coverage at the secondary level lags far behind that of other regions (figure 0.1). With 20 percent of the school-age population not in school, AFW hosts the largest share of the world's out-of-school (OOS) children. Nigeria has more than 11 million OOS children - the highest in the world (World Bank 2022a). The OOS population comprises children in three distinct groups: those who have never enrolled, those who enrolled but dropped out before finishing, and those attending nonintegrated religious establishments. The region also faces major gender disparities in access to education. For example, on average, only 44 percent of girls in AFW are enrolled in secondary school (junior and senior), compared with 52 percent of boys.

5 The AFW region comprises the following countries: Benin, Burkina Faso, Cabo Verde, Cameroon, Central African Republic, Chad, Republic of Congo, Côte d'Ivoire, Equatorial Guinea, Gabon, The Gambia, Ghana, Guinea, Guinea-Bissau, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Sierra Leone, and Togo.

6 Data in this section are from World Development Indicators (database), World Bank, Washington, DC (accessed February 25, 2022), <https://databank.worldbank.org/source/world-development-indicators>.

7 Based on estimates from World Development Indicators (database), World Bank, Washington, DC (accessed February 25, 2022), <https://databank.worldbank.org/source/world-development-indicators>.

Figure O.1. Primary and Secondary Educational Attainment in AFW and Other Regions**a. Primary gross enrollment****b. Secondary gross enrollment**

Source: World Development Indicators (database), World Bank, Washington, DC (accessed February 25, 2022), <https://databank.worldbank.org/source/world-development-indicators>.

Note: AFW = Western and Central Africa. AFE = Eastern and Southern Africa. MNA = Middle East and North Africa. SAR = South Asia.

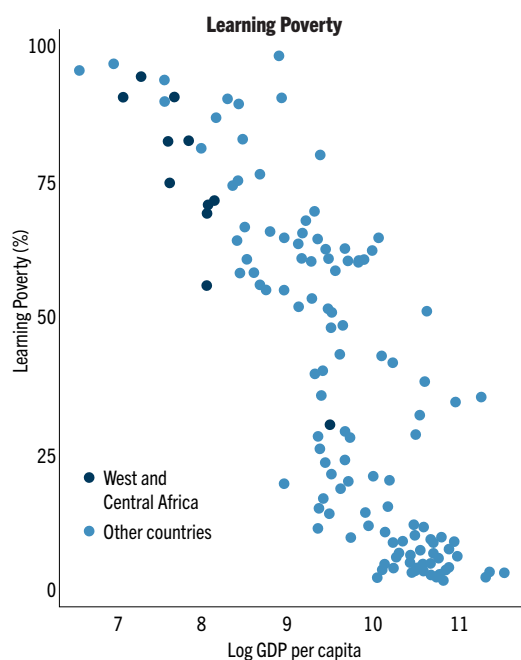
Intergenerational disparities in education are significant. For example, due to rapid expansion of educational coverage, children in Burkina Faso can expect to complete, on average, seven years of schooling by their 18th birthday, compared to just two years for adults ages 25 and older. This wide gap in educational attainment illustrates a special challenge: the urgency of addressing the educational needs of both the school-age population and working adults. Lack of schooling among youth and younger adults is concerning especially given the adverse implications for their labor productivity over the decades of working life still ahead of them.

More worrisome than lack of universal basic education is the low level of learning throughout the region. An estimated 80 percent of 10-year-olds in AFW suffer from learning poverty, or an inability to read and understand a simple text (figure O.2). A child in AFW today can expect to complete 7.8 years of schooling, on average, by the age of 18. But

this figure falls to just 4.5 years when adjusted for the quality of learning (learning-adjusted years of schooling, or LAYS). The quality gap explains why the AFW's Human Capital Index (HCI) is the lowest in the world—only 0.38 on a scale of 0 to 1.⁸ Lack of or weak foundations for learning in childhood continue into adulthood: the literacy rates among adults in Chad and Niger, two countries with some of the world's worst human capital outcomes, are just 22 percent and 19 percent, respectively (World Population Review 2021).

The COVID-19 pandemic has exacerbated many of the region's chronic education challenges and has jeopardized its hard-earned progress. At the peak of the crisis, 101 million learners in the region could not attend class in person, and most could not learn online due to lack of internet access. In Nigeria, for example, the pandemic reduced students' probability of attending school by nearly 7 percentage points (UNESCO, UNICEF, and World Bank 2021).

⁸ The index is a summary measure of the human capital a child born today can expect to acquire by age 18 given the risks of poor health and poor education that prevail in the country where he or she lives. A value of 1 indicates a child born today can expect to achieve full health (defined as no stunting and survival up to at least age 60) and achieve his or her formal education potential (defined as 14 years of high-quality school by age 18). A full accounting of the HCI methodology is available from Kraay (2018). Children born today in an AFW country will be, on average, only 38 percent as productive as they could be if they enjoyed complete education and full health. Complete education and full health would mean productivity in an average AFW country could be 2.63 times higher than it is today, equivalent to 1.95 extra percentage points of growth per year over 50 years.

Figure O.2 Learning Poverty in AFW Countries

Source: World Development Indicators (database), World Bank, Washington, DC (accessed February 25, 2022), <https://databank.worldbank.org/source/world-development-indicators>.

Many learners, especially girls, are also likely to drop out permanently.⁹ In Ghana, girls account for 60 percent of postpandemic dropouts. Across the AFW region, an estimated 10 million more girls are at risk of early marriage as a result of the crisis (UNESCO, UNICEF, and World Bank 2021). Limited data exist on the magnitude of pandemic-related learning losses in AFW countries, but experiences in other countries suggest that losses, especially among disadvantaged populations, will be significant.¹⁰ Nonetheless, many AFW countries are taking proactive measures to protect against the pandemic's adverse effects. Sierra Leone, for example, built on its Ebola-era radio program to provide continuity of schooling with two-way interactions, and Côte d'Ivoire spent \$8.2 million to enable distance

learning through television for examination-year classes.

The region faces chronic gaps in job attainment and workforce participation, especially among young women, and youth unemployment is high even among the educated and trained. Poor workforce skills limit business success and reinforce the vicious cycle of few job opportunities and high youth unemployment, which have fueled protests and violence in the region (Frimpong and Commodore 2021). Most AFW youth acquire skills through informal apprenticeships that prepare them for informal work only. Less than 4 percent of secondary students, on average, are enrolled in formal TVET, and gross enrollment ratio (GER) in tertiary education averages only 11 percent (9.4 percent in Sub-Saharan Africa), far below the 54 percent GER in Latin America and the Caribbean and 74 percent in the Organisation for Economic Co-operation and Development (OECD). However, in some countries, even with this limited coverage, the share of well-educated youth ages 15–24 who are not in education, employment, or training (NEET) is large (figure O.3). In Nigeria in 2018 an estimated 55 percent of the NEETs in this age bracket possessed post–basic education.¹¹ In Liberia, where unemployment is relatively low, the problem is the lack of quality jobs available. Throughout the region, manufacturing and services are expanding but slowly. As a result, there are not enough good-quality jobs to absorb all the graduates of post–basic education and training programs. Moreover, formal post–basic education and training programs are not preparing graduates for fields where labor market demand is high, especially in science, technology, engineering, and mathematics (STEM). Graduates from tertiary STEM programs make up less than 25 percent of graduates in the region.¹² In Sierra Leone, for example, the share of graduates in information and communications technology (ICT) was 8 percent in 2019.¹³ These programs also enroll far too few women. In Ghana, women composed only 1 percent of graduates from public

9 For example, when schools in Sierra Leone reopened after a nearly year-long closure following the 2016 Ebola outbreak, girls ages 12–17 were 16 percentage points less likely than boys to be in school. Further, out-of-wedlock pregnancies rose by 7.2 percentage points after the start of the outbreak (Bandiera et al. 2019).

10 For example, in the Netherlands, where schools closed for eight weeks during the COVID-19 pandemic, national primary school examination scores fell by about 0.08 of a standard deviation (equivalent to missing 20 percent of the school year), with losses up to 60 percent greater among children from disadvantaged homes (Engzell, Frey, and Verhagen 2021).

11 Data are from the analysis of the 2018–19 Nigeria Living Standards Survey, Nigeria National Bureau of Statistics (accessed January 2022), <https://nigerianstat.gov.ng/nada/index.php/catalog/68/study-description>.

12 Based on available data from UNESCO UIS (2017–20) database (accessed January 2022), <http://data.uis.unesco.org/>.

13 Original calculations based on World Bank (2020b).

university undergraduate ICT programs in 2019, and in engineering their share was only 4 percent.¹⁴

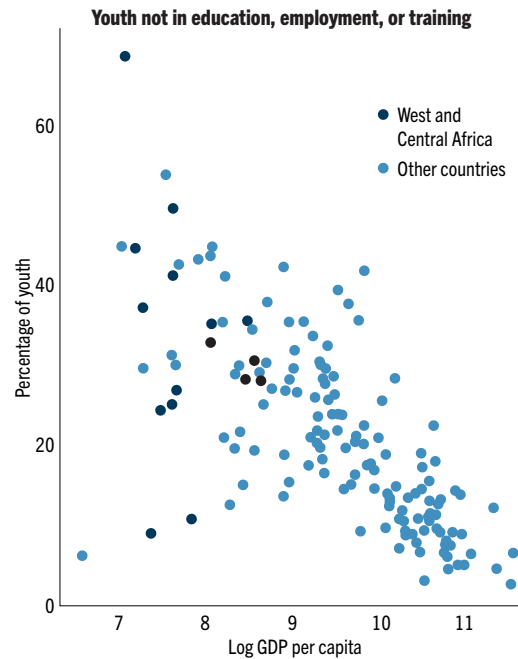
Most countries in the region underfund education.

Governments are the largest source of education funding, accounting for an average of 52 percent of aggregate spending on education in the AFW region.¹⁵ Based on data for 17 AFW countries for 2017–19, only six of the countries—Burkina Faso, Cabo Verde, Ghana, Senegal, Sierra Leone, and Togo—spent at least 4 percent of GDP on education. This represents the lower bound of the range of government spending in countries with successful education systems (4–6 percent of GDP). In the four lowest-spending countries—Chad, Guinea, Mauritania, and The Gambia—government spending on education averaged only 2.2 percent of GDP. Most AFW countries need to increase government funding for education. In many, the effort likely depends on enlarging overall public budgets instead of increasing the already large share apportioned to education.

Pervasive poverty in the AFW region and a projected economic slowdown make it difficult to mobilize household spending on education. Households in the region already contribute an average of 42 percent of total spending on education. Many AFW countries have eliminated fees for public basic education, but households still incur other out-of-pocket costs, such as for books and transportation. For poor families, the burden can be onerous enough to stop a child’s schooling. The COVID-19 crisis has worsened conditions in the region, increasing the number of people living in extreme poverty (on less than \$1.90 a day) to an estimated 23 million. Opportunities to mobilize more resources are therefore unlikely except among better-off households with additional sources of income (e.g., remittances from abroad) and by tapping into these families’ willingness to pay for services offered by private providers.

Prospects for increased official development assistance (ODA) also appear modest. ODA accounts for only 6 percent of aggregate spending on education in the AFW region, and the share in the region’s low-income countries is 13 percent, substantially less than

Figure O.3 Youth Ages 15–24 Not in Education, Employment, or Training



Source: World Development Indicators (database), World Bank, Washington, DC (accessed February 25, 2022), <https://databank.worldbank.org/source/world-development-indicators>.

the global average of 20 percent. Patterns of ODA for education also reveal two areas of concern: heavy concentration of ODA in only a few countries and low levels of funding for the school-age population. For example, in 2014, funding averaged just \$11 per child in 18 of 42 Sub-Saharan countries for which data were available (Bashir et al. 2018). Because overall ODA is expected to shrink in the aftermath of the COVID-19 pandemic and may not recover to its 2018 level for some years (UNESCO Institute for Lifelong Learning 2020), these patterns do not augur well for the future. Donor partners might revisit future ODA allocations for education in the region and consider ways to increase funding and direct more funds to the neediest populations.

Education systems in AFW not only struggle with inadequate financing but also operate inefficiently. In some countries, however, improving the allocative

¹⁴ Original calculations based on 2018–19 graduate data from the Ghana Tertiary Education Commission.

¹⁵ Data in this section are from Education Finance Watch (database), UNESCO, Paris (accessed on August 31, 2021), <https://en.unesco.org/gem-report/education-finance-watch-2021>. See also the Technical Report accompanying this Overview for additional country-specific details.

efficiency of spending can release resources for high-priority goals. For example, governments can reduce disproportionately high budget shares for tertiary education, which are not justified by current or projected enrollments. To attract additional funding, AFW education systems must become more efficient. The weak correlation between investment of resources and learning outcomes—both across AFW countries and across districts and schools within each country—points to potential for more efficient spending. Greater efficiency means better learning outcomes, which would in turn mean more efficient patterns of student flow with lower repetition rates, especially in the early primary grades, and lower dropout rates, especially in the final grades of primary education and in secondary education. In some countries, inefficient student flow also affects tertiary education. For example, at Senegal’s Université Cheikh Anta Diop de Dakar, the country’s largest university, repetition among first-year students averaged nearly 30 percent in 2018. In post–basic education, tighter management also means improving labor market outcomes among school leavers and graduates to boost the system’s external efficiency.

Many AFW countries are responding to their immense education challenges by undertaking significant systemic reforms to achieve better results. In 2017 Ghana introduced the Free Senior High School policy to ensure access, equity, and equality in education. In 2018 Sierra Leone phased in a Free Quality School Education initiative that offers all children tuition-free admission to government-approved schools. Niger’s president has announced plans for a compulsory two-year national civic service for recent graduates of higher education in an effort to staff the education ministries with a cadre of highly competent graduates. In Nigeria’s Edo State, the government launched the Edo Basic Education Sector Transformation (EdoBEST) program in 2018 to leverage digital technologies to improve the quality of basic education and strengthen the pipeline of workers for jobs in the digital economy. The program’s innovative design serves as a model not only for other states in Nigeria but also for other countries. In Mali, a comprehensive 10-year national education

program (Programme décennal de développement de l’éducation et de la formation professionnelle deuxième génération, 2019–28) is underway to improve service delivery and address school closures due to conflict and insecurity, among other issues. Similarly, in December 2021, the heads of state of the Sahel countries signed the Nouakchott Declaration affirming their commitment to education as a development priority and establishing priority goals to improve education in the subregion.

The Economic and Social Imperative

Investing in education yields high returns for individuals. The informal sector is large in most of the countries in the region, and unemployment and underemployment are common (Filmer and Fox 2014). But the countries also vary significantly, from dynamic and diverse economies in Nigeria, Senegal, and Ghana, to resource-rich and relatively undiversified economies in Equatorial Guinea, and the Republic of Congo, to extremely resource poor agriculture-based countries in the Sahel subregion. In such settings, education offers a clear advantage by giving people better access to full-time formal jobs that pay well. For those employed in a wage job, each additional year of schooling is associated with higher earnings, ranging from 7 percent in Chad to 15 percent in Burkina Faso and Niger.¹⁶

Expanded and improved education will ameliorate economic outcomes for countries, reducing poverty and increasing shared prosperity. Universal basic education with full learning could increase the region’s HCI from 0.38 to 0.80 and boost GDP per capita by an estimated 2.2 times over, equivalent to growing the economy at an average rate of 1.6 percentage points a year over 50 years. Investing in quality education would produce the knowledge capital needed for the economies of AFW countries to grow. As these economies become more sophisticated, demand for better-educated specialists, such as engineers, managers, and scientists, would also grow. Countries with a skilled workforce are also more likely to

¹⁶ Based on analysis of household survey data from 11 of the 22 AFW countries drawn from the 2018 Enquête Harmonisée sur les Conditions de Vie des Ménages for Benin, Burkina Faso, Chad, Guinea, Guinea-Bissau, Mali, Niger, Senegal, and Togo; the 2018–19 Nigeria Living Standards Survey; and the 2016 Ghana Living Standards Survey VII. For more details, see the Technical Report accompanying this Overview.

attract foreign direct investment, further reinforcing the virtuous cycle.¹⁷ More broadly, investing in education would help improve living standards, especially among the poor. Raising the primary gross enrollment ratio from 50 percent to 100 percent would increase the share of income going to households in the poorest decile by 8 percent (Abdullah, Doucouliagos, and Mannin 2015). The impact is even greater for countries furthest from the global technological frontier, as many AFW countries are.

Education also enhances child survival and health outcomes and reduces child marriage and early pregnancies. In Nigeria, each additional year of female schooling reduced fertility by at least 0.26 births per woman (Lam, Sedlacek, and Duryea 2016). Educated women are more likely to use contraception, play a larger role in family fertility decisions, and display greater awareness of the trade-offs in having children (Becker, Cinnirella, and Woessma, 2013). Better-educated mothers raise healthier and better-educated children. Controlling for other factors, educated women are more likely than those with less education to work in paid jobs outside the home, remain longer in such jobs, and earn more (Osili and Long 2008).

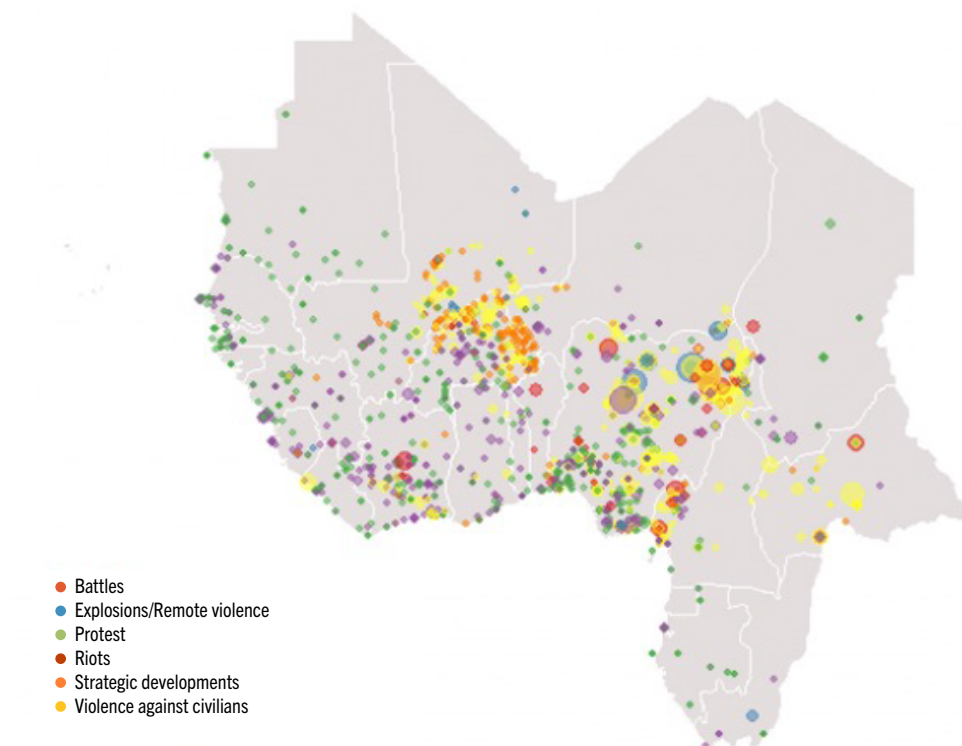
Education can help build social capital and stabilize a region where the social fabric is fraying. By helping ease demographic pressures, reduce poverty and inequality, and accelerate economic growth, education can make a vital contribution to relieving the underlying sources of FCV in the AFW region. It can foster more peaceful societies by promoting tolerance and cooperation and discouraging people from resorting to violence to settle conflicts (Davies 2004). Importantly, parallel efforts to increase job opportunities are essential. When job prospects are favorable, the opportunity cost of violence rises, making it harder for terrorist organizations to gain new recruits (Collier, Hoeffler, and Rohner 2009).

Seven Regional Megatrends Affecting Education Outcomes

Widespread poverty and slow economic growth deter investments in human capital. In 14 AFW countries, more than 30 percent of the population lives on less than US\$1.90 a day. The gap between AFW per capita incomes and those of other developing countries and high-income countries has been widening steadily. Per capita incomes in AFW 50 years ago were 8 percent those of high-income per capita countries; today they are only 4 percent. Poverty this significant leaves no margin for investment in education, especially for the poor, so gaps widen. In recent years, the region's economies have been growing very slowly. In 2020 AFW's real GDP contracted by an estimated 1.1 percent (Zeufack et al. 2021). Although there is considerable variation within the region, the generally bleak macroeconomic outlook is reducing capacity to increase public investment in education.

Rapid population growth in AFW countries, averaging 3 percent a year, puts pressure on education systems to accommodate rising enrollments. The region's total fertility rate averages 4.6 children per woman, almost twice the global average of 2.4. Its population of 459 million people is growing much faster than the average rate of 2 percent a year for Sub-Saharan Africa and will double by 2050, based on the data from the World Development Indicators. Additionally, the region has urbanized rapidly, and cities now host 48 percent of the population. Abidjan, Côte d'Ivoire, and Dakar, Senegal, with 3.7 million and 3.1 million inhabitants, respectively, are the largest francophone cities in the world after Kinshasa, Democratic Republic of Congo, and Paris, France. Lagos, Nigeria, is among the largest English-speaking cities in the world. This rapid urbanization is expected to continue in the coming years. Although the trend creates economies of scale for investing in education, it also isolates those in rural areas, thus widening urban-rural disparities. Rapid population growth puts even more strain on quality, as it requires systems to quickly hire large numbers of teachers to cope with rising enrollments, and many of the new hires lack the requisite qualifications.

¹⁷ The experience of East Asian miracle countries, which have all achieved rapid growth over the course of decades, attests to the key role of strong public commitment to investing in education as well as infrastructure and health (Birdsall et al. 1993; CGD 2008).

Figure O.4 Episodes of Political Violence in and around Education Facilities, 2010–20

Source: World Bank based on ACLED data.

Heavy dependence on nonrenewable resources to drive economic growth is creating serious challenges for sustainability and governance in many AFW countries. These countries are essentially mining their nonrenewable capital—whether hydrocarbons, minerals, or land—and consuming it rather than transforming it into human or produced capital. This unsustainable growth model generates few jobs and makes economies vulnerable to commodity price shocks. Because government revenues in resource-dependent economies are highly volatile, public funding for education is also unpredictable. Proceeds from extraction are often perceived as inequitably distributed, which stokes grievances, encourages corruption, and reduces government accountability. The resulting loss of trust discourages citizen engagement and erodes government incentives to invest in quality education.

As social contracts in AFW countries break down, violent conflict is on the upswing, driven by the spread

of insurgency movements, community conflict, and interpersonal violence. Of the region's 22 countries, 11 are classified as nations afflicted by FCV, and almost 75 percent of the region's population lives in those countries. The impact on education has been devastating. Before the COVID-19 pandemic, about 2 million children were not in school because schools were closed for security reasons. Since 2010, there have been at least 2,880 violent events in and around schools, increasing from just 39 in 2010 to 559 in 2020 to 440 in the first half of 2021 (figure O.4). In the first seven months of 2021, more than 1,037 people in and around educational facilities, mostly students and teachers, have been kidnapped in Nigeria.

The population of internally displaced persons and refugees, many of them children or youth with unmet education needs, has grown due to rising violence in the region. The region has more than 11 million

people of concern,¹⁸ among them 7.5 million internally displaced persons (IDPs). Five million of these IDPs are children. During the 2020–21 school year, more than half of school-aged refugees in AFW did not attend school, and those who did were more likely to be in overcrowded classrooms, which reduce learning. The enrollment rate averaged 60 percent for primary education, 15 percent for secondary education, and just 1 percent for higher education and vocational training among those ages 18–24. These enrollment rates were not only much lower than those for non-refugees but also lower than the rates for refugees in other parts of the world.¹⁹ Even for those who access education, the quality of learning environments tends to be very poor.

Climate change is adding new challenges with adverse impacts on education. Africa accounts for only 2–3 percent of the world’s emissions of carbon dioxide but is projected to suffer the most from climate change (Zeufack et al. 2021). The frequency and severity of climatic shocks threaten livelihoods, increase food insecurity, press households into coping strategies that reduce human capital, and aggravate conflict. They also force schools to close temporarily or relocate permanently, disrupting children’s schooling. Analysis of test scores on OECD’s Programme for International Student Assessment (PISA) from 58 countries provides evidence that rising temperatures

reduce student learning (Park, Behrer, and Goodman 2021). Through various channels, climate change is imperiling the gains in education that AFW countries have achieved so far.

The digital technology revolution is creating new opportunities and new challenges. New technologies offer significant advantages for the region’s development, including education. They enable AFW countries to leapfrog some technological developments. One example is mobile phones, which have overtaken landline telephones. In the AFW region, there are, on average, 88 mobile subscriptions per 100 people. The expansion of mobile and internet connectivity has the potential to create new jobs in the digital sector and increase productivity in traditional sectors, such as agriculture, services, and industry. Since the onset of the COVID-19 pandemic, AFW countries have tried to incorporate educational technology to provide education services through blended learning approaches. However, digital content aligned to the curriculum is scarce, and the ecosystem to support blended learning is nascent throughout the AFW region. On average, only 23 percent of the region’s population has access to and uses the internet, reflecting the sparse digital infrastructure, high cost of digital technologies and services, and limited digital skills of the population. As a result, the promise of technology has been elusive.

¹⁸ People of concern are those considered by the United Nations High Commissioner on Refugees (UNHCR 2021a) to be refugees, IDPs, asylum seekers, or stateless people, or people from a few other groups. For additional details, see <https://reporting.unhcr.org/document/2188>.

¹⁹ For example, 3 percent of refugees globally are enrolled in higher education (UNHCR 2021c).



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Strategic Priority Goals across the Learning Life Cycle

*This is the first regional education strategy in Africa since 2001.*²⁰ It builds on experience and evidence of what has proved viable in Africa and around the world. With a fresh perspective and new approaches to education in the region, it contains five distinctive features:

- It calls for an integrated approach to investing in the learning life cycle, highlighting the interdependence of different levels and types of education and the need for system-wide coherence and prioritization.
- It underscores the critical role of strategic leadership for genuine breakthroughs based on commitment to widely shared goals.
- It emphasizes systematic capacity building to enable countries to sustain learning by doing, thus reinforcing ownership and effective implementation.
- It embraces multisectoral solutions to achieve learning outcomes, which requires going beyond traditional sectoral ministerial mandates.
- It advocates for a greater focus on results rather than inputs in World Bank operations.
- It organizes subregional country groupings to help the World Bank tailor its support to countries' specific needs. With this new orientation and by leveraging scalable, innovative, and high-impact interventions, the World Bank aims to support countries more effectively in tackling the region's education crisis and achieving sustained progress in the sector.

The strategy has three goals covering the main formal education subsectors of primary, secondary, and tertiary education, including TVET, as well as the informal and nonformal skilling systems. These goals are reducing learning poverty, increasing girls' enrollment in secondary school, and expanding job-relevant skills training. While these are not the only goals that matter for education in the AFW region, prioritizing them through this strategy can align efforts, catalyze change, and create synergies across a range of outcomes. For each goal, the strategy targets both short- and long-term objectives:

- **Target 1: Reduce learning poverty ((inability to read and understand a simple text at age 10) from 80 percent in 2020 to 75 percent by 2025, and 66 percent by 2030.** Achieving this target would add 11.1 million more literate children by 2025 and 29.7 million more by 2030.
- **Target 2: Increase girls' secondary school gross enrollment from 43 percent in 2020 to 47.9 percent by 2025 and 57.2 percent by 2030.** Achieving this target would result in 4.6 million more girls in secondary school by 2025 and 12.5 million more by 2030.
- **Target 3: Expand access to job-relevant skills training through multiple formal and informal channels** by increasing the gross enrollment ratio in tertiary education from 11 percent in 2020 to 14 percent by 2025 and 20 percent by 2030 (adding 3 million more youth by 2025 and 8 million more by 2030); and training 3.7 million more young adults in foundational skills by 2025, and 1 million more youth in

²⁰ The last regional strategy for education, prepared in 2001, was called *A Chance to Learn: Knowledge and Finance for Education in Sub-Saharan Africa* (World Bank 2001).

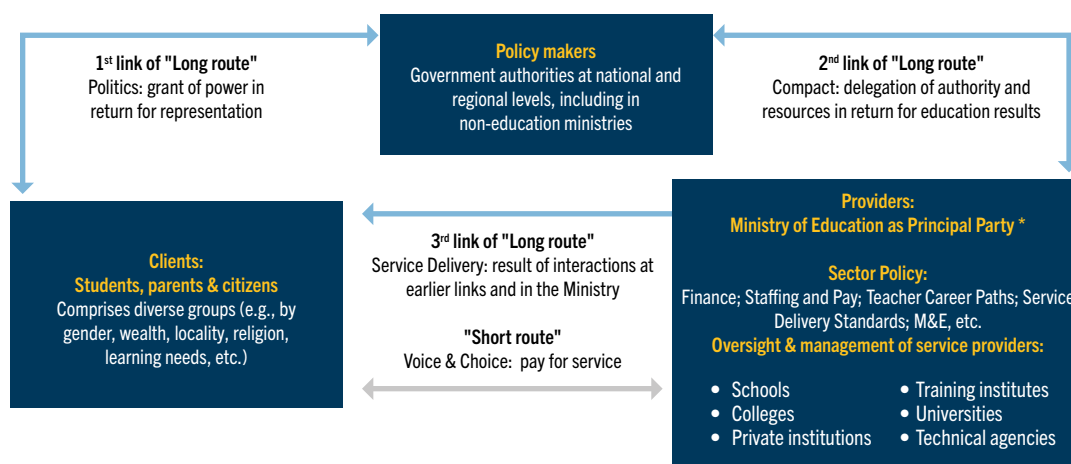
Figure O.5 Conceptual Framework for AFW's Education Strategy



Source: World Bank.

digital skills by 2025 (60 percent of whom would obtain better jobs). The strategy acknowledges that tackling AFW's education crisis requires both effective interventions and an enabling policy environment that includes effective strategic leadership and increased implementation capacity (figure O.5). The conceptual framework envisions a key role for strategic leadership to drive the education reform agenda. It highlights investments in high-impact interventions across the learning life cycle designed to (a) improve teaching and learning outcomes, (b) expand learning opportunities, and (c) build job-relevant skills for all. Finally, it emphasizes actions to enhance capacity for implementation and for monitoring and evaluation.

The strategy supports actions that can achieve both quick wins and long-term impact. Many of the high-impact interventions involve prompt action for quick progress toward the 2025 targets set in this strategy. For longer-term impact, the strategy emphasizes investment in processes to reshape mindsets, change practices, and build capacity. While these processes take longer to produce tangible results, they are essential for reinforcing the system to ensure progress toward 2030 targets. The challenge is to use quick fixes to create momentum while sustaining efforts to introduce the broader changes required to improve the education system's overall functioning and performance.

Figure O.6 Political Economy of Education Systems and the Accountability Triangle

Source: Adapted from World Bank (2003).

Note: Blue arrows trace the long route of accountability, with the first link going from clients to policy makers, the second from policy makers to service providers, and the third from providers to clients. The gray arrow traces the short route connecting clients directly to providers through "voice and choice" market transactions. M&E = monitoring and evaluation. Technical agencies are entities specializing in such areas as quality assurance, curriculum development, teacher training and professional development, assessments and examinations, qualifications frameworks, accreditation, and student aid.

Strengthening Strategic Leadership

Strategic leadership involves effectively undertaking several tasks to achieve education results. These include (a) galvanizing shared commitment to priority education goals, (b) fostering sound governance of the education system, and (c) ensuring adequate financing and the effective and efficient use of resources. These tasks entail dialogue and decision-making processes that require going beyond mere rhetoric and opinion. Instead, to narrow the frequent gaps between leaders' ambition and the means for realizing their key education goals, leaders must inculcate a culture and practice of evidence-based dialogue and decision-making.²¹ Doing so is essential to facilitate coalition building and strengthen the demand for education results. In Nigeria's Edo State, the ongoing EdoBEST program championed by the governor exemplifies how each task, informed by data and

evidence, is integrated to catalyze systemic education reforms for economic transformation, including in basic education. This aligns with the governor's core belief that "once you get basic education right, everything else falls in place."²²

An accountability triangle clarifies features of the complex dynamics of strategic leadership. Figure O.6 highlights the interactions among policy makers, service providers, and users or clients of education services.²³ In most countries, policy makers are in a dominant position as the intermediary between users and providers of education services. Politics is the starting point of this relationship. In theory, citizens grant policy makers power over education policies and programs, though in most settings they do this implicitly in exchange for representation of their interests. As noted in World Bank (2003), however, citizens' hold on politicians is often weakened by the influence of interest groups, such as unions,

21 Both country-specific information and cross-country information are useful to inform dialogue and decision-making. UNESCO Institute for Statistics (<http://uis.unesco.org>) offers comprehensive data on key education indicators, while the World Bank's Global Education Policy Dashboard provides comparative information on education policies (<https://www.worldbank.org/en/topic/education/brief/global-education-policy-dashboard>).

22 For more information, see the EdoBEST website at <https://edobest.org/careers>. The quote comes from this article: <https://guardian.ng/issue/the-education-miracle-taking-place-in-edo-state/>

23 See World Bank (2003) on the political economy of service provision, including education to the poor. Gershberg (2021), Schiefelbein and McGinn (2017), and Kingdon et al. (2014), among others, focus specifically on education. For brevity, "politicians" and "policy makers" are used synonymously in this section.

private service providers, and political parties, who have more power and access to the politicians.²⁴ In the second link of the accountability triangle, policy makers delegate authority and resources to service providers to achieve the expected education results, typically via compacts with the ministries of education responsible for overseeing and managing provision of services. Crafting more effective compacts is as desirable as it is challenging and often requires better information on system performance as well as greater alignment of incentives within the government. When policy makers allow private providers to operate, there is a more direct pay-for-service link between users and providers of education services. Giving users greater choice among providers can enhance competition among service providers and incentivize their performance. In many AFW countries, donors add to the complexity of the accountability triangle, especially when they contribute significant funding to education.

Galvanize Shared Commitment to Priority Goals in Education

Political will and commitment from top leaders are vital but not sufficient. Priority goals must also appeal to diverse stakeholders and persuade them to cooperate in the national interest. The leaders of East Asian countries have been widely recognized for their success in mobilizing sustained support for investing in quality education as a key driver of economic growth (CGD 2008). Motivating and organizing relevant constituencies—engaging in what Kosack (2012) calls “political entrepreneurship”—is essential to cooperating for better education outcomes. Among familiar tools for this purpose are (a) appropriate framing of the issues to support clear messages, (b) fostering dialogue and networking to build alliances for reform, and (c) engaging in negotiations and accommodations to create win-win situations that advance priority national goals. These tools have been used successfully around the world to strengthen shared commitment for change (Hudson et al. 2018). They

help to foster a whole-of-society approach to advance a country’s priority goals in education.

AFW leaders can leverage evidence on the dire state of learning and skills to signal that the status quo is unacceptable and to explain the government’s plan of action. In Niger, for example, its last-place ranking in the 2014 Programme for the Analysis of Education Systems (PASEC)²⁵ assessment of learning among primary school children in AFW francophone countries led the government to take decisive action, including letting go of teachers who lacked the required proficiency, introducing a remedial program in mathematics, reforming the curriculum and teacher training, and strengthening the accountability of school directors (PASEC 2020). These changes played a role in Niger’s significant gains in learning outcomes between 2014 and 2019; it was one of only two AFW countries participating in PASEC where test scores clearly improved during the period. In Kenya, the state of Puebla in Mexico, and Sobral municipality in Ceará, Brazil, unsatisfactory learning outcomes have also led to systemic reforms that are already yielding results. If sustained, these reforms would enable all three systems to attain “at least the first satisfactory levels [of learning] in the OECD ranks in a reasonable time” (Crouch 2020). In all cases, political will and commitment from top leaders have been key. In AFW, recent reforms in countries such as Sierra Leone and Ghana and in Edo State in Nigeria have also been the product of the political will and strong commitment of top leaders.

Dialogue and networking to strengthen coalitions for reform are especially important where social norms, religious preferences, or cultural concerns present major barriers to change. In Egypt and Jordan, for example, advocacy for gender equality was more successful when the dialogue was framed around family values rather than women’s rights and when support came from influential players in the community (Hudson et al. 2018). These experiences underline the importance of understanding the underlying dynamics and framing the issues accordingly. Similar work could continue dismantling barriers to girls’ schooling

24 This distortion typically undermines service delivery to poor families in terms of access and quality. Options to reduce the problem include enhancing citizen participation, such as in budget formulation and supervision, and publicity on key performance indicators, such as school-level spending on education and learning outcomes and graduate employment across institutions.

25 The 2014 PASEC international student assessment has been administered in 10 countries in francophone West Africa (Cameroon, Burundi, Republic of Congo, Côte d’Ivoire, Senegal, Chad, Togo, Benin, Burkina Faso, and Niger). PASEC is designed to assess students’ abilities in mathematics and reading French.

and achieving breakthroughs in contentious areas where progress, though vital, has been elusive, as in the choice of language of instruction and the integration of Koranic schools.²⁶ Good examples are projects such as the Sahel Women’s Empowerment and Demographic Dividend (SWEDD) project and the integration of religious schools in Senegal.

While stakeholders might be committed to priority goals, negotiations and accommodations of key stakeholder concerns are often needed to sustain commitment to and support for the reform agenda. The relevant stakeholders depend on the issue at hand. In Benin, the only other AFW country whose PASEC test scores rose significantly between 2014 and 2019, better dialogue with teacher unions and accommodation of their interests reduced the time lost to teacher strikes—very likely an important reason behind the gain in test scores (PASEC 2020). In Kenya, the president took steps in 2016 to bring the Teachers Service Commission and the teachers unions together to negotiate on all disputes in order to restore peace and avoid further losses of teaching time (Bashir et al. 2018). The commission is now into its third collective bargaining agreement with the unions (2021–25). In post–basic education, especially TVET, successful efforts to involve industry-leading firms in skills building (curriculum development, hosting of internships, contribution of equipment, and training of faculty) often require providing benefits for the participating firms or the industry (such as public funding of the training program or first pick of training graduates for staff). Examples of such arrangements in the AFW region include ArcelorMittal in Liberia and Dangote in Nigeria.

Foster Sound Governance for Better Performance

A whole-of-government approach²⁷ matters for achieving the three targets highlighted in this strategy. These goals require the backing of the entire government as synergistic investments essential for a country’s economic and social success. Equipping all children with stronger foundational skills, for example, is

crucial for growing the economy because it can help raise agricultural productivity, among other benefits, and broaden the pipeline of qualified candidates for post–basic education and training, especially in STEM fields. Stronger post–basic programs, for their part, can benefit basic education by increasing the supply of better-trained teachers, thereby improving student learning outcomes. Countries that have successfully adopted a whole-of-government approach to building high-performing education systems in recent decades include the Republic of Korea, Singapore, and Vietnam. Their experience attests to the vital role of high-level leaders in strategic decision making, especially in the initial phases of economic takeoff (Ashton et al. 2002; Green et al. 1999; Nguyen and Nguyen 2008).

A whole-of-government approach requires systems that promote coherence, cooperation, and coordination across organizational silos in the education system. In many AFW countries, the education system is fragmented across numerous ministries with weak coordination. Only five AFW countries—Cabo Verde, Equatorial Guinea, Ghana, Guinea-Bissau, and Liberia—have a single ministry of education for all sub-sectors; the rest have multiple ministries by level or type of education, up to five in Cameroon and Niger. While the divisions may encourage each unit to focus on its own responsibilities, such as basic education reforms in Niger, they interfere with strategic decision-making that benefits the whole system, such as reallocation of resources across units. In a large country like Nigeria, where education is a concurrent responsibility of federal, state, and local governments, decision-making silos are an ever-present risk made more complex by lack of clarity about roles and responsibilities, occasional rivalry, and frequent policy changes. In large and small countries alike, clear leadership from the top is needed to reduce the impact of fragmented bureaucracies on efficient and effective governance. A country’s president or prime minister may elevate these critical issues above the line ministries and assign key cabinet members the task of dismantling barriers to genuine progress in education. Sierra Leone, for example, recognizes

26 Issues relating to language of instruction and integration of Koranic schools are discussed in pillars 1 and 2, respectively, in the section “Investing in High-Impact Interventions throughout the Learning Life Cycle.”

27 A whole-of-government approach emphasizes the need for greater collaboration and coordination across departmental boundaries to eliminate duplication, optimize resources, create synergies among agencies, and deliver better services to citizens (Christensen and Lægread 2007).

the need for coordination within government and is attempting to fill this need by establishing the Human Capital Development Secretariat in the Office of the President to improve coordination between the Ministry of Finance and the Directorate of Science, Technology, and Innovation, as well as other line ministries.

Development of national education strategies in the context of overall development plans can help show political commitment and align multiple agencies. To be successful, these plans must set specific goals to be achieved within a certain time frame and establish monitoring mechanisms to track progress and make the necessary adjustments. When endorsed at the highest political level, education strategies can send the right signals to a variety of stakeholders about the importance of education for a country's development.

In primary and secondary education, sound governance of schools and service providers involves striking a balance between accountability and autonomy. Effective governance means requiring school managers to operate their schools according to quality standards and requiring teachers to teach according to the specified curriculum. It also entails granting managers and teachers the autonomy to innovate and take initiative to respond to local conditions and opportunities relevant to their community. At the system level, effective governance means requiring specialized agencies in the education system, such as those responsible for curriculum development, teacher training, or school inspections, to play an explicit role in providing timely, coherent, and coordinated technical support to enable effective teaching and learning in schools. The World Bank–financed Ghana Accountability for Learning Outcomes Project (US\$150 million), for example, combines various aspects of effective governance to provide teachers and school managers with the autonomy, support, resources, and tools they need for their work and to fortify their incentives and accountability for learning outcomes.

In TVET and tertiary education, sound governance begins with action by AFW governments to put in place the legal and regulatory frameworks and standards to define service provider accountability and autonomy. Formal and informal public providers of TVET and higher education need greater clarity about their powers and responsibilities to respond to emerging trends in skills demand and to become more resilient to ongoing and future shocks (Arnhold and Bassett 2021).²⁸ Because TVET and higher education systems in most AFW countries are still at a nascent stage of development, support to enhance service provider capacity and incentives for successful operation are essential. At the institutional level, this means building managerial capacity, ensuring guidance from independent governing boards, allowing meaningful control over critical drivers of program quality and costs, and creating access to tools and resources for developing and harnessing staffing talent. For the system as a whole, including all public and private providers, this means quality assurance for accreditation, skills qualification, and unified data systems to track service provision and labor market outcomes.

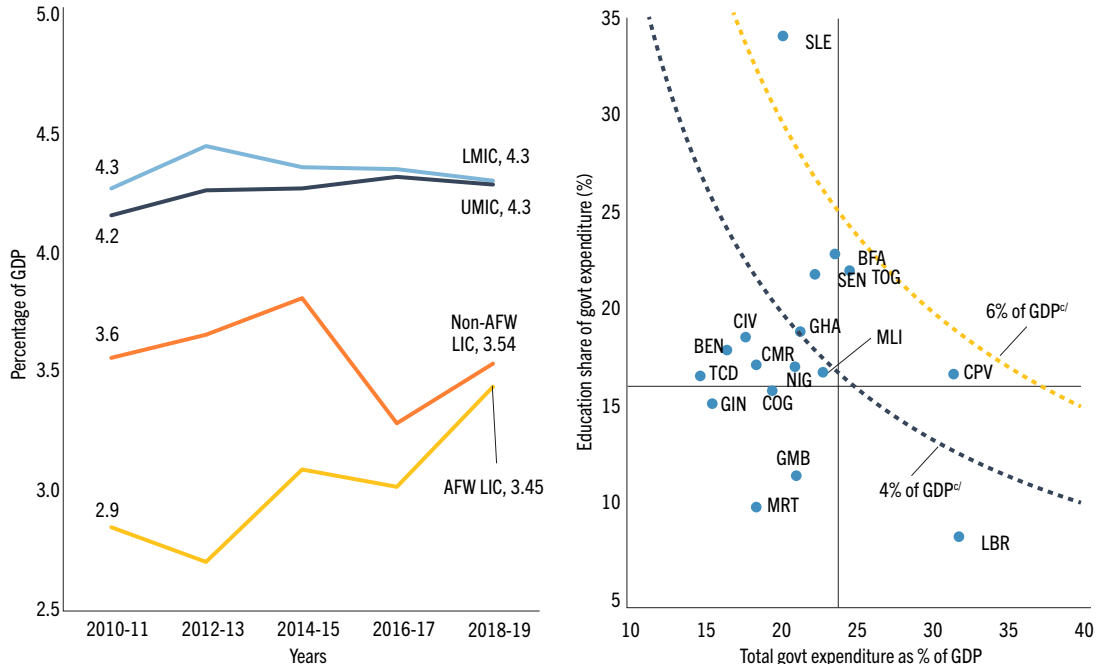
Ensure Adequate Financing and Effective Use of Resources for Education

Insufficient and unpredictable education funding throughout the AFW region gives top policy makers a critical role in managing strategic decisions on education finance. This is especially true for trade-offs in allocations among competing priorities, including the three highlighted in this strategy. Rising demographic pressures, modest education outcomes, bleak economic prospects, and weak opportunities for aid flows create a challenging environment. Since 2010 public spending on education in AFW countries has been rising steadily, from an average of 2.9 percent of GDP to 3.5 percent of GDP in 2018–19, comparable to the average in other low-income regions but still only 80 percent of the average level in middle-income

²⁸ In some countries, providers of post–basic education and training may be formally organized as statutory boards. The board has a direct budget and full responsibility for service delivery, including staffing and all aspects of operations, in return for delivering agreed results. Beginning in 1973 under its predecessor entity as the Industrial Training Board (Law 2015), Singapore's Institute of Technical Education has operated this way to provide TVET. All the country's public polytechnics are also statutory boards, as were its two public universities until 2006, when they were incorporated and given even more leeway to operate independently (see Singapore's statutory board directory at <https://www.gov.sg/sgdi/statutory-boards>).

Figure O.7 Fiscal Space for Mobilizing Government Funding for Education

a. Government spending on education as a share of GDP by income group, 2010–19^a b. Education as a share of government budget versus government spending as a share of GDP, 2017–19^b



Source: Data for 21 AFW countries from Education Finance Watch (database), UNESCO, Paris (accessed on August 31, 2021), <https://en.unesco.org/gem-report/education-finance-watch-2021>.

a. LIC = low-income countries. LMIC = lower middle-income countries. UMIC = upper middle-income countries.
 b. The horizontal and vertical lines denote global averages of the two axes for low- and middle-income countries: 16 and 24 percent, respectively.
 c. The dotted curves denote combinations of values in the two axes equal to public spending on education for a given percentage of GDP: 6 percent for the yellow curve and 4 percent for the blue curve.

countries (figure O.7, panel a). For most AFW countries, the shortfall in public spending stems more from the small size of the overall government budget than from low prioritization of education in the budget (figure O.7, panel b). Among the 17 AFW countries with data available for 2017–19, the government budget was at least 24 percent of GDP (the global average for low- and middle-income countries) in only three countries—Cabo Verde, Liberia, and Togo. By contrast, 12 of the AFW countries allocated education a greater share of the government budget than the global average of 16 percent.

AFW governments must prioritize spending to minimize—and reverse as much as possible—pandemic-related learning losses and mobilize additional funding for education.²⁹ Even though total fiscal space

is limited throughout the region, the lowest-spending countries must do more to increase their modest investment in education, allocating the additional funds to quality-enhancing nonsalary inputs in basic education. The other countries spend more but still trail their peers; therefore, they must preserve and even increase budget allocations for education. Options for mobilizing more resources include expanding the tax base, explicitly prioritizing national budget allocations for achieving education outcomes through concrete medium-term budget plans and encouraging the private sector to contribute more. In FCV-affected countries, such as the Central African Republic, additional development aid is critical. In countries with large diasporas, remittances—amounting to 3.5 percent of Africa’s GDP in 2018—can be tapped for education. In 2018, households allocated 22 percent of

²⁹ See the Technical Report accompanying this Overview, as well as the options discussed in the following sections, for details on stretching the resources available for education by improving efficiency and equity in their use.

the remittances they received to education in Nigeria, 12 percent in Burkina Faso, and 3 percent in Senegal (AfDB 2020). Mobilizing resources for basic education from households must be considered carefully. Although most AFW countries do not charge fees for public primary or basic education, households still shoulder out-of-pocket spending for books, transportation, and other school-related costs. In 2015, households in Sub-Saharan Africa spent an average of 2.5 percent of their budget on education (AfDB 2020). On top of the opportunity cost of a child's lost labor, the financial burden can be so onerous that some poorer families decide to stop sending their child to school.

Tighter budgets make it even more urgent for AFW countries to improve the efficiency of government spending on education. Stronger public financial management (PFM) in two areas is especially important: medium-term expenditure planning and budgeting and discipline in budget execution. The former allows for systematic allocations of public resources based on education priorities—for example, ensuring that new primary schools are built in underserved communities and new classrooms are added as a priority in severely overcrowded schools, that schools are staffed according to enrollments, and that all public schools receive the minimum material resources, especially the textbooks required for effective teaching and learning. Discipline in budget execution, especially over major expenditures like payroll and educational materials and equipment, is essential to reduce waste and leakage of public funds. Paying teachers on time warrants close attention given the adverse impact of salary arrears on teachers' motivation and ability to concentrate on their work. In addition, waste can be reduced by removing “ghost teachers”³⁰ from the payroll, ensuring routine competitive bidding to procure textbooks and other educational inputs, and conducting random audits to track the flow of funds and resources to schools, especially those in poor communities. In postsecondary education, improving the quality of spending requires strengthening institutional accountability and autonomy and aligning incentives with performance measures to lower repetition




and dropout rates, increase research outputs, and improve staff-to-student ratios. Many tools are available for this purpose, including performance contracts, competitive grants, financial audits and cost analysis, external reviews and benchmarking, and annual performance reports. In some countries, such as Nigeria, improving spending efficiency requires closing critical data gaps that impede objective assessment of institutional performance, such as data on enrollment, graduates, expenditures, dropouts, repetition, and research production (Blom et al. 2019).

Tight budgets intensify the need for AFW policy makers to promote and support a more equitable allocation of resources. Biases in the structure of enrollments and public subsidies for education suggest that the poorest households tend to benefit much less from public spending on education than wealthier ones. In an assessment of 42 countries (2010–17), researchers identified the eight AFW countries in the sample as having the least equitable distribution of spending on education (UNICEF 2020).³¹ The share of spending benefiting the poorest quintile was just 5 percent in Guinea, 8 percent in Central African Republic, and 9 percent in Cameroon and Senegal. Disparities in spending by locality exacerbate allocation inequities. In Nigeria, spending per child in the highest-spending region was about six times more than in the lowest-spending region. In Mauritania, the ratio was four times higher (World Bank 2021a). Spending disparities, whether by income or locality, are significantly smaller in other low- and lower-middle-income countries in AFW (such as Burkina Faso, Ghana, and Togo), which point to potential for improving the equity of public spending on education there. Options in basic education include adhering to norm-based staffing in all schools and prioritizing poor children and communities in removing barriers to school participation. For example, Cameroon has adopted free primary education, Sierra Leone has adopted free basic education, and Ghana has adopted free secondary education. Measures in post-basic education include need-based financial aid for students and formula-based funding for institutions.

30 “Ghost teachers” are teachers who are on payroll but are not in classrooms teaching.

31 The eight AFW countries, ranked from most to least inequitable, are Guinea, Central African Republic, Senegal, Cameroon, Benin, Niger, Ghana, and Togo.

Figure O.8 Strengthening Strategic Leadership

	What?	Why?	How?
	Galvanize widely-shared commitment to key education goals	Achieving national priorities in education requires strong ownership of key goals by diverse constituencies	<ul style="list-style-type: none"> • Strengthen coalitions between government, civil society and the private sector for the reform agenda • Sustain purposeful communications strategy • Create "win-win" situations for effective cooperation
	Structure governance of education institutions for coherence and accountability for results	Weak governance structures blur roles and responsibility and impede service delivery to achieve education results	<ul style="list-style-type: none"> • Elevate key education priorities above line ministries • Organize the education system for coherence • Clarify institutional compacts, roles, and responsibilities
	Expand, or at least protect, funding for education and make better use of available resources	Spending on education is often low, inefficient, and inequitable, and COVID has added to the challenges	<ul style="list-style-type: none"> • Plan and allocate funding to achieve education goals • Tighten PFM for efficient use of education budgets • Use pro-poor/equity norms to allocate resources

Source: World Bank.

Investing in High-Impact Interventions throughout the Learning Life Cycle

The following high-impact interventions are organized under three pillars: (a) *improving teaching and learning*, (b) *expanding opportunities for learning*, and (c) *building job-relevant skills*. The first two pillars focus on basic and secondary education, while the third pillar focuses on post–basic education, including TVET and tertiary education. These interventions were identified through a thorough literature review, World Bank operational experience, and comprehensive consultations conducted as part of this strategy. The aim is to produce quick wins within three years.

Pillar 1: Improving Teaching and Learning

AFW's basic education learning crisis stems from multiple causes that require interventions in three areas. These areas are (a) strengthen children's readiness to learn, (b) improve management of the teacher workforce, and (c) reinforce critical policies in basic education for effective teaching and learning.

Transform the Teaching Profession

Deepening teachers' professional expertise and effective teaching in the classroom warrants especially close attention given the enormous influence teachers have on students. Students whose teachers are skillful learn more and attain more years of schooling; they also earn more as working adults and are less likely to become pregnant as teens (Chetty, Friedman, and Rockoff 2014; Hanushek 2011). Students of skillful teachers also gain valuable socioemotional skills (Villasenor 2017). In AFW, management of the teacher workforce must be improved to address inconsistent teacher deployment across schools, high rates of teacher absenteeism, and ineffective teaching in the classroom including behavior and mind-sets. Although large numbers of teachers have been recruited, they are poorly trained in terms of subject matter, and understaffing is common in rural schools and schools in high-conflict areas.³² Moreover, on average, 14.7 percent of teachers are absent at least once a week (UNICEF 2021), which gives rise to "orphan" classrooms with no instructor available even while the school is in session. In many AFW countries, criteria for recruiting teachers are murky and based on political factors rather than professional merit; they are promoted, if at all, based on paper qualifications and seniority rather than evidence of effective

32 Bashir et al. (2018) showed that in Benin, Burkina Faso, Cameroon, Chad, Côte d'Ivoire, Ghana, Senegal, and Togo, more than 30 percent of teacher allocations in primary schools are not driven by the number of students.

teaching. Preservice teacher preparation is often merely theoretical and detached from actual classroom conditions. In-service training for professional growth is typically fragmented and sporadic where it exists at all. Teachers receive little on-site support for improving at work and have few tools to support them.

This strategy identifies four areas of high-impact interventions to strengthen the teacher workforce.

These include (a) preservice teacher training, (b) increasing the share of women teachers, (c) career development, and (d) structured pedagogy.

AFW countries must take concrete steps to improve the quality of new teachers in the pipeline.

One such step is incorporating authentic classroom training into the courses offered at teacher training colleges. Mali's teacher education reform envisions recruiting teachers only if they have completed high school, extending the duration of initial teacher training from two to three years, and aligning the curricula of teacher training programs with those of primary and secondary education. Student test score data for Togo and Guinea indicate that teachers with a solid general education who received short preservice training lasting four to six months and support in the first year on the job were as effective in boosting student learning as peers whose preservice training was longer. This bootcamp-like approach allows the government to expand the supply of qualified candidates and quickly equip them for jobs.

More effort must be made to attract women to the teaching profession.

The share of women in the region's teacher workforce is the lowest in the world, averaging only 35 percent in primary education and 22 percent in secondary education. Women teachers are good role models for young girls. In francophone AFW countries, female teachers have been effective in boosting girls' performance in reading and math without hurting that of boys (J. Lee, Rhee, and Rudolf 2018). In Sierra Leone, there was a scholarship program to support girls' enrollment in teacher training colleges. In rural Nigeria, incentives such as housing were provided to female teachers.

Using sound human resource management practices to manage the teacher workforce and promote career

development is essential to tackle the learning crisis.

The practices appropriate in each country depend on the context and may include a range of options, among them meritocratic recruitment of teachers; creation of career pathways; clarification of compensation and contracts; regulation of teacher deployment, especially for disadvantaged areas; and setting expectations for professional behavior. Some AFW countries have initiated reforms to better manage the teacher workforce. Under Cameroon's comprehensive primary teacher reform, for example, new teachers are being recruited based on merit. Recruits are deployed according to new criteria to prioritize understaffed schools serving disadvantaged populations. In Nigeria's Kaduna State, the government assessed the capacity of teachers and determined that only a third of the 33,000 teachers who took a statewide competency test passed it, which then triggered a significant reassignment of the stock of teachers. In Ghana, the Accountability for Learning Outcomes Project aims to support teaching and learning through assistance and resources for teachers, including capacity building and innovative delivery of in-service training.

Structured pedagogy—a package of continuous teacher training, coaching, mentoring, and instructional materials—has been proven to boost student learning.

To be effective, teachers must first know and understand the lessons they are assigned to teach. Too few teachers in AFW have even minimally adequate levels of knowledge. In Togo, fourth-grade teachers who were tested on content knowledge correctly answered only half the questions on language and only a third on mathematics (Bashir et al. 2018). Structured pedagogy addresses these weaknesses by providing scripted lessons and then training teachers to use them. Rigorous impact evaluations in Guinea-Bissau (Fazio et al. 2020), Kenya, and The Gambia (World Bank 2020a) confirmed the effectiveness of the approach in boosting test scores. In Kenya, the government has begun to scale structured pedagogy nationwide (Crouch 2020). In Edo State, the government is leveraging technology to implement structured pedagogy, using tablets to track teachers' progress in delivering scripted lessons in real time and customizing on-site coaching and mentoring for each teacher.



PHOTO BY © DOMINIC CHAVEZ/WORLD BANK

Strengthen Children's Readiness to Learn

Many children in the AFW region start school facing severe barriers to learning. More than a third of those under the age of five are stunted, and severe malnutrition puts their mental and physical development at risk and reduces their ability to learn. Barely a third of each cohort has benefited from early childhood education. Most children arrive in first grade emotionally, socially, and intellectually unprepared for learning with other children. In some AFW countries, children enter classrooms overcrowded with under-age children whose parents enroll them because they lack preprimary options. The resulting “early grade bulge” creates a dismal dynamic: “millions of children are ‘churning’ in the early grades, attending infrequently, repeating grades at rates higher than the official ones, and eventually leaving the education system with few cognitive skills” (Bashir et al. 2018, 147).






Preparing children to learn must start early, which requires supporting newborns' health and nutrition, early

stimulation, and protection from stress, particularly in the first 1,000 days of life. Designing a well-integrated progression requires cross-sector collaboration, and implementing it almost certainly involves a variety of nonstate actors, including community-based early childhood education centers, faith-based organizations, private and public preprimary schools, child-care facilities, and safe learning spaces, especially in conflict zones. Involving parents and communities is critical if an intervention is to be effective well beyond the first 1,000 days, as exemplified by such programs as the World Bank's Read@Home program. Analysis of data from 35 countries showed that having at least one children's book at home almost doubled a child's likelihood of being on track for literacy and numeracy skills (Manu et al. 2019).

Reinforce Critical Subsector Policies for Effective Teaching and Learning

Policies for effective teaching and learning include (a) using learning resources and educational technology tools to ensure children are equipped with

Figure O.9 Interventions to Improve Teaching and Learning

	What?	Why?	How?
	Transform the teaching profession	Students of skillful teachers learn more and attain more years of schooling	<ul style="list-style-type: none"> • Improve the quality of new teachers in the pipeline • Attract more women to teaching • Recruit teachers based on merit, deploy based on needs, strengthen career management • Support teachers with structured pedagogy
	Enhance students' readiness to learn	Students without proper early nutrition and stimulation are not well prepared to learn	<ul style="list-style-type: none"> • Invest in nutrition, health, early stimulation and other cross-sectoral areas • Encourage reading at home • Involve non-state actors, incl community-based ECD
	Provide learning resources and EdTech tools	Shortage of learning materials is pervasive, and students cannot learn without them	<ul style="list-style-type: none"> • Provide a set of core learning resources/minimum package of learning materials (textbooks, readers, and scripted lesson plans)
	Teach at the right level and in a language children understand	Learning in a first language promotes better learning outcomes and development of other cognitive abilities, and targeting instruction to a child's learning level provides quick results	<ul style="list-style-type: none"> • Instruct in local languages in first few year of schooling and transition to second language in later years • Target instruction to children's level focusing on foundational reading and mathematic skills
	Foster a culture of regular learning assessments	Regular assessments keep the focus on learning, provide timely information on student performance, and allow for adjustments to improve student learning	<ul style="list-style-type: none"> • Institutionalize periodic, rigorous, large-scale assessments (national or international) • Support frequent in-class formative assessments using technology

Source: World Bank.

high-quality, age-appropriate books and that technology is harnessed to achieve learning objectives and (b) teaching at the right level and in a language that children understand.

AFW countries must provide a minimum package of quality teaching and learning resources to all schools and encourage school-based instructional innovations. These resources, though essential to enable student learning, are in short supply everywhere in the region. In Nigeria, for example, each textbook is shared by 17 students, and in Togo, by 23 students. High costs have made it difficult to provide high-quality age-appropriate books for teachers and students. Cameroon tackled this problem by specifying new rules for textbook selection to enhance transparency and regulation of the textbook supply chain. These rules reduced the unit cost of textbooks from US\$6–\$7 to US\$3–\$4. The cheaper editions have been arriving in schools since October 2020.³³ In some cases,

the private sector can help ensure services without necessarily managing the schools. In Edo State, the government has improved the quality of primary education by introducing technologies in the classroom and increasing school accountability through a private service provider. In Niger, for example, only 23 percent of schools in 2015 provided basic teaching materials, and only 20 percent were equipped with minimally adequate infrastructure.

Teaching children at the right level and in a language they understand is a second policy lever for reducing learning poverty. In many AFW countries, weak foundations in literacy and numeracy in the early primary grades mean that as students move to higher grades, the official curriculum soon becomes too difficult for them to follow, much less master. In Sierra Leone, an estimated 20 percent of ninth graders were more than three grades behind the official curriculum, and 70 percent were two to three grades behind.

33 The reforms were supported by World Bank financing through the Education Reform Support Project and a development policy operation.

Consolidating and simplifying the official curriculum is one way to ensure students are taught at the right level (UNESCO, UNICEF, and World Bank 2021). In a region of high linguistic diversity (AFW has as many as 940 languages), it is critical to teach young children first in their home language or one familiar to them. They will learn more, learn more quickly, and transition in the higher grades more easily to learning in a second language—typically, Arabic, English, French, Portuguese, or Spanish. Conversely, those taught in a language alien to them have great difficulty learning and tend to leave school earlier and with less knowledge (August and Hakuta 1997; Duc and Tam 2013; OECD 2016; Smits, Huisman, and Kruijff 2008; Trudell 2016; Vygotsky 1986). With more schooling and better cognitive skills, children who begin their education in their home language earn more, on average, than other children (Patrinos and Velez 2009). Some African countries are permitting instruction in local languages in the early grades. The Democratic Republic of Congo’s Global Partnership for Education project supports instruction in four local languages, and textbooks in these languages have begun arriving in schools. The Central African Republic Global Partnership for Education—financed project supports instruction in Sango, a language spoken by almost everyone in the country. Strengthening teacher capacity in the language of instruction is also key.

A third policy lever is fostering a culture of regular student assessment. This culture must focus the attention of teachers, school managers, instructional leaders, and the government on learning outcomes. Most AFW countries rely on high-stakes end-of-cycle examinations for summative assessment of student learning. Some countries participate in regional examination syndicates, such as the West Africa Senior School Certificate Examination. Regional assessment can become more robust by encouraging frequent in-class formative assessments and institutionalizing periodic rigorous large-scale regional or international assessments. Regular in-class formative assessments alert teachers to gaps in student knowledge, enable them to adapt their lessons accordingly, and provide early remediation to students who are lagging.

Cross-country assessments provide information to situate a country against international learning benchmarks for informed decision-making by policy makers based on learning priorities and goals. As of 2021, Ghana and Senegal were the only AFW countries to participate in international assessments.³⁴ All francophone countries in the region have participated in PASEC, a regional student assessment program, and many AFW countries have participated in early grade assessments such as Early Grade Reading Assessment (EGRA) and Early Grade Mathematics Assessment (EGMA). Institutionalizing cross-country assessments can help AFW countries identify common bottlenecks and facilitate regional collaboration to address them.

Pillar 2: Expanding Opportunities for Learning

Expanding learning opportunities for children in the region requires reducing both demand- and supply-side constraints on basic and secondary education with a focus on girls. Poverty is often the most crucial demand-side impediment. The household budget in poor families typically prioritizes basic needs (food and shelter) over education. Lack of information on the benefits of schooling and sociocultural norms and biases further erodes demand for schooling, especially among girls of secondary-school age and among vulnerable populations like refugees. In other cases, lack of information might make parents send children to schools that are more expensive but less effective. On the supply side, obstacles include the scarcity of schools and their inaccessibility, dilapidated infrastructure, insecurity, and minimal engagement with and regulation of nongovernment actors in service delivery (figure O.10).

Rapid population growth exacerbates difficulties in increasing access to education. Even significant increases in the number of schools are insufficient in many cases. The interventions highlighted in this section are particularly relevant because expanding

³⁴ Ghana participated in several rounds of the Trends in International Mathematics and Science Study (TIMSS). Senegal participated in the Programme for International Student Assessment for Development (PISA4D).

access to education is linked with decreases in fertility, one of the main elements to catalyze a demographic dividend in AFW.³⁵

Ease Demand-Side Constraints

Lowering the direct cost of schooling can encourage more children to enroll, especially those from poor families. With the exception of a few, AFW countries have abolished fees for primary education, which has stimulated rising enrollment and completion rates and falling adolescent marriage and pregnancy rates. Other results include higher employment rates and greater financial inclusion (Ajayi and Ross 2020; Boahen and Yamauchi 2018; Moussa and Omoeva 2020). Abolishing fees in secondary education has similarly heightened access and completion rates (Blimpo, Gajigo, and Pugatch 2016; Brudevold-Newman 2016; Duflo, Dupas, and Kremer 2021; Masuda and Yamauchi 2019). For some families, however, help is still needed to defray other school-related costs. In Liberia, for example, for 11.3 percent of children of primary school age and 19.1 percent of those of junior secondary school age, lack of money was a key reason for never having attended school (De Simone and Teixeira 2021). Scholarships, cash transfers, and in-kind support, such as free uniforms and meals at school, can all help lower the direct cost of education. Examples of successful cash transfer programs in Africa are the Nigeria Partnership for Education Project (NIPEP) and Zambia’s Girls’ Education and Women’s Empowerment and Livelihood (GEWEL) project. The design of these interventions is as important as their existence. For instance, deferring payment of conditional cash transfers to coincide with the time that fees are required for the next level of education has a larger impact on subsequent enrollment than evenly spaced transfers throughout the year (Barrera-Osorio et al. 2020). Behavioral insights and nudges can also help increase adoption of these programs and increase attendance rates.

Informing parents and students about the quality of local schools, funding for education, and the higher earnings associated with education can spur

enrollments. AFW countries can take advantage of international initiatives like UNICEF’s Data Must Speak program to create simple, easy-to-understand school report cards that inform even semiliterate parents and students about schooling options. Schools can share such information inexpensively through text messages, videos, parent meetings, or school report cards. In Pakistan, school report cards facilitated comparisons of providers and helped boost primary enrollment by 4.5 percent (Andrabi, Das, and Khwaja 2017). In Madagascar, school attendance rose by 3.5 percent when children and their families were exposed to information on financial returns to education (Nguyen 2008).

Shifting sociocultural norms that discourage school enrollment, especially for girls, are an essential medium-term measure for widening learning opportunities. Norms matter. In Ghana, for example, when parents were asked to choose between enrolling a daughter or son in school, 50 percent prioritized the son whereas only 10 percent the daughter. Changing norms starts with advocacy and engagement with community and traditional leaders and other stakeholders. It also entails communication campaigns to change norms that discourage school attendance. Such campaigns can take advantage of findings from the behavioral sciences to achieve rapid results, such as insights on the role of authoritative voices and peer effects (Prentice and Paluck 2020; Tankard and Paluck 2017). Recent innovations include using bots that combine artificial intelligence and behavioral insights for dynamic community engagement to increase girls’ attendance and reduce early pregnancies (Rascon n.d.). Shifting norms about girls’ schooling warrants particularly close attention in Sahelian countries and in certain areas in other AFW countries, such as northern Cameroon and northern Nigeria.

Reduce Supply-Side Constraints

A sparse network of schools, many of them unsafe and in poor condition, seriously impedes widening learning opportunities in primary and secondary schools. In Nigeria, secondary schools are in extremely short

³⁵ A demographic dividend is the economic growth potential resulting from shifts in a population’s age structure. When the share of the working-age population is larger than that of the non-working-age, which is typically defined as those younger 15 and older than 65, there is an opportunity to grow due to the demographic dynamic (United Nations Population Fund 2016).

supply, with 4.3 primary schools for each junior secondary school and 6.1 for each senior secondary school. In northern Nigeria, 23 percent of primary schools have no junior secondary school within 4 kilometers, compared to only 5 percent in the south.³⁶ Dilapidated, cramped, and unsafe classrooms are common throughout the region, and many schools lack basic facilities. Only 32 percent of schools in Senegal have a supply of drinking water; this figure is 10 percent in Guinea and 41 percent in Liberia. In Liberia, only 37 percent of schools in 2016 had functional latrines incorporating menstrual hygiene components, such as disposal bins, water, and soap in latrine stalls (De Simone and Teixeira 2021). In some AFW countries, violence in schools is on the rise, and many schools are unsafe. In early 2021 almost 5,000 schools were closed for safety reasons in Burkina Faso, Mali, Niger, the far north of Cameroon, Chad's Lac Province, and Nigeria's northeastern regions (NRC 2021).

Locating new schools in localities of greatest need and rehabilitating substandard schools are critical to making schools more available, accessible, and attractive. School-building programs have helped expand access and learning outcomes in Burkina Faso (Ingwersen et al. 2019), Benin (Deschênes and Hott 2019), and Niger (Bagby et al. 2016). New secondary schools should be built first in areas with the greatest need. This requires having good data systems that can provide both demographic information and geo-referenced data on existing schools and how to access them. The World Bank AGILE project in Nigeria uses geo-referenced data to reveal gaps in the supply of schools. In the Secondary Education Improvement Project in Ghana, the school construction component specified both site selection criteria and construction standards. The Burkina Faso Emergency Local Development and Resilience project focuses on rehabilitating existing schools. School accessibility can also be enhanced by improving commuting routes and options, such as by offering adolescents bicycles. Attendance can also be encouraged by repairing dilapidated infrastructure, providing drinking water, building separate and functioning toilets for boys and girls, and creating adequate gender-sensitive sanitation facilities.

Attendance can also be increased by improving infrastructure, especially when schools are dilapidated or in poor condition. Key improvements include increasing access to drinking water, providing separate functioning toilets for boys and girls, and providing adequate gender-sensitive sanitation facilities. Infrastructure improvement should prioritize access to electricity and connectivity in schools. In some cases, educators can explore innovative delivery models involving private sector investments. For example, private sector providers can commit to providing solar panels and the necessary maintenance.

Establishing quality private and nonstate education service providers can help relieve constraints in the supply of public schools. In many AFW countries, enrollments at all levels are growing faster in nongovernment schools than in public schools. On average, about a quarter of AFW's primary students are enrolled in private schools; in Gabon and Mali, the share is about 40 percent, and in Liberia it exceeds 50 percent. However, regulatory frameworks for private schools are weak, and existing policies focus more on school inputs than on the quality of education and learning outcomes (Baum, Cooper, and Lusk-Stover 2018). Governments can encourage growth of nongovernment schools provided they meet minimum quality standards by setting clear regulations for their operations, ensuring that learning outcomes are at the center of the policies. In Uganda, a public-private partnership program for low-cost private secondary education boosted both enrollment and student learning (Barrera-Osorio et al. 2020). In Pakistan, a well-implemented policy to encourage low-cost private schools also succeeded in increasing enrollment (Qureshi and Razzaq 2021). These models can be explored in AFW to expand access to education. When the private sector is involved, it is key for governments to develop strong quality assurance mechanisms since many providers do not meet the minimum standards needed to deliver education services. Involving nongovernmental organizations in the provision of education, such as through community schools, can also add to schooling options. Setting up schools in community buildings or private residences can increase coverage at a lower cost compared to building new schools. For example, Afghanistan increased

36 Team's analysis of Nigeria's National Personnel Audit (NPA) survey, 2017/18, Universal Basic Education Fund.

enrollment and the test scores of children educated in such settings, especially girls. In the AFW region, community schools in Cameroon and the Central African Republic have helped to boost enrollment. Community schools are often not well funded, so their sustainability tends to be precarious. Therefore, investments in community schools need to include measures to ensure they continue operating in the medium-term.

Integrating Koranic schools into the national system can increase the educational participation of children and youth who are not in the official school system.

Governments can recognize and regulate these schools and may even consider supporting them if they meet performance-based criteria. In Nigeria, for example, the government has supported integrating children who attend religious schools into traditional public schools (World Bank 2021b). Other examples include Senegal and Niger, especially under the Learning Improvement for Results in Education (LIRE) project. It is worth highlighting that religious schools tend to remain open even in situations of conflict. Thus, when integrating them into formal education is impossible, providing minimum foundational skills on math and language without changing schools' overall objectives can be promising, as done under the Better Education Service Delivery for All (BESDA) operation in Nigeria.

Ensure Safe and Inclusive Learning Environments

Governments in AFW countries with a significant number of unsafe schools must take three major steps to address the problem. They must build databases to register attacks on schools, create early warning systems, and formulate comprehensive security plans that incorporate physical protection. They must also sign and act on the Safe Schools Declaration—an intergovernmental political commitment that was opened for endorsement by countries in 2015—and implement the Guidelines for Protecting Schools and Universities from Military Use during Armed Conflicts. Finally, they must establish backup venues or mechanisms for schooling when regular schools become too unsafe to operate, such as community buildings, homes, or other types of government facilities. Learning circles or pop-up schools in emergency

situations have been successful in expanding coverage and improving learning outcomes while reinforcing democratic behavior, peaceful coexistence, and students' self-esteem (Cerdan, Bustillo, and Colbert 2020).







Governments in affected AFW countries must leverage education and community engagement as a tool for preventing violence in schools and promoting innovative approaches.

In Uganda, the Good School Toolkit—an 18-month whole-of-school approach—reduced physical violence by 42 percent (Devries et al. 2015). In Nigeria, the Adolescent Girls Initiative for Learning and Empowerment (AGILE) project includes a similar whole-of-school safety approach, one that aims to empower all stakeholders with a shared vision of violence prevention and reduction. In Liberia, a cognitive behavioral therapy session has reduced violence among males (Blattman, Jamison, and Sheridan 2017). School curricula can challenge social norms that encourage violence (WHO 2019) and instead promote political, religious, and ethnic tolerance to prevent violent extremism and radicalization (Bellis et al. 2017). In Tanzania, the World Bank–funded Secondary Education Quality Improvement Project supports a comprehensive package for gender-sensitive, learner-friendly safe schools with a focus on training teachers, teaching life skills to students, and community-based mechanisms for safe commutes to school.

Include Vulnerable Groups

Responding to the specific needs of children with disabilities is an important way to reduce supply-side constraints on schooling. The Disability-Inclusive Education in Africa Program, which has provided almost \$1.5 million in grants to seven countries across the region, including Ghana, Liberia, Senegal, and The Gambia, supports system strengthening and educational and social inclusion activities in primary schools. The aim is to transform schools and regional assessment centers for students with special needs into inclusive education resource centers while piloting the training of teachers and staff in their new roles. In Burkina Faso, the Improving Education of Children with Disabilities project is directed to community participation and removing affordability constraints, enhancing the quality of teaching, providing remedial

Figure O.10 Interventions for Expanding Opportunities for Learning

	What?	Why?	How?		
Demand	 Reduce the cost of education, especially for the poor	Financial constraints are one of the main obstacles to access education	<ul style="list-style-type: none"> Eliminate school fees Provide transfers (cash transfers, scholarships, free uniforms, school feeding) 	Demand	
	 Inform parents and students on funding, quality of schools, and benefits of education	Lack of information affects demand for education, and these interventions are very cost-efficient	<ul style="list-style-type: none"> Conduct informational campaigns for parents and students using SMS, videos, and other tools 		
	 Shift socio-cultural norms to reduce prejudice, especially against girls	Socio-cultural norms affect demand for education, especially for girls	<ul style="list-style-type: none"> Conduct communication and media campaigns using behavioral sciences Implement advocacy campaigns and involve traditional leaders 		
	Supply	 Include vulnerable groups	Refugees and people with disabilities are disproportionately excluded from education systems	<ul style="list-style-type: none"> Include refugees in education (accelerated learning programs, psychosocial support, teacher training) Include people with disabilities 	Supply
		 Ensure safe and inclusive learning environments	Lack of safe and inclusive spaces in and around schools is common in the region, and prevents many from attending education	<ul style="list-style-type: none"> Ensure safety in and around schools (Safe Schools Declaration, physical security measures, whole-of-school approaches). Use education systems to prevent violence (safe spaces to change behaviors, school curriculum). Continue service delivery when education is disrupted (pop-up schools, learning circles, remote learning) 	
		 Increase availability, accessibility, and resilience of schools	Lack of facilities, especially for post-primary levels, is one of the main supply-side causes of low enrollment	<ul style="list-style-type: none"> Construct and renovate schools; improve water, sanitation, and hygiene infrastructure Improve commuting routes and options Involve non-state actors (private sector, community schools, and religious schools) 	

Source: World Bank.

education, and improving access to preprimary and primary schools for children with disabilities.

Addressing the specific needs of IDPs and refugees can also remove major supply-side deterrents to educating vulnerable students.³⁷ In the AFW region, all IDPs/refugees in schools are counted as students in the host country's national education system.³⁸ In 2018 Chad's government declared 108 schools in refugee camps to be public schools, allowing them to enroll both refugees and local students (UNHCR 2018). Including refugees in national education

systems is important, but efforts must be made to ensure they are effectively integrated and supported to succeed. Some interventions are particularly crucial. One is offering accelerated education programs by assessing learner competence in basic education and using effective teaching and learning approaches matched to their cognitive maturity (UNHCR 2017). These programs are common in East Africa, where they have proved effective. An impact evaluation of the Speed School program in Mali, which is also being implemented in Burkina Faso and Niger, showed that children in the Speed School program improved

37 Expanding access to quality education for refugees is essential to achieving this vision, which is central to both the Global Compact on Refugees and the 2030 Agenda for Sustainable Development (UNHCR 2021b). Thus, including refugees in national education systems is key (World Bank and UNHCR 2021).

38 The exceptions are refugees attending secondary school in the Diffa region of Niger. Due to a language barrier, they follow the curriculum of their country of origin through distance learning centers (UNHCR 2021b).

by 42 percent in French language learning, relative to the comparison group, allowing them to almost catch up with their peers. In math, they improved by 25 percent, which enabled them to completely catch up with their peers. The average cost per student for the nine-month program in Mali was US\$172 (IPA 2016). A second intervention is providing psychosocial support programs that have proven effective in reducing emotional distress and physical illness and increasing interest in attending school, sense of safety, and homework completion for IDPs and refugees (INEE 2016). The third intervention is training teachers on refugee and IDP inclusiveness. Kenya's Teachers for Teachers program provides educational staff in refugee camps with teacher training, peer coaching, and mobile mentoring. In Chad, Sudanese teachers participate in a certified two-year program to equip them to teach the Chadian curriculum and familiarize them with the standards of the country's education system (Save the Children, UNHCR, and Pearson 2019).

Pillar 3: Building Job-Relevant Skills for All³⁹

AFW's economic transformation hinges on the skills of its workforce. Most people in the region will need a basic level of skills, especially in functional literacy and digital literacy, to engage in and fully benefit from social and economic engagement in today's modernizing society. A critical mass of the workforce will need additional competencies for moderately and highly skilled work as technicians, production operators, engineers, ICT specialists, scientists, and researchers, as digital technology and climate change rapidly reshape economies. All priority sectors of the region highlight lack of a skilled workforce (in both technical and soft skills) as a challenge. In a 2020 survey of CEOs of 150 Africa-based companies (40 percent of which were based in AFW), 44 percent of CEOs highlighted lack of or inadequate skills as their main human resource challenge (Deloitte 2020). The nature of work is rapidly evolving, implying a need for workers to upskill or reskill as the labor market

changes. Economic transformation requires finding sustainable approaches to formal TVET and higher education and other informal and nonformal skilling avenues, including apprenticeships. Well-functioning skills and higher education systems have the potential not only to lift individuals out of poverty but also to bring economic development to whole nations and regions.

This strategy takes stock of the key challenges in the region's jobs and skills landscape in light of the implications of the digital and green economies for skills development. Four complementary high-impact interventions can address these challenges: (a) reinforcing governance of training service providers, (b) dismantling barriers to skills acquisition, (c) managing service delivery for quality and relevance, and (d) fostering sustainable service delivery. Adapting these interventions to fit each country's setting is essential to achieve impact. Skills development should be complemented with job creation to spur economic growth, an effort that goes beyond the education sector and will require a whole-of-government approach in partnership with the private sector (figure O.11).

Key Challenges Affecting Jobs, Skills, and Research in AFW

AFW countries face hard choices in building job-relevant skills in the context of emerging industries, weaknesses in the human capital base, nascent skills systems, and tight budgets. These challenges create two trade-offs common across the region: (a) investing in skills for high economic productivity versus for social inclusion⁴⁰ and (b) investing in skills for today's jobs versus for future jobs (Arias, Evans, and Santos 2019).⁴¹ Experiences in Chile, Ireland, Korea, Malaysia, and Singapore since the 1970s suggest that countries can successfully follow divergent pathways in helping nascent formal skilling systems mature, depending on countries' economic strategy, organizational structure, private sector roles, and so on (Tan et al. 2016). Key lessons include the need for strategic, whole-of-government steering of the jobs and

39 This refers to the continuum of job-relevant skills from secondary TVET through tertiary education and research, as well as informal and nonformal skills provision.

40 Investing in skills for social inclusion refers to skilling the unemployed as well as the mostly agrarian and self-employed population in low productivity jobs in the informal sector.

41 Governments often have to reprioritize due to fiscal constraints and the many challenges requiring investments.

skills agenda; prioritization of investments to expand quality basic education, innovations, and reforms to model agile responses to emerging labor market needs; use of graduate employment as a key indicator of institutional performance; and consolidation and integration of proven innovations to embed and disseminate good practices.⁴² AFW countries can use these lessons to shape their plan for strengthening their systems for skills building, taking into account both the region's current jobs and skills landscape and emerging workforce trends.

Most of AFW's workforce is in the informal sector, including subsistence agriculture, which exposes workers to unpaid or low-wage, low-productivity jobs with limited opportunities. The average share of workers ages 25–64 in such jobs is 85 percent (ranging from 60 percent in Cabo Verde to 97 percent in Benin). This figure is higher among youth 15–24-years old, where the average is 94 percent.⁴³ ACET (2018) affirms the importance of modernizing agriculture, a long-neglected challenge in Africa; and FAO (2018) notes that this development can leverage the agri-food chain to expand attractive job opportunities for the region's burgeoning youth population. China's dramatic success in reducing poverty between 1978 and 2001 owes much to growth originating in agriculture, which contributed an estimated four times as much to poverty reduction during the period as industry or services (Ravallion 2009). China's experience suggests that realizing this potential will require attention to various contributing policies, including the provision of appropriate training through both formal and informal channels, improving farm-level knowledge and practices (including adoption of technologies), and strengthening applied agricultural research in the universities and its diffusion through extension services (World Bank 2022b).

Formal sector jobs offer much better pay and prospects, but they are not being created fast enough. In

Ghana, only 10 percent of the 200,000 people who enter the labor market each year secure such jobs (ACET 2018). Across 11 AFW countries,⁴⁴ the data show that higher pay typically accrues to the better educated, with each additional year of schooling yielding an estimated private return, on average, of 11 percent, which is slightly better than the global average of 9 percent (Psacharopoulos and Patrinos 2018). Education also affects access to wage jobs: across all workers, the probability of wage employment averages about 15 percent but rises to 50 percent among those with TVET and higher education, compared to just 2 percent for those with no schooling. High pay juxtaposed with few jobs in the formal sector is a pervasive problem in the region and implies a wasteful loss of benefit for the broader economy. To reduce this waste, some AFW countries, such as Ghana, Senegal, and Nigeria (Edo State), are reimagining the role of new technologies, especially digital technology, in their economic strategy, aiming to create large numbers of moderately skilled jobs complemented by a small but critical number of highly skilled jobs while also training young people for absorption into these jobs. For people who are functionally illiterate, a step-ladder approach can be used to support acquisition of basic skills and job placement and then progressively accruing additional skills through short- and long-term training opportunities.

AFW's working-age population is young and its human capital, modest. Options for skills acquisition are highly limited for those aspiring to better jobs and for recent school leavers and graduates simply hoping to land a job. About 42 percent of the workforce has no education, and only 11 percent has tertiary education.⁴⁵ The adult literacy rate in AFW averages 52 percent but is only 19 percent in Chad. The rate is higher among younger people but is still only 70 percent, on average, for those ages 15–24.⁴⁶ Traditional apprenticeships, which typically last three to five years, are the most common option for skills acquisition,

42 One example is the evolution of training centers established in 1972–75 by the Singapore Economic Development Board in partnership with various foreign companies and governments (Tan and Nam 2012). These centers were upgraded to technology institutes during 1979–92 and were consolidated in 1993 to form Nanyang Polytechnic under the Ministry of Education. One benefit is to institutionalize many of Nanyang Polytechnic's innovations in industry-responsive skills development, including its signature "teaching factory" model.

43 Data in this section are from ILOSTAT (database), International Labour Organization, Geneva (accessed February 28, 2022), <https://ilostat.ilo.org/>.

44 Benin, Burkina Faso, Chad, Ghana, Guinea, Guinea-Bissau, Mali, Niger, Nigeria, Senegal, and Togo. The data pertain to 2018 for all countries except Ghana, whose data are for 2016. Analytical details are in the full report for this strategy.

45 In the East Asia and Pacific region, which in the 1950s had development challenges like those of AFW, everyone in the workforce has some schooling and 55 percent of workers have tertiary education.

46 Data in this section are from UIS.STAT (database), UNESCO, Paris (accessed February 28, 2022), <http://data.uis.unesco.org/>.

especially for jobs in the informal sector, accounting for up to 80–90 percent of skills training in some countries. The market for apprenticeship training is highly unregulated. Master craftsmen, usually the main providers of such training, offer skilling services of variable quality with limited, if any, provision for skills certification. Other options—often small-scale and idiosyncratic—include training offered by firms; bootcamps, such as for computer coding, and other intensive short-term programs; and second-chance or catch-up programs for vulnerable groups, such as women and refugees. Limited options for skills acquisition are one possible reason for the large number of NEETs among educated youth in many AFW countries.

Although options for acquiring job-relevant skills have expanded for youth in the education system, access remains low and program quality continues to be poor. Enrollments in formal secondary TVET and tertiary education have grown in recent decades, but coverage is still lower than in the other regions. Due to its poor quality, TVET is widely perceived as a last resort for youth struggling in general secondary education. In tertiary education, the options include universities, polytechnics, community colleges, and other specialized institutions, as well as private institutions. Government establishments tend to have weak links to industry and to be poorly funded, staffed, and equipped for teaching, learning, and research, lacking reliable and affordable broadband internet connectivity. The rate of hiring of faculty has not kept pace with the expansion of the tertiary education sector, leading to overcrowding. In Burkina Faso, for example, the student-faculty ratio in public higher education institutions is 112:1 (World Bank 2018b). In public TVET institutions, quality of teachers is an even greater challenge, with Côte d'Ivoire⁴⁷ being an exception (ACET 2022). For example, in Niger, only 12 percent of TVET teachers have the requisite qualification. Enrollments in STEM fields

are modest in most AFW countries and at the tertiary education level reflect a weak pipeline of suitably prepared secondary school graduates, lack of exposure to STEM fields, and scarcity of attractive programs.⁴⁸ Women are underrepresented in STEM programs, a problem associated with social norms and expectations and other factors such as lack of role models and mentors, information, and funding.

The region's research output has increased over the past decade, but sufficient focus has not been given to creating the enabling environment to expand research production and impact. Addressing the region's many challenges, including those related to productivity, requires AFW countries to expand their innovation and knowledge base. As illustrated by recent pandemics (Ebola and COVID-19) and the need for mitigation and adaptation to climate change and the digital economy, investments in local research and development in these fields have become critical for development. Ghana, which has the highest scientific output in AFW, is producing three times less than South Africa.⁴⁹ A number of factors contribute to the low performance in AFW countries: the absence of national science and technology policies and related sustainable financial resources for implementation, lack of a critical mass of academics⁵⁰ who can commit substantial effort and time to research instead of only teaching, and insufficient scientific infrastructure in terms of advanced laboratories and internet connectivity.

This strategy highlights four complementary sets of high-impact interventions to improve the health and performance of AFW's skills development systems and align them with the changing nature of work. These interventions aim to (a) reinforce governance of providers of training services, (b) remove barriers to skills acquisition, (c) manage service delivery for quality and relevance, and (d) foster sustainable service delivery.

47 According to a recent ACET report (ACET 2022), Côte d'Ivoire is known to have in place a strong institutional framework due to strategic investments in its National Pedagogical Institute for Technical and Vocational Education, which has standardized training and regulates the curriculum. The institute also tracks and provides continuous upskilling of trainers.

48 In 2019 more than 245,000 students from AFW countries were enrolled in tertiary programs abroad. Numbers aggregated by authors. Using the <http://uis.unesco.org/en/uis-student-flow> database.

49 Data from SCImago Journal & Country Rank (database), SCImago, Madrid (accessed February 28, 2022), <https://www.scimagojr.com/>.

50 The number of researchers per million inhabitants (full-time equivalent) in Sub-Saharan Africa was 98 in 2018 and almost 8,000 for South Korea. Data are from UIS. STAT (database), UNESCO, Paris (accessed February 28, 2022), <http://data.uis.unesco.org/>.



Reinforce Coordination and Governance of Providers of Training Services

Better governance of training service providers would help integrate AFW countries' highly fragmented skills-building systems. Publicly funded-formal TVET and higher education programs alone are insufficient to cope with all of the region's skilling needs. In many countries, gaps are filled by master craftsmen and private firms, among others. AFW governments can create a more integrated system that benefits users and providers of training services alike. To this end, three areas of governance warrant attention: (a) reforming traditional apprenticeship models, (b) formalizing the role of employers in skills development, and (c) developing simple yet inclusive skills qualifications frameworks.

Reforming traditional apprenticeship models can improve worker productivity in the informal sector and help workers gain a foothold in the formal sector. A key

reform is adding classroom-based training to traditional apprenticeships, which typically focus exclusively on practical training provided at a workshop or on the premises of an enterprise. Benin, for example, is testing a partnership arrangement with local TVET institutions to incorporate classroom-based instruction on entrepreneurship and digital and soft skills. AFW countries can improve their apprenticeship programs in other ways as well, notably by providing career counseling (linking trainees to jobs and microfinance), by targeting disadvantaged youth for additional support, and by bringing apprenticeship programs under the TVET coordinating agency with solid capacity in financial management and complex coordination. Successful programs also provide trainees with suitable training tools and stipends that match or exceed what they would have earned in an informal job. Assessment-based certification of both trainers (masters) and trainees validates the skills gained through apprenticeships and facilitates recognition of such skills. Côte d'Ivoire has moved furthest along in reforming its apprenticeship

system, while Benin, Ghana, and Senegal have had variable success. Distilling lessons from these country experiences is essential to assess the relevance, feasibility, and impact of various approaches.

Formal sector employers play a crucial role as skills providers. Therefore, strategic public-private partnerships (PPPs) are a necessity. Some large domestic companies and multinational corporations in the AFW region meet acute shortages of skilled workers by establishing training schools that offer practical training leading to certification. These companies hire some of the graduates, while those not recruited are easily able to find work elsewhere based on the highly transferable skills acquired from their training. To address skills shortages, some AFW governments have formed formal partnerships with individual corporations, such as Dangote in Nigeria, ArcelorMittal in Liberia, and Toyota in Kenya, or with groups of firms operating in technology parks and hubs, such as Edo Tech Park in Nigeria. Governments can extend these types of strategic PPPs to more companies. Governments should clearly define their vision regarding contributions of private TVET and higher education as a pillar of the expansion strategy.

Employers also invest in on-the-job training to boost firm productivity and profitability. Such investments offer opportunities for lifelong learning and increase the workforce's adaptability to the changing nature of work. To incentivize employers' interest in such training, some countries collect training levies. Giving employers an effective voice in managing the training fund is essential to ensure that levies are used as intended to upgrade worker skills in areas of relevance and need to employers. Mexico's Integral Quality and Modernization program exemplifies a successful payroll-based levy collected by the government to promote skills upgrading in small- and medium-sized firms. Malaysia's Penang Skills Development Centre uses a different model, relying on membership fees to fund skills upgrading for participating firms (Banerji et al. 2010). Governments can also outsource management of major elements of their national TVET system to a target industry, where management capacity exists, such as SENAI in Brazil and the Institutes à Gestion Délégée in Morocco.

AFW countries must put in place simple yet inclusive skills qualifications frameworks to clarify learning

pathways and to ensure the quality of training provided. National qualifications frameworks (NQFs) and regulatory frameworks help countries align competency-based curricula to skills outcomes and expected career pathways. Such frameworks must provide guidance and tools for the recognition of prior learning and posttraining certification, both of which are especially important for skills acquisition through traditional apprenticeships or other informal avenues. Because skills qualifications frameworks take time, resources, and sustained commitment to set up and operate, they should be pursued in phases, first targeting industries where certifications are most pertinent. Development of the NQF could prioritize emerging areas of skills needs, such as for digital skills, and accelerate the process by adapting new ideas to suit national conditions and priorities. One need in the context of AFW countries is for NQFs to offer qualified youth several simple pathways to grow their skills and qualifications. Governments can also use NQFs as a tool for quality control and accreditation of both public and private training service providers.

Dismantle Barriers to Skills Acquisition

Key measures include diversifying the options for skills acquisition and reducing the costs of training. Remedial programs and bootcamps are one way to help more people, especially the poor, access market-relevant training. These interventions can fill learning and skills gaps that would otherwise disqualify prospective participants. Additional measures include increasing the supply of high-quality, affordable skilling opportunities and targeting financial aid for students based on merit and need.

Remedial programs, bootcamps, and second-chance programs can serve diverse learners. These individuals can range from university entrants with weak preparation for STEM degrees to job seekers in need of a quick upskilling boost to adults with weak foundational skills. When offered as part of formal TVET and tertiary education courses, remedial programs are especially useful to new students handicapped in their studies by poor-quality education. These programs can strengthen students' foundational skills in STEM and digital technology and prepare them to pursue STEM courses successfully. For this purpose,

The Gambia's Africa Higher Education Center of Excellence (ACE) Impact Project, for example, includes a preengineering preparatory course for graduates of upper secondary school. Bootcamps can offer services for rapid skilling for employment, such as training in entrepreneurship and soft skills, career coaching, and help with linking to prospective employers. In Kenya, the Moringa School boasts an 85 percent graduate employment rate. Targeted bootcamps can help reinforce interest in STEM programs, especially for young women. Second-chance and adult literacy programs can also help illiterate adults, especially women and youth from disadvantaged backgrounds. For youth with a checkered educational record, second-chance programs can provide a pathway back into the education system or facilitate participants' transition into the labor market. For young adults ages 15–34, adult education programs can leverage the wide penetration of mobile phones to provide sustained and tailored mass literacy trainings in basic literacy, numeracy, and digital literacy to improve participants' work productivity and livelihoods. Niger's mobile phone–based Alfabétisation de Base par Cellulaire project is an example of an innovative adult literacy and numeracy program. In Ghana, the Grameen Foundation uses its digital farming platform to train and advise cocoa farmers.⁵¹

AFW governments can take advantage of new ways to increase access to flexible, low-cost, and high-quality pathways for skills acquisition. Enrollments in online courses at the tertiary level have expanded everywhere in recent years due to their flexibility and low cost to students. For the poorest students, financial aid may still be needed to defray the cost of attending, including computers, equipment, and internet services. The formats of online courses include blended learning programs hosted by traditional brick-and-mortar institutions, such as African Development University in Niger, and fully online programs offered by open or virtual universities, such as virtual universities in Burkina, Nigeria, and Senegal. AFW governments can build on the shift to online learning during the COVID-19 crisis and leverage their sunk investments⁵² in digital infrastructure and the capacity

of faculty/trainers in digital education pedagogy to widen course offerings, including those for youth and adults already in the workforce. Given the hands-on nature of TVET training, some formal providers have started to integrate blended platforms for learning, such as industrial welding skills training in Kenya. Online programs can help trainees acquire, at their own pace, certificates, badges, and even degrees. Such arrangements are especially helpful to those with limited time or budgets to pursue their studies full-time and complete their courses within the standard time frame. Such learners can nonetheless work toward earning a degree by accumulating stackable credentials or microcredentials. The practice is still new globally and can be transformational for a region like AFW provided quality controls are put in place to help students, employers, and the public understand clearly how these credentials relate to conventional degrees and certificates. Governments, in coordination with the private sector and development partners, can also provide job-oriented mass skilling (digital skills training) for youth through mobile-friendly digital platforms at both the national and regional levels, such as the Harambee Youth Employment Accelerator in South Africa and AfDB's Coding for Employment program.

Expanding access to skills and higher education also requires diversifying student financing options to support marginalized and vulnerable youth. For trainees in pretertiary TVET programs, voucher schemes, stipends (such as the Tanzania Skills Development Fund Bursary Scheme), and no-cost skills training packages are ways to ease access to education and training for youth from underprivileged families. In regard to tertiary education, schemes offering low-interest loans and targeted scholarships have proved effective in increasing access for youth from underprivileged families. Examples include Rwanda's student loan and bursary program, managed by the Development Bank of Rwanda (BRD 2019), and the Ghana Education Trust, which allocates a share of value-added tax toward scholarships for gifted but financially needy students. Some countries, such as Malaysia and Mexico, have mandated a minimal

51 Although high adult illiteracy rates are endemic in AFW countries, they are more pronounced in the Sahel subregion. Therefore, the Sahel Education White Paper (World Bank 2021c) and this AFW strategy align closely to address this challenge.

52 Key enabling factors required to successfully deploy digital education include access to affordable and reliable electricity and internet, access to devices, digital skills for trainers and trainees, and capacity in digital education pedagogy for trainers and faculty.

proportion of 5–10 percent of low-income students to whom private providers should provide full financial support. For the poorest students, online training programs can still be costly. Access to digital devices, reliable internet and the cost of the overall training can be expensive, so financial aid may still be needed to defray the cost of enrolling. Affordable approaches to digital education include negotiations with telecommunication companies for preferential pricing (zero rating) in accessing educational resources and implementing innovative models with financiers for purchasing devices for students, such as Senegal’s student laptop purchasing scheme⁵³ and the framework agreements/contracts in Burkina Faso.

Manage the Quality and Relevance of TVET and Tertiary Education Programs

This strategy highlights three interventions for improving program quality and relevance that are especially pertinent to the region’s nascent systems of TVET and higher education. The interventions help to enhance system performance and ensure students acquire job-relevant skills by (a) forging closer links between service providers and employers; (b) increasing access to digital technologies for innovations in teaching, learning, and research; and (c) investing in research and development by capitalizing on regional approaches.

Forging closer links between training service providers and employers benefits both parties. Because the work of service providers and employers rarely brings them into passing contact with each other, let alone sustained interactions, proactive effort must be made to facilitate and incentivize a productive collaboration. Engaging industry-leading employers is particularly important. Such employers influence quality standards for their entire industry, such as through their networks of clients, suppliers, and subcontractors.⁵⁴ Moral persuasion by high-level officials, along with powerful incentives, financial and otherwise,

can help unleash interactions that ripple through the TVET and higher education system, providing models and templates for strengthening the quality and relevance of training programs,⁵⁵ especially industries aligned with national priorities, such as green jobs. The interactions benefit both training service providers and employers in multiple ways. They ensure students acquire market-relevant skills. Further, academics, trainers, and students can be placed in companies, and industry experts can serve on program and curriculum committees and teach select courses, such as entrepreneurship and other modules that build resilience, complex problem-solving skills, and creativity in students. These soft skills are important in helping graduates successfully navigate a mostly informal and resource-constrained economy. Digital recruiting platforms can link youth to training and jobs and help employers reduce the cost and time to find, train, and hire suitable talent. Joint projects and applied research can be undertaken to solve problems that undermine firm productivity and profits. Initiatives forging closer links between training service providers and employers include Sèmè City in Benin; Educate! in Kenya, Uganda, and Rwanda; Learn and Earn in India; Giraffe in South Africa; and Najja7ni in Tunisia—all of which seek to improve the learning and employability of marginalized youth.

Widening access to digital technologies would modernize TVET and higher education while increasing their relevance and quality. These technologies could enhance learning, research, and pedagogical innovation. National Research and Education Networks (NRENs) have a vital, if still embryonic, role in AFW’s systems of formal TVET and higher education. They connect students and faculty to an enormous and vibrant ecosystem of information, learning resources, and research outputs from across the globe. Yet few TVET and tertiary education systems in the region are connected to reliable NRENs due to the lack of sustainable funding for NRENs, the cost of high-speed broadband, and gaps in the technical capacity of NRENs. Institutions also do not have consistent budget line items supporting connectivity, computer

53 The government provides each student in higher education with a laptop at a subsidized rate, with payment spread over 12 months.

54 In Korea, the government created the BRIDGE model to link the country’s consortium of small and medium enterprises to Samsung and other leading conglomerates (Almeida and Cho 2012).

55 O’Hare (2008) describes the role of regional technology centers, the Dublin Institute of Technology, and the National Institute for Higher Education in accomplishing this result in Ireland.

labs, and the like. Removing these barriers can enable innovations in teaching, learning, and research including (a) student-centered programming that is engaging and stimulating (such as at Ghana's private Ashesi University), (b) computer-assisted adaptive learning that provides customized help to struggling students, (c) microcredentials and other digital courses to fill gaps in faculty capacity, and (d) virtual laboratories and other digital tools, such as virtual reality in medical training, cloud computing, artificial intelligence, and machine learning, to enable high-quality teaching and research, especially in STEM programs, even when budgets are tight. The use of these digital technologies can build students' digital skills. In parallel, soft skills, which are equally important in the digital economy, should be incorporated into these training programs. Facilitating such digital transformation, especially in the public education sector, will require additional investment in hardware and capacity building, which some AFW governments are starting to engage in. In Senegal, the government is providing students in public higher education with free on-campus internet and access to 5 gigabytes of data per month while off campus. This is possible due to an agreement between the Ministry of Higher Education and SONATEL, the principal telecommunications operator (Bashir 2020).

Capitalizing on regional approaches would support investments in research and development. Although the region has many challenges with respect to unemployed, unskilled, and vulnerable youth and adults, there must be sufficient focus on research and development in higher education. This will ensure that innovative homegrown solutions are developed to address the region's development challenges and that the region can improve its global competitiveness. AFW can capitalize on regional approaches to share and consolidate resources in training the next generation of researchers and faculty in highly specialized skills, which can be expensive. Regional approaches offer opportunities to leverage each country's competitive advantage in developing strong regional networks that efficiently facilitate cross-border mobility of knowledge, data, student researchers, and faculty. AFW governments can focus on key priority research areas such as climate change, ICT, health, renewable energy, and sustainable agriculture, building on the World Bank's support of the ACE program and the Regional Scholarship and Innovation Fund under

the Partnership for Skills in Applied Sciences, Engineering and Technology. In a medium- to long-term timeframe, AFW governments need to consider steps toward building effective national innovation systems in which researchers routinely disseminate their research findings for testing and adoption by end users.





Foster Sustainable Service Provision in TVET and Higher Education

With tight fiscal constraints continuing throughout the region, it is essential to ensure sustainable training service delivery of programs in TVET and higher education, especially in the public sector. Nontertiary TVET and nonformal education and training, including apprenticeships, have traditionally attracted the lowest amount of government spending. Sustainable funding of these programs calls for reassessment and possible increases in allocation. For tertiary TVET and higher education, fostering sustainable service provision requires measures to mobilize more resources and manage the cost of service delivery.

More resources for tertiary-level TVET and higher education (including research) can be mobilized by diversifying funding sources. Some countries have diversified funding by earmarking special revenue streams. In Ghana, the Ghana Education Trust Fund (an earmarked portion of value-added tax) and the Annual Budget Funding Amount (an earmarked portion of oil revenues) have provided funding for tertiary education, including scholarships for gifted but financially needy students (Government of Ghana 2017; Newman and Duwieju 2015). Other options include employer-funded and managed training and skills funds, such as Malaysia's Human Resources Development Fund, which supports a significant number of SMEs (Cheong, Singaravelloo, and Lee 2013); an expanded role for nonstate training service providers with appropriate arrangements for quality assurance; and enhancing student loan recovery to enable new loans for future students, such as Rwanda's student loan and bursary program (BRD 2019). Skills funds must have regular audits and evaluation of expenditure.

Measures at the institutional level can also help improve the sustainability of training service provision in public sector TVET and tertiary education.

Figure O.11 Interventions to Build Job-Relevant Skills for All

	What?	Why?	How?
	Strengthen governance of skills provision	The skilling ecosystem is highly fragmented, is mostly informal, and has limited quality controls in place and, thus, is difficult to manage	<ul style="list-style-type: none"> • Reform traditional apprenticeships • Formalize employers' roles in skills provision • Enhance QF to diversify learning pathways and facilitate mobility
	Dismantle barriers to skills acquisition, including low foundational skills	Lack of equitable access to affordable, flexible, and quality basic education and skills programs is hampering expansion of a skilled workforce	<ul style="list-style-type: none"> • Support equitable access to remedial programs and bootcamps, e.g., mass literacy and digital skills training • Diversify student financing options • Expand access to flexible, lower cost and high quality skilling options
	Manage service delivery for quality and relevance	Programs must adequately prepare youth for jobs in dynamic job markets and increase research outputs aligned with national and regional opportunities	<ul style="list-style-type: none"> • Develop job-oriented & entrepreneurship skills with industry participation • Harness digital technologies and promote innovative pedagogies • Invest in targeted R&D, leveraging regional approaches
	Foster sustainability of service delivery	Service delivery options should be designed to ensure they are efficient, viable, and long-lasting	<ul style="list-style-type: none"> • Diversify resource mobilization for sustainability (including for research and innovation) • Promote performance oriented and equitable resource allocation

Source: World Bank.

Two complementary measures warrant consideration. The first is to grant institutions the right to generate their own revenues, for example, by pursuing income-generating activities, such as consultancies, collection of user fees for various services, and sales of goods and services produced by trainees; attracting philanthropic donations; and offering fee-based executive courses and continuing education. Participating in grant competitions can also provide new funding. One of the ACEs supported with a US\$8 million grant by the World Bank under the ACE I project (2014–20) raised US\$100 million in additional funding through international competitive grants. The second measure is to encourage greater efficiency in training service provision, such as by using performance-based funding instruments,⁵⁶ participating in regional programs in tertiary TVET or higher education, or consolidating disparate institutions with small enrollments for economies of scale in training service provision, such as stand-alone colleges brought under the umbrella of the University of Rwanda. The success of all these measures hinges on strong management

and high transparency, including monitoring of performance of institutions.

Navigating Crosscutting Challenges to Rebuild Education for Resilience and Impact

AFW countries will need to find their footing in a rapidly emerging digital world amid the threats posed by the COVID-19 pandemic, chronic FCV, and climate change. The education sector has not been insulated from these adversities and must focus on two complementary lines of responses. One is regaining momentum to build human capital for growth and development lost to disruptions caused by the pandemic and spreading violence. The other is moving proactively to rebuild using new technologies, especially digital ones, to improve the education system's operations and enhance its unique contributions to the fight against various threats.

⁵⁶ Performance-based funding instruments can be in the form of including funding formulas, performance contracts, and competitive grants.

Regain Momentum in Building Human Capital

The pandemic has exposed the weaknesses of the region's education systems. Millions of learners are unable to attend classes in person, and many are still stranded with few options to continue learning. Protecting education spending is critical. Equally important is ensuring the funds are deployed effectively to reverse learning losses and dropout rates. Cash transfers and other financial incentives to support girls and other vulnerable groups will help keep them enrolled. Investing in low-cost remote learning and training teachers in technology can help minimize learning losses, improve teachers' pedagogical skills, and make the education system more resilient to future shocks. TVET and tertiary education must be repositioned to rapidly scale online learning with increased focus on equipping young people with skills for jobs. Local innovations developed by regional universities have a role to play in the fight against COVID-19. The ACE for Genomics of Infectious Diseases in Nigeria and the West African Centre for Cell Biology of Infectious Pathogens in Ghana serve as regional leaders in genomic sequencing of the COVID-19 virus and national efforts in mass testing and pandemic control. Other ACEs in Senegal and Nigeria have used 3D printing to produce face masks and parts for locally made ventilators.

The high levels of conflict and violence in the region are a fundamental reality that cannot be ignored. AFW governments must recognize the existence and scale of the problem by signing the Safe Schools Declaration and promoting the Guidelines for Protecting Schools and Universities from Military Use during Armed Conflict. Advocacy alone is insufficient. Governments must also enable schools to operate safely through early warning arrangements and robust security protection and to continue lessons during disruptions through pop-up schools, learning circles, and remote learning. Widening access to secondary, tertiary, and vocational education and expanding job opportunities are critical to prevent youth from joining extremist organizations and engaging in violence. In higher education, conflict studies can deepen

understanding of the dynamics of violence, and leadership training to build negotiation skills can help promote substantive and effective engagement in peace building. The school curricula can also incorporate material to encourage peaceful behavior among children and youth.






Rebuild Better with Digital Technologies

Climate change carries urgent implications for the education sector, both for adaptation to and mitigation of its effects, especially over the medium term.

Educational attainment is the single strongest predictor of climate change awareness and perceptions of its risks (T. Lee et al. 2015). Exposure to climate-specific courses can lead young people to adopt climate-friendly behavior.⁵⁷ Climate change is also changing the landscape of jobs and skills. New jobs in the green economy will require more cognitive skills (Consoli et al. 2016), as well as technical expertise in many areas of rising demand, such as disaster management, water conservation, and green technology. Some AFW universities are responding with new programs and research. Ghana's ACE, for example, is researching and developing integrated solutions to coastal degradation. In Côte d'Ivoire and Senegal, similar efforts seek to strengthen education and applied research in basic STEM fields that can offer insights for tackling climate-related issues, among them water and electrical engineering, transport and logistics, environmental sciences, and climate-adapted agriculture. Broader initiatives are also needed to create curricula for teaching the public and students in schools about climate change and life skills for adaptation and mitigation, such as recycling, water harvesting, tree planting, consumption habits, and transportation choices. In an era of climate change, training teachers and others to carry out evacuation protocols in the event of emergencies is critical. Meanwhile, decisions about school construction must aim to increase resilience to climate-induced shocks by taking explicit measures to minimize exposure to heat, wind, flash floods, soil erosion, and other problems.

⁵⁷ Cordero, Centeno, and Todd (2020) showed that students who attended a year-long university course on climate change each reduced their annual carbon emissions by 2.86 tons of CO₂.

Figure O.12 Interventions to Navigate Crosscutting Areas to Rebuild Education for Resilience and Impact

	What?	Why?	How?
	Combat the challenges of the COVID-19 Pandemic	Millions of learners are unable to attend classes in person and many still have few options to continue learning	<ul style="list-style-type: none"> • Protect education spending and use resources effectively • Use financial incentives to support girls & vulnerable groups • Enable low-cost remote learning avenues • Train teachers on use of tech and new tools for remote learning • Equip youth with skills for jobs in the depressed labor market • Leverage universities to fight the pandemic through local innovation
	Address fragility, conflict, and violence issues	There is a high presence and magnitude of conflict and violence in the region	<ul style="list-style-type: none"> • Sign the Safe Schools Declaration and protect schools from attacks • Enable schools operate safely through early warning signs and security protection • Reduce drivers of conflict & violence through peace-building curricula
	Tackle climate change	Educational attainment is the single strongest predictor of climate change awareness and green jobs exhibit stronger intensity of high-level cognitive skills	<ul style="list-style-type: none"> • Develop education content, curriculums, and teacher training materials on local impact of climate change • Provide skills training with a focus on green economy jobs • Construct schools to be resilient against climate-induced shocks and use ecofriendly building materials • Support universities to contribute to better education and research on climate change
	Adopt education technologies	Education technologies can boost education outcomes and improve systems	<ul style="list-style-type: none"> • Promote structured pedagogy through digital devices • Develop virtual classrooms for purely remote or hybrid learning • Provide digital skills for students for digital economy jobs • Use EdTech to improve education data and management to facilitate better decision-making
	Harness cutting-edge innovation	Innovation has great potential to catalyze change in education systems	<ul style="list-style-type: none"> • Test and evaluate innovative solutions (blockchain to track expenditures for accountability, machine learning to prevent dropout, artificial intelligence and behavioral sciences to shift social norms, adaptive learning, and virtual reality)

Source: World Bank.

Education systems in AFW must embrace the potential of educational technologies. Four key actions are critical. First, structured pedagogy must be expanded using digital devices. In South Africa, a yearlong virtual coaching program using digital lesson plans proved to be as effective as on-site coaching in boosting teachers' instructional practice and students' literacy outcomes (Kotze, Fliesch, and Taylor 2019). World Bank operations in Nigeria's Edo State, Rwanda, and Liberia are supporting the approach. Second, except for primary schools, open schools and universities with virtual classrooms should be developed so that all or a portion of instruction is remote and online (Twinomugisha 2019). Third, at the tertiary level, all students should be equipped with digital skills, with

a focus on advanced digital skills, to enable students to take full advantage of opportunities in the digital economy. AFW countries can leverage economies of scale through regional initiatives to build high-quality digital skills training programs that ensure no country is left behind. An example is The Gambia's ACE project.⁵⁸ Fourth, educational technology must be used to improve education management information systems (EMISs) for data-driven decision-making by policy makers. An example of a revamped EMIS is Liberia's latest school census exercise. For the education system to fully benefit from the use of educational technologies, governments need to invest in reliable and affordable electricity and digital infrastructure, including internet connectivity and devices.

⁵⁸ Through the ACE project, the College of Engineering at Kwame Nkrumah University of Science and Technology in Ghana is providing technical assistance to The Gambia for setting up a university that will offer applied science, engineering, and technology-related programs.

AFW countries can explore and adapt innovations to enhance the performance of their education systems for better education outcomes. The range of options is wide, and options must be carefully selected based on country conditions. The menu includes, for example, blockchains to track education expenditures; machine learning to identify and protect students, especially girls, from dropping out of school (Adelman et al. 2018); adaptive learning to increase student learning (Muralidharan, Singh, and Ganimian 2019); and virtual reality to develop job skills.

Enhancing Implementation and Monitoring and Evaluation Capacity

Achieving the expected outcomes of this strategy calls for deepening capacity for policy and program implementation and for monitoring and evaluating. The scope and complexity of the reform agenda to achieve the goals of this strategy make it urgent to enhance capabilities throughout the education system, including in decentralized offices and lower tiers of government. Although capacity gaps vary across AFW countries, two common weaknesses warrant attention: (a) inadequate technical and managerial capacity and (b) suboptimal decision-making based upon data of insufficient quality. In both areas, increasing capacity through learning by doing, with nationals working with technical experts rather than through ad hoc technical assistance, would embed new capabilities in the system, enable dynamic decision-making, and strengthen ownership and sustainability of the reform agenda (figure O.13).

Deepen Technical and Managerial Capabilities for Policy and Program Implementation

Enhanced capabilities in PFM and working with decentralized entities and other collaborators matter for the success of the high-impact interventions presented. Greater PFM capacity is essential to improve the efficacy and efficiency of public spending on education

in AFW countries.⁵⁹ Many ministries of education lack adequate capacity to plan budget allocations to meet strategic objectives and to execute the budget as planned. Specific weaknesses include budget classifications that hinder meaningful tracking of expenditures, such as intergovernmental fiscal flows, and low predictability of funding for education, partial allocations, or late release of commitment authority—all of which impede timely implementation of planned activities. Other weaknesses include minimal controls on payroll and nonsalary spending, which can lead to chronic lateness in paying teacher salaries. Efforts to decentralize spending to subnational units or rely on school-based management of funds to improve education outcomes have succeeded in some settings but not in others. Building up AFW countries' PFM capabilities would address these challenges and help ensure efficient and fair flows of funds.

The capacity of technical staff should be strengthened with system-wide responsibility for core services to support the work of teachers and school managers.

In basic and secondary education, these services include curriculum development, examinations and student assessments, teacher training, and school inspection and supervision. Strengthening capacity in these domains in a systematic and coherent manner is essential to create high-performance systems. A key advantage is enabling AFW countries to adapt promising innovations from elsewhere to suit local conditions and engaging in a process of learning by doing and continuous iteration for improvement (Crouch 2020). In post-basic education, where training service providers have more autonomy, system-level technical expertise relates to oversight of such areas as quality assurance, regulation of service providers, institutional performance, qualifications frameworks, and student finance. Building capacity within a system does not always mean creating new institutions; rather, existing entities can be reorganized for greater coherence and effectiveness. In Nigeria, many institutions support teacher training and instructional processes in schools, but with insufficient resources and sometimes overlapping functions, they are not yet sufficiently aligned to provide effective services for improving the overall system of learning (Bashir et al. 2018).

⁵⁹ See Bashir et al. (2018) for a detailed discussion of the results summarized here.

Building the leadership and managerial capacity of school managers and other education leaders will equip them to oversee operations, assess needs, plan new programs, and manage budgets. The best managers ensure effective use of resources, such as school-based grants and other locally mobilized funding; supervise, guide, coach, and motivate staff to do good work; foster a conducive workplace culture free of abuse; and engage with external stakeholders (Adelman and Lemos 2020). Research on eight countries associates a 1.00 standard deviation increase in management capacity of school managers—based on 20 management practices—with a gain in learning outcomes of 0.23 to 0.43 standard deviations (World Bank 2018). This gain is comparable to that of structured pedagogy, the most impactful intervention among those subjected to rigorous evaluation in Sub-Saharan African countries (Bashir et al. 2018). Given managers' vital role, researchers have highlighted competitive merit-based recruitment and career ladders to incentivize professional growth as critical factors. Experience with this type of reform in Peru in 2013 suggests that systematic training and coaching of managers, especially those in rural schools, also matter (Lemos and Piza 2020).

Enhanced capabilities in working with decentralized entities and other collaborators also matter if promising solutions are to succeed. Greater PFM capacity is needed to improve the efficacy and efficiency of public spending on education in AFW countries.⁶⁰ Many ministries of education lack adequate capacity to plan budget allocations to meet strategic objectives and to execute the budget as planned. Specific weaknesses include budget classifications that hinder meaningful tracking of expenditures, including intergovernmental fiscal flows; low predictability of funding for education, partial allocations, or late release of commitment authority, which all impede timely implementation of planned activities; and minimal controls on payroll and nonsalary spending, which can lead to chronic lateness in paying teacher salaries. Efforts to decentralize spending to subnational units or to rely on school-based management of funds to improve education outcomes have succeeded in some settings but not in others. Building up AFW countries' PFM capabilities would address

these challenges and help ensure efficient and fair flows of funds.

In all of the above areas, more purposeful and sustained collaboration among donors can build the needed capacity for better education outcomes in the AFW region. Given the limited success of past efforts in this endeavor (e.g., World Bank 2005 and 2008), new approach to capacity building warrant consideration (Fredriksen 2016), based on lessons from successful initiatives elsewhere (e.g., the IMF's successful effort to improve financial sector management through its capacity development and training centers (IMF 2020)).

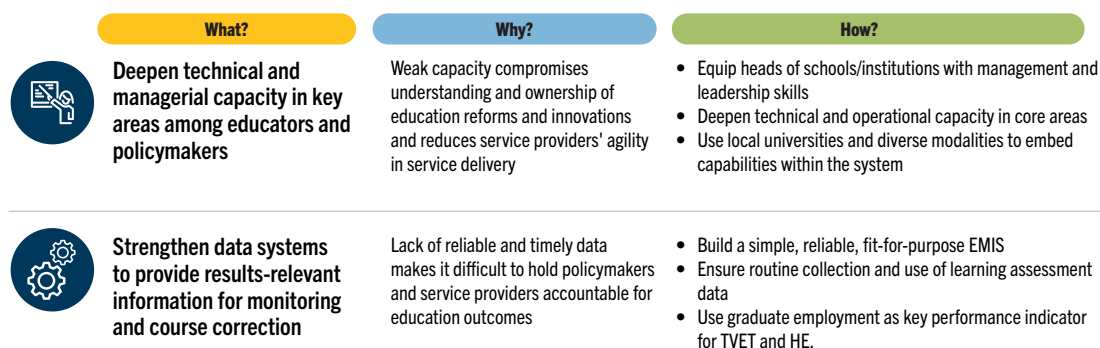
Strengthen Education Data Systems for Informed Decision-Making

Reliable EMISs are essential to drive results, and capacity must be enhanced among both data producers and users. A robust EMIS can foster a culture of data-driven decision-making when there is both a demand for data and the capacity to use the data to improve system performance, such as by aligning resources more closely with the country's priorities in education. Negotiations with the ministry of finance on budget allocations and execution, for example, requires timely and accurate data on such basic parameters as enrollments, teachers, and implementation of the national curriculum. When data systems provide disaggregated data—by schools, teachers, and students—they can guide targeted actions and broader reforms to improve efficiency and fairness in education service delivery. Sierra Leone's Education Data Hub is an EMIS that offers timely and easily accessible system-wide indicators, such as enrollments, staffing, school facilities, and examination results, as well as details on each school.⁶¹ The hub's website also includes interactive features for data exploration.

The latest technology also simplifies the collection of geospatial data that can further support informed decision-making in various areas. Examples include school mapping, assessing the reach of remote learning systems, and estimating the geographical distribution of

⁶⁰ See Bashir et al. (2018) for a detailed discussion of the results summarized here.

⁶¹ For more information, see <https://educationdatahub.dsti.gov.sl/>.

Figure O.13 Enhancing Implementation Capacity

Source: World Bank.

out-of-school children. Several education projects in FCV countries, such as Nigeria and Cameroon, have started using Geo-enabling Initiatives for Monitoring and Supervision (GEMS) for monitoring in hard-to-reach areas. In AFW's embryonic systems of post–basic education systems, EMISs can be built with an initial focus on key indicators of provision, such as intake and graduates by field of study, and gradual broadening to include indicators of labor market outcomes, such as employment and earnings by field of study.

Given AFW's severe learning and skills crisis, it is especially important to improve national capacity to collect and use learning assessment data and track graduates' labor market outcomes. As the amount of high-quality data grows, capacity-building efforts must also equip data users—that is, policy makers, analysts, and other stakeholders—with basic data literacy skills for monitoring system performance and holding education service providers accountable for results. In basic education, the challenge is to use the data to guide the design and redesign of tools, resources (scripted lessons, tools and resources for teaching at the right level, and so on), and related training programs geared toward helping teachers teach more effectively. In Edo State, for example, the World Bank is supporting the development of an EMIS that will include data on students' learning outcomes and customize support for teachers. At the postbasic levels, data on graduate employment and earnings provide a critical test of institutional effectiveness in equipping the graduates of TVET and higher education programs

with job-relevant skills. Systematic use of such data, complemented by information from labor market observatories and labor market forecasts, can help align program design to labor market opportunities and trends. However, in most AFW countries, capabilities in these data-related areas are nascent.

New approaches will be needed to institutionalize capabilities for improved performance of AFW's education systems. Many ministries of education realize that low capacity is often the primary binding constraint on implementation and have invested accordingly.⁶² Experience highlights some approaches to avoid, such as overreliance on project-related technical assistance, which typically ends when the project closes; use of individual consulting services; and ad hoc training of individual government officials. A better approach is to invest in enlarging the pool of competent specialists trained through targeted programs adapted to the context of countries in the region. These programs should be hosted by AFW universities and other institutions, possibly via regional and international twinning programs in key thematic areas. Past efforts have also defined capacity constraints too narrowly as simply a lack of technical skills and competencies and have paid insufficient attention to soft skills, such as coordination, change management, and consensus building, which are required to navigate the organizational and political economy impediments to reform. This weakness can be addressed by creating venues for continuous peer learning, experience sharing, and cooperation among AFW countries.

62 See Bashir et al. (2018) and Fredriksen (2016) for further details.



World Bank AFW Education Portfolio

The World Bank's growing education portfolio has been supporting AFW countries in responding to their education needs. The current portfolio (FY21) comprises US\$3 billion of operations under implementation and another US\$2 billion under preparation, including the International Development Association (IDA) and IBRD. Total aggregate annual commitments have tripled since 2018. More than a third of investments under implementation support basic education, while the remaining two-thirds support skills development, higher education, sectoral reforms, secondary education, and early childhood education. The pipeline puts a stronger focus on secondary education and skills, but basic education remains important. Some of the most recent projects are geared to help countries cope with the adverse impact of the COVID-19 crisis on education.

The World Bank annual commitment for education in the AFW region tripled between 2018 and 2021 from US\$400 million to US\$1.2 billion. This trend reflects the Bank's increasing commitment to helping countries achieve results at scale. IDA projects average about US\$105 million each, compared with US\$63 million, on average, for each IBRD project. They also channel more funding per project than the amount for education flowing through other instruments (US\$19 million each). The portfolio increasingly uses a results-based financing modality in lending operation, either using traditional investment financing with disbursement-linked indicators (or performance-based conditions) or through Program for Results operations. Projects using results-based financing approaches account for half of the portfolio under implementation and three-quarters of the pipeline.

The education portfolio performance has been positive, judged by the World Bank Independent Evaluation Group's assessment and other project monitoring metrics. Between 2014 and 2019, the Independent

Evaluation Group rated 75 percent of the education projects in AFW as moderately satisfactory or better. The Bank's internal real-time tracking reveals an overall rating of moderately satisfactory or better for 89 percent of the active projects containing a stated development outcome and an implementation progress rating of moderately satisfactory or better for 88 percent of the active projects.

Education Global Practice has a noteworthy direct collaboration with at least seven other Bank Global Practices (GPs). For instance, the Social Protection and Jobs GP prepared the Togo Employment Opportunities for Vulnerable Youth Project in close collaboration with the Education GP. The Macroeconomics, Trade, and Investments GP prepared in Niger the First Laying the Foundations for Inclusive Development Policy Financing, a development policy operation, with support from the Education GP to improve educational attainment among adolescent girls. There are also synergies with the Health, Nutrition, and Population GP, such as through the Population and Health Support Project in Niger, which aims to increase the use of reproductive health and nutrition services and promote access to secondary school for girls. Collaboration is also strong with noneducation sectors such as governance; agriculture; and water, sanitation and hygiene (WASH).

Overall, the portfolio analysis shows that investments have been increasing, often through collaboration with other sectors and using a different set of instruments. However, the magnitude of the challenges demands an ambitious and transformative response, not only in terms of how much the World Bank invests but also how it engages countries for education reforms. The following section highlights strategic directions for future World Bank support based on lessons learned from previous Bank operations in the region and around the world and on global best practices.



Role of the World Bank

Building on its current portfolio of large and innovative operations and on its good progress so far, the World Bank can and will do more in light of AFW's challenges in education. The magnitude of these challenges demands an ambitious and transformative response, not only in how much the World Bank invests but also in how it engages and supports countries as they design and implement critical reforms across the learning life cycle. Achieving ambitious results will require the World Bank to follow clear principles for structuring its support. Eight principles emerge from insights distilled from recent operations.

First, the Bank should base its interventions on lessons learned about what does or does not work. These lessons will be extracted on a continuing basis from both the Bank's operational experience and experience from other organizations as well as the latest research evidence. Central to building the evidence on what works will be advisory services and analytics (ASA). Today, the ASAs in the AFW region focus on early learning, public expenditure reviews, and human capital assessments. Future ASAs will also consider other topics, including education and FCV, community-based approaches to education, educational technology and remote learning, teacher effectiveness, skills, adult literacy, tertiary education, and reviews of teacher unions through a political economy lens. AFW will structure ASA into programs to assure iterative and sustained engagement and to avoid proliferation of fragmented, supply-driven ASAs.

Second, support should be prioritized to high-impact interventions and promising innovations. AFW will put a premium on learning and innovation to help countries accelerate change and, where possible, leapfrog to new solutions to overcome long-standing problems. This will require a different risk appetite, and when failures occur, the lessons will be used to

design new operations. Innovations to boost learning outcomes may be piloted depending on a country's appetite and capacity. Thus, the region will use a problem-driven iterative approach to design, implement, and redesign operations.

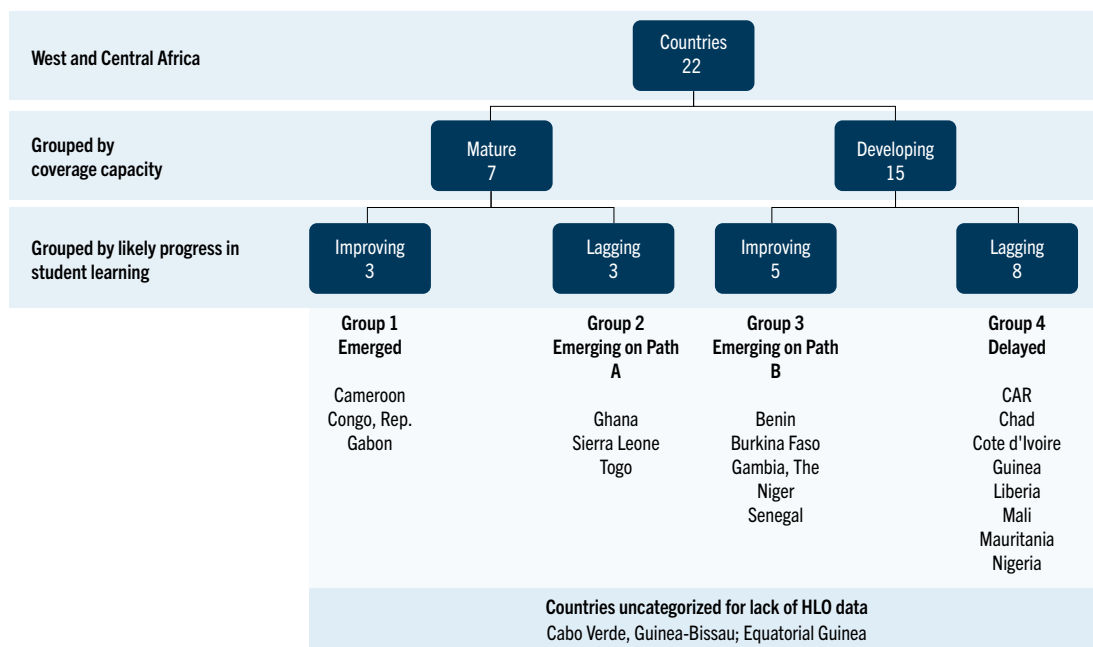
Third, regional approaches must be used, especially in the poorest AFW countries. Approaches include facilitating peer learning; sharing human capital, knowledge, and other resources; exploiting economies of scale to lower costs and increase bargaining power; and engaging in cross-border mobility. Two World Bank-funded regional interventions are the higher education ACEs and the TVET East Africa Skills for Transformation and Regional Integration Project. Similarly, SWEDD, an initiative to increase women and adolescent girls' empowerment in the Sahel region, shows the importance of working across sectors at the regional level.

Fourth, a mix of financial instruments should be used and more weight placed on results-based approaches. The Program for Results instrument is the preferred instrument to focus on results, particularly for delivering services and overcoming implementation constraints. When changes are needed in the enabling environment for better education, development policy operations should be prioritized.

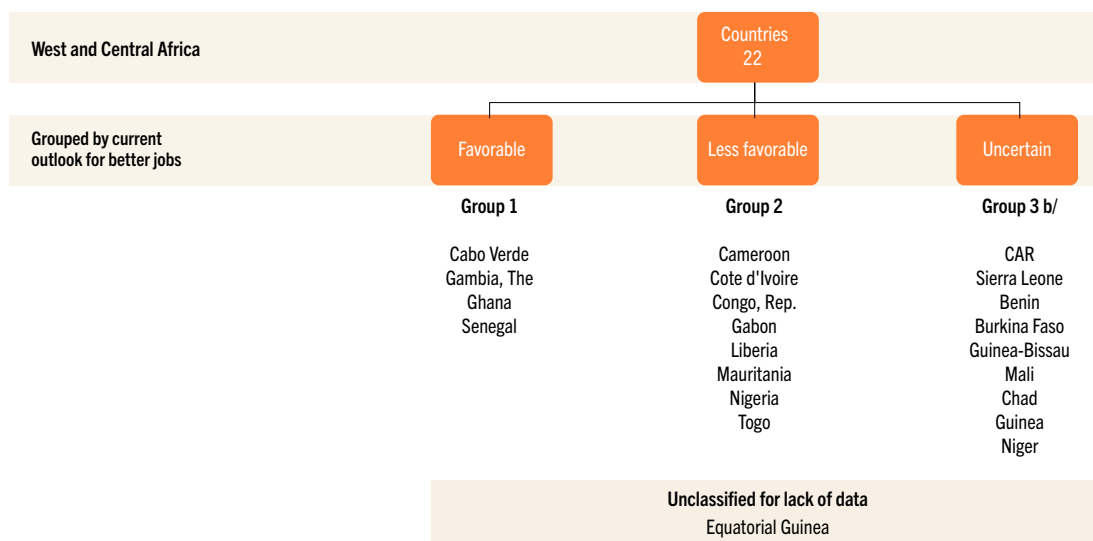
Fifth, multisectoral interventions must be fostered in broad-based learning program design and in collaboration with noneducation GPs. Tackling education challenges requires a problem-driven, rather than merely sectoral, approach. The Education GP will actively collaborate with the Health, Nutrition, and Population GP to ensure that children are well-nourished, healthy, and ready to learn. It will do likewise with the Social Protection and Jobs GP to help reduce financial constraints on educational access and enable smoother school-to-work transitions for young people

Figure O.14 Country Groupings for Country-Specific Education Strategies

Panel A: Basic Education



Panel B: Post-Basic Education



Source: World Bank.

a/ Refer to the technical report for details on the data and methodology for the country classifications

entering the labor force. Working with the Governance GP is essential in design operations to address institutional constraints that undermine effective service delivery and to build the necessary PFM environment for results-based approaches. Partnership with other GPs such as Macroeconomics, Trade, and

Investments will help ensure there is enough fiscal space to invest in education. Overall, the strategy envisions the Bank's Education GP working closely with other GPs to foster a whole-of-government approach to enhance education outcomes throughout the AFW region.

Sixth, clear and effective communications must be used to engage with partners to maximize synergies.

AFW will partner with other organizations to align efforts for maximum joint impact on outcomes, ensure that knowledge and experience are shared, coordinate financing, and avoid duplication. The Sahel region and the FCV countries will require a special emphasis on coordination as well as robust integration of security and development activities.

Seventh, the Bank's on-the-ground footprint should be enlarged for close collaboration with clients during project implementation and improved responsiveness. Similarly, the region will increase and diversify its skills mix to strengthen expertise in such critical areas as educational technologies, digital skills, climate change and education, and education in fragile

settings. As part of the strategy's agenda, support for capacity-building priorities in key areas will receive added attention.

Finally, common challenges should be identified across the AFW region while keeping in view the region's high degree of heterogeneity.

The strategy will thus tailor interventions to the realities of conditions in each country and specify measurable targets for country-specific outcomes. Figure 0.14 provides a country classification for exploring solutions adapted to a variety of country contexts. In basic education, the criteria relate simply to enrollment coverage and learning outcomes. In post–basic education through TVET and higher education, coverage and learning outcomes continue to matter but so do the prospects for the employment and earnings of graduates.

Annex 1: Prioritization of Interventions

Table A1.1: Priorities by Domain and Pillar of Intervention, with Time Horizons and Emphasis on Country Type and Level of Education

Domain of Intervention	Pillar	Intervention	Time horizon (for results)		Emphasis on	
			Short and medium term	Long term	Type of country ^{a/}	Level
Strengthening strategic leadership for long-term impact		Galvanize commitment to education priorities		X	All countries	All levels
		Provide governance for coherence and accountability	X		All countries	All levels
		Expand, or at least protect, funding for education	X		All countries	All levels
Investing in high-impact interventions for quick wins	Pillar 1: Improving teaching and learning	Transform the teaching profession	X		Groups 2 and 4	Primary and secondary
		Enhance students' readiness to learn	X		Groups 2 and 4	Early childhood development
		Provide learning resources and educational technology tools	X		Groups 2 and 4	All levels
		Teach at the right level and in a language children understand	X		Groups 2 and 4	Primary
		Promote regular learning assessments	X		Groups 2 and 4	Primary and secondary
	Pillar 2: Expanding opportunities	Reduce the cost of education	X		Groups 3 and 4	Secondary

Domain of Intervention	Pillar	Intervention	Time horizon (for results)		Emphasis on	
			Short and medium term	Long term	Type of country ^{a/}	Level
		Inform parents and students	X		Groups 3 and 4	Secondary
		Shift sociocultural norms	X	X	Groups 3 and 4	Secondary
	Pillar 3: Building job-relevant skills	Include vulnerable groups	X	X	Groups 3 and 4 and FCV-affected countries	All levels
		Ensure safe learning environments	X		Groups 3 and 4 and FCV-affected countries	All levels
		Increase the availability and accessibility of schools	X		Groups 3 and 4	Secondary
		Strengthen governance of skills provision	X		Groups B and C	TVET
		Dismantle barriers to skills acquisition	X	X	Groups B and C	TVET
		Manage service delivery for quality and relevance	X		Groups B and C	TVET
		Foster sustainability of service delivery	X	X	Groups B and C	TVET and higher education
		Enhancing implementation capacity for long-term impact	Deepen technical and managerial capacity		X	All countries
	Strengthen data systems		X		All countries	All levels

Source: World Bank.

a/ See figure O.14 for countries in the various groups for basic and post-basic education.

Note: FCV = fragility, conflict, and violence; TVET = technical and vocational education and training.

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