4. High-Impact Interventions to Reduce Learning Poverty

Reducing learning poverty is critical in a region where access to basic education has widened considerably without commensurate progress in boosting student learning. By 18 years of age, a child born today in the region can expect to attain, on average, 7.8 years of schooling; however, this schooling amounts to only 4.3 years when adjusted for learning. Addressing what the World Bank (2020a) has described as a serious problem in widespread learning poverty is vital to building a strong human capital base capable of driving the region’s agenda for growth and shared prosperity.

This chapter focuses on high-impact interventions to this end, with specific focus on five broad interrelated thematic areas to improve teaching and learning: transforming the teacher workforce, improving children’s readiness to learn, providing essential learning resources and tools, enhancing pedagogical effectiveness in the classroom, and fostering a culture of learning assessment throughout the education system.

The discussion addresses the challenges of special relevance to basic education—from preprimary through secondary. At these levels, the government often dominates service provision, and the high-impact interventions are within the scope for governments to consider in policy and program design. For each thematic issue, the discussion provides an assessment of its status and importance in the region and elaborates on promising approaches for addressing it to improve learning outcomes.

4.1. Teachers and the Current Status of the Profession

Multiple studies have emphasized the lack of teacher effectiveness in AFW and have highlighted the main sources of the problem. Key among those sources are (a) inadequate teacher preparation due to preservice training that tends to be highly theoretical; (b) weak processes for teacher recruitment, retention, deployment, and accountability; and (c) sporadic and highly fragmented programs for in-service training for teachers’ continuous professional development. The teacher workforce also suffers from poor management and inadequate support.

4.1.1. Preservice Teacher Training

The AFW primary education teaching workforce is composed of fairly well-credentialed teachers. Recent data from the PASEC 2019 shows that in AFW countries, almost all teachers have an academic level higher than primary school (figure 4.1). Indeed, most of these countries have raised their requirements for teacher credentials in the past two decades, asking for at least upper-secondary or postsecondary degrees. However, these educated teachers are the graduates of a poor-quality education and training system with low learning outcomes. Teachers in the region need support to compensate for low content knowledge. Data on teachers’ ability to master the curriculum are not available for a wide range of AFW countries, and those countries with available data indicate a low level of content knowledge. According to available Service Delivery Indicator data, the share of teachers with minimum subject knowledge in the region is 14 percent on average. Of the teachers in Nigeria, Togo, and Niger, 3.9 percent, 2.5 percent, and less than 0.1 percent, respectively, scored more than 80 percent on the combined mathematics and language test. Thus, despite their level of education, most of the teachers of those countries lack minimum subject knowledge of the curriculum they teach (figure 4.2). The same conclusion holds for pedagogical skills.
Well-educated teachers who lack subject content knowledge and pedagogical skills indicate that the preservice training system is dysfunctional. The preservice training itself may also be insufficient and of low quality (too theoretical and likely misaligned with the needs in the classroom). Most of the time, there is no mechanism for coordination between the ministries of education and providers of teacher education to ensure that preservice teacher education programs align with new curricula.
4.1.2. Teacher Recruitment, Retention, Deployment, and Accountability

Despite significant expansion, teachers are not well deployed across schools, with schools in rural and high-conflict areas especially understaffed. Teacher absenteeism is a chronic problem, giving rise to “orphan” classrooms with no instruction while the school is in session. For example, 14.7 percent of teachers are absent at least once a week, and 14.4 percent are not in the classroom while in school. In many AFW countries, teacher recruitment is based on nontransparent and political factors rather than professional merit, and progression up the career ladder is either nonexistent or based mainly on paper qualifications and seniority rather than on professional growth and performance.

Over the period 2005–15, the size of the teacher workforce in AFW expanded faster than the corresponding global average. The number of teachers increased at an average annual growth rate of 5.3 percent in preschool education, 3.3 percent in primary education, and 5.9 percent in secondary education, much faster than the world averages of 3.4 percent, 1.4 percent, and 1.5 percent, respectively, but slightly less than the Sub-Saharan African average for primary (4.2 percent) and secondary education (7.6 percent). The secondary education teacher workforce in AFW in 2015 was two times its size in 2005; in primary and preprimary education, it was 1.6 and 1.8 times as large, respectively. The growth of the primary education teacher workforce almost matched the average annual growth of enrollment (3.1 percent). Across the region, the increase in primary education teachers simply maintained existing student-teacher ratios in AFW. In some countries, like Togo, Cabo Verde, and The Gambia, primary education enrollment growth was much faster than annual the increase of teachers.

Looking ahead, the region’s challenging demographics and need to universalize basic education imply continued rapid expansion of the teacher workforce. Projections suggest that the number of students between six and 12 years of age will almost double by 2030, which will require AFW countries to accelerate the recruitment and replacement of primary education teachers just to maintain already high student-teacher ratios. The region has a track record of growth upon which to build, but more must be done.

Despite the considerable growth in the teacher workforce, teacher deployment across schools is highly inconsistent in the region. Some AFW countries fail to ensure that schools are staffed according to the size of their enrollments. In countries like Benin, Ghana, Cameroon, Togo, Senegal, Chad, Burkina Faso, and Côte d’Ivoire, understaffing is common in rural schools and those in high-conflict areas.

On average, 14.7 percent of teachers are absent at least once a week, which gives rise to “orphan” classrooms with no instructor available even while the school is in session. Across the five AFW countries implementing Service Delivery Indicator surveys (figure 4.3), absenteeism from school (classroom) among primary school teachers ranged from 14 percent (28 percent) in Mauritania (2017) to 23 percent (40 percent) in Togo (2013). Although most of the teacher absences were justified with legitimate reasons (justified leave, illness, maternity leave, training), there were no arrangements for substitute teaching in place; teacher absenteeism thus reduced instructional time for students and lowered student learning. Loss of instructional time combined with frequent absences among students further undermined learning. These teacher absenteeism patterns reflect challenges and opportunities for better teacher management at the school and system levels.

AFW has the world’s lowest shares of female teachers. The share of women in the region’s teacher workforce averages only 35 percent in primary education and 22 percent in secondary education, well below the world average of 53 percent or the overall Sub-Saharan African average of 31 percent (figure 4.4).

Women are also underrepresented in leadership positions. The position of headmaster in primary education is almost exclusively reserved for men (figure 4.5). Relatively few primary education students in schools in AFW are managed by women.

4.1.3. Teacher Professional Development

In-service teacher training is fragmented without structured continuous professional development. It is sporadic, mostly donor funded, and theoretical in nature, focused on broad pedagogic topics. It does
not remediate teachers’ low content knowledge and pedagogical skills. Most teacher training programs have disappointing results, with teachers usually travelling to a training center for a couple of days only to receive an abstract lecture largely unrelated to their weaknesses or their classroom reality. Too few teachers in AFW have even minimally adequate levels of knowledge: in Nigeria’s Kaduna state, only a third of the 33,000 teachers who took a statewide competency test passed it, and in Togo, fourth-grade teachers tested for content knowledge were able to answer correctly only half the questions on language and only a third on mathematics (Bashir et al. 2018).
Unfortunately, low student learning levels are a complex problem that requires interventions targeting several different thematic areas, including curricular design and lesson plans, textbook design, assessment tools, and teacher coaching and support. These areas need not only strong design and implementation but also alignment, a concept sometimes referred to as “instructional coherence.” Limited bureaucratic or implementation capacity is one reason education systems in AFW struggle to address this complex challenge effectively. These thematic areas are often managed by different agencies or units with varying levels of coordination. For example, the second-grade reading textbook that six students are sharing may not align with the teacher’s lesson plans. Teachers may also lack clear support on how to teach better (Crouch 2020). In AFW, countries must address deficiencies in these thematic areas while also working to align them.

Well before the pandemic, most national curriculums in AFW and around the world were characterized as overambitious and lacking pedagogical approaches that strengthen socioemotional skills. Tanzania, for example, used to cover an overly ambitious nine subjects in its curriculum for first and second grade before streamlining it in 2015 to focus on the 3Rs: Reading, Writing, and Arithmetic. In secondary schools, the curricula of many AFW countries date back to the 1970s and have not undergone any fundamental reform. Back then, curricula targeted a minority of young people, namely those who were well prepared and supported for schooling; these curricula no longer reflect the needs or abilities of students entering the system through the provision of free basic education (Bashir et al. 2018) or the needs of these students’ teachers. Global evidence suggests that the simplification of curricular goals has helped teachers prioritize the most important topics and achieve greater understanding and proficiency among students (Pritchett and Beatty 2012).

In addition, many AFW countries lack an explicit plan for a scope, sequence, and progression of instructional activities that is backed by the science of teaching. For example, AFW countries tend to assign insufficient class time to teaching reading, language, and literacy (the research suggests at least an hour and a half every school day to help students learn to read with comprehension). The repetitive nature of the instruction is also geared more toward teaching facts as opposed to skills and competencies. Teacher and student absences and tardiness contribute to additional time lost. Especially with the pandemic, teachers can be overwhelmed by teaching a standard complex curriculum while also trying to remediate COVID-19-related learning loss.

In this context, many governments are experimenting with various solutions and increasingly focusing on structured pedagogy interventions in foundational literacy and numeracy. At its simplest, structured pedagogy is a coordinated approach to align teacher lesson plans, student materials, teacher training, and ongoing support. Teachers can become real allies if reforms support their work and if they can observe an impact on improving children’s reading levels (Piper et al. 2018). Liberia, for example, combined structured lessons for teachers with observation and feedback by literacy coaches as part of the Early Grade Reading Assessment Plus program. There are other promising examples in AFW and across Sub-Saharan Africa.

![Figure 4.5. Percentage of Students in Schools Managed by Women](image-url)
4.2. Transforming the Teaching Profession

The long-term vision for AFW is to reshape the teaching profession into a socially valued, meritocratic profession with high professional standards. Since this transformation will take time, the strategy highlights key reforms that countries can implement in the near-term to move the region closer to this vision and shift the focus to teacher effectiveness.

Improving teacher effectiveness is part of a broader agenda to enhance the impact of teachers on student learning. Students of skillful teachers learn more and attain more years of schooling; such students go on to earn higher incomes as working adults, and the girls among them are less prone to teenage pregnancy (Chetty, Friedman, and Rockoff 2014; Hanushek 2011). Skillful teachers are also valuable for imparting socioemotional skills to their students (Villasenor 2017).

Deepening teachers’ professional expertise and effectiveness warrants especially close attention because of the enormous influence teachers have on their students. Empirical evidence from developing countries demonstrates that the quality of a teacher also affects other learning-centered interventions and inputs, such as providing textbooks. Teacher knowledge, teaching practice, and instructional time are key determinants of student learning. In addition, it is very important that both the habits and mindsets of teachers reflect a belief in students’ abilities. Going from a low-performing teacher to a high-performing teacher increases student learning dramatically. The effect has been measured from more than 0.2 standard deviations in Ecuador to more than 0.9 standard deviations in India—the equivalent of multiple years of business-as-usual schooling.

Both teaching and teachers matter. A teacher’s credentials (experience, certificate, or training), while usually considered when hiring and promoting teachers, are not consistently associated with higher student achievements. Instead, evidence indicates that pedagogical practices and interactions with their students have a much stronger influence on student outcomes. Specifically, students who are taught by teachers who prepared lesson plans, asked many questions, and quizzed them on past material are more likely to perform better than students whose teachers did not. Moreover, recent developments in technologies for education and the unique challenges imposed by COVID-19 are offering alternative ways to help teachers teach students how to learn.

To anchor a collective understanding of teacher effectiveness, the World Bank put forth five principles as part of its Global Platform for Successful Teachers (Béteille and Evans 2018). These five principles, which are distilled from a review of evidence relevant for low- and middle-income countries on teacher effectiveness, are presented in figure 4.6. These principles can help ensure coverage of key issues for teachers in a structured and comprehensive approach for any AFW country.

The long-term goal throughout the region must be to make teaching a more attractive career. Higher status for teachers is correlated with better student performance. However, improving the prestige of teaching is challenging. Perhaps the most complex obstacle, especially in low-resource AFW countries, is enhancing teacher compensation policies to resemble those in professions with higher status. Aside from compensation reform, AFW countries can address the social perception of teaching as a career, raise the requirements for entry into the teaching profession, address the large number of nonpermanent teachers with lower salaries and poor employment conditions, and create career ladders linked with performance and competencies. Key actions to consider include conducting campaigns to promote the social value of teachers’ work, instituting incentives to attract the best candidates to teaching, ensuring fair pay compared to other professions and across teachers doing the same job, ensuring good working conditions, and developing a career ladder for teachers and principals with salary increases and promotions linked to better practices and professional development. In Nigeria, for instance, the government is formulating a comprehensive human resource strategy for skills development, including policies that address critical challenges such as working conditions, career progression, and incentives for technical teachers and instructors. Sierra Leone is establishing communities of practice for pedagogical teachers to reduce the isolation of the teaching profession and improve peer-to-peer support.

For AFW in the near term, the strategy prioritizes high-impact interventions to strengthen the teacher
workforce. Specifically, as the following sections discuss, the strategy aims to (a) improve the quality of new teachers in the pipeline; (b) attract more women to teaching; (c) recruit teachers based on merit, deploy them based on needs, and strengthen career management; and (d) support teachers with structured pedagogy.

4.2.1. Improving the Quality of New Teachers in the Pipeline

Investing in practical preservice training is crucial to prepare the next generation of professionals. The curriculum for teacher preparation at teacher training colleges needs to incorporate authentic classroom training. In Mali, for example, efforts are underway to recruit only future teachers who are at the bacca-laureate level (completion of high school), extend the duration of initial teacher training from two to three years, and align the curricula of teacher training programs with those of primary and secondary education. Recent evidence based on test score data for Togo and Guinea indicate that, while teachers need preservice training, short four-to-six-month courses provided to teachers with good general education, together with support in the first year on the job, could be as effective as programs of longer duration. Using such bootcamp-like approaches can allow governments to draw upon pools of potential teachers to expand supply of schooling more quickly.

The World Bank will help governments define their expectations of teachers and help new professionals confidently enter classrooms by ensuring that preservice teacher training teaches pedagogical skills, classroom management, and the ability to respond to personalized feedback. In many AFW countries, teacher training institutions are not very selective, offer training that is too theoretical, and give aspiring teachers few opportunities for classroom practice. This approach contrasts with what is found in high-performing countries, where strong candidates seek entry into the profession and are prepared with practical experience.

Entry into preservice teacher training must be selective so that the best candidates enter the teaching profession. Successful education systems select candidates based on candidates’ motivation to become teachers as well as on candidates’ skills (for example, by reviewing high school graduation examinations and matriculation examinations, considering social and communication skills, and observing candidates’ skills in classroom settings). Governments should tightly regulate preservice education.

Another crucial step is to support teacher training colleges in introducing extensive practice in schools as part of the training curriculum. Without that experience, teachers struggle when they confront classroom challenges for the first time after graduation, often without any mentoring or guidance on how to meet those challenges.

Recruiting and retaining strong teachers is an essential foundation for improving students’ educational outcomes, especially in underresourced settings. In many AFW countries, criteria for recruiting teachers are murky and based on political factors rather than

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Figure 4.6. Five Principles to Build an Effective Teachers’ Cadre

- **THE 5 PRINCIPLES**
  - **PRINCIPLE 1:** Make teaching attractive
    - Career progression structures
    - Working conditions
    - Profile of career
  - **PRINCIPLE 2:** Improve preservice education
    - Trainee’s selection
    - Links to higher education institutions
    - Practical training
  - **PRINCIPLE 3:** Manage teachers better
    - Meritocratic selection
    - Teacher allocation
    - Monitoring & feedback systems
  - **PRINCIPLE 4:** Provide high-quality professional development and school leadership
    - In-service professional development
    - Detailed lesson plans
  - **PRINCIPLE 5:** Use technology wisely
    - Tailor instruction to students need
    - Reform professional development
    - Improve management

Source: Saavedra 2019.
professional merit; teachers earn promotions, if at all, based on paper qualifications and seniority rather than evidence of effective teaching. Setting minimum qualification requirements ensures that incoming teachers possess the key content and pedagogical skills to perform the job. Well-prepared teachers are also more likely to be effective and remain in the profession (Podolsy et al. 2016). Given teacher shortages, some countries in AFW tend to lower or remove the entry qualifications for teachers to rapidly expand the workforce (Bashir et al. 2018). However, this approach could lead to a series of long-lasting detrimental effects on the education system, including low teacher effectiveness, high teacher turnover, increased inequality in student learning, and low prestige of the teaching profession.

To perform well, teachers need to know what is expected of them in the first place. Thus, recruitment and deployment policies should establish the expectations for teachers to guide teachers’ career choices and development (World Bank 2013). Job descriptions need to clearly specify the duties and expectations of teachers. The descriptions should cover teachers’ rights and responsibilities in various aspects ranging from instruction, teacher training, and community engagement to posting, transfers, and career advancement. All the details need to be developed and reviewed jointly by the relevant departments within the ministry. At the same time, the expectations should align with both financial incentives and professional support, especially in rural and remote areas. For instance, previous evidence has demonstrated that hardship allowance alone could only keep teachers at their posts; it did not improve their performance (Chelwa et al. 2019; Pugatch and Schroeder 2018).

One important step is to incorporate authentic classroom training into the courses offered at teacher training colleges. Preservice teacher preparation is often merely theoretical and detached from actual classroom conditions. In-service training for professional growth tends to be fragmented and sporadic, if it exists at all. While top-performing countries typically have preservice programs that last for two or more years, a more feasible solution for AFW countries, especially in light of the increasing and immediate demand for more teachers, might be to combine shorter preservice programs with more intensive in-service training opportunities. Teach For America and its sister programs around the world also rely on relatively short preservice programs that then feed into structured and continuous in-service training.

Unfortunately, teachers in most of AFW lack the support they need to improve their teaching and master new skills. While some evidence-backed professional development programs do exist in the region, many teachers lack access to high-quality teacher professional development. Recent research, evidence, and experience have clarified what works for effective teacher professional development. These findings, which emphasize a tailored, practical, focused, and ongoing approach, must inform the design of any teacher professional development framework and its implementation on the ground. The World Bank’s new Coach initiative, which focuses on improving in-service teacher professional development, will be an important resource for the region and the implementation of this strategy.

4.2.2. Attracting More Women to Teaching

Attracting more female teachers to the teaching profession seems to be an effective way to improve girls’ performance. In Korea, using random assignment of students to Korean middle school classrooms, researchers found that the female students performed substantially better on standardized tests when assigned to female teachers (Lim and Meer 2015). 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). Female teachers are also good role models for young girls. Evidence suggests that female teachers may increase girls’ likelihood of staying in school, heighten their aspirations, and lower their likelihood of being subject to violence (Evans and Nestour 2019). In addition, the teacher labor market is important for women as it promotes gender equality: in some countries, teaching is one of the few high-skilled professions that is accessible to women. To increase the number of female graduates from teacher training colleges, governments must increase girls’ enrollment and completion at secondary education. In addition to campaigns to promote the social
value of teachers’ work, incentives can encourage high-achieving students to pursue a career in teaching. In Sierra Leone, for example, the government has provided scholarships for girls to complete their study at teacher training colleges. Finally, well-structured teacher career frameworks and strategies, including for female teachers and head teachers, should be developed in the long run. Incentives are also an option to attract the best candidates to teaching. In rural Nigeria, housing has been provided for female teachers.

4.2.3. Merit-Based Recruitment, Needs-Based Deployment, and Teacher Career Pathways

Teacher human resource management reforms are essential to elevate the quality of education. Depending on a country context, these reforms may include ensuring meritocratic recruitment; creating career progression pathways; clearly defining compensation and contracts; regulating teacher deployment, especially for disadvantaged areas; and setting expectations for professional behavior. Some AFW countries have already started tackling these issues. For example, Cameroon has introduced comprehensive teacher reform, including meritocratic teacher recruitment and clearer deployment policy for newly recruited teachers to ensure teacher availability in disadvantaged areas.

The World Bank will support governments, with interventions at both the school and system levels, in addressing teacher absenteeism and rationalizing teacher deployment. To tackle unauthorized teacher absences, heads of schools can work closely with the local community. Authorized absences—such as for personal leave, professional training, or official duties outside the school—are surprisingly prevalent in AFW. To minimize their occurrence requires intervention at the policy level, for example, by creating and supporting a system of substitute teaching arrangements, if budgets permit.

Sound human resource management practices to manage the teacher workforce are essential to tackling the learning crisis. The practices appropriate in each country will 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 already initiated reforms to better manage the teacher workforce. Cameroon, under its comprehensive primary teacher reform, for example, is recruiting new teachers based on merit and deploying the recruits according to new criteria that prioritize understaffed schools serving disadvantaged populations.

AFW countries need to develop well-structured career frameworks for their teachers promptly, as the teaching force is expanding rapidly and becoming more heterogeneous. The ideal frameworks should be comprehensive to value teachers of different types (such as civil service, contract, and para teachers) and teachers with different academic and demographic characteristics. The planning department and human resource department should work together to take stock of the current teaching force and prospective teachers. Then these departments should develop realistic roadmaps to match supply with demand and to offer different career opportunities within the system for various time intervals. They should also collaborate with teacher unions or associations to gain their buy-in for the implementation of the career frameworks with sound human resource management practices. A smooth and successful implementation requires continuous and fair professional support and evaluation for teachers at different levels, which could be a major barrier for many education systems.

4.2.4. Supporting Teachers with Structured Pedagogy

Supporting AFW teachers with structured pedagogy—a package of instructional materials and continuous teacher training, coaching, and mentoring—has proved to boost student learning. Teacher subject knowledge is essential for learning as even the most effective curriculum cannot be taught if teachers do not fully understand it. To be effective, teachers must first know and understand the lessons they are assigned to teach. Structured pedagogy addresses this weakness by providing scripted lessons and training teachers on using those lessons well. It ideally
mitigates skill gaps by providing detailed guidance on teaching specific content and training on how to carry out instructional activities. Following the best practices promoted in lesson plans, teachers would improve the quality of their instruction, preferably without compromising their agency.

**Implementing a structured pedagogy program requires a strong commitment of stakeholders inside and outside the education system.** Each component involves various departments and professional personnel in the ministry of education and local offices such as inspectors, pedagogical advisors, school principals, pedagogical leaders, teachers, parents, the local community, and so on. In low-capacity settings, emphasis on enhanced implementation capacity is key. In addition, from the development of teaching and learning materials to teacher training and monitoring, and from the deployment of teachers to community engagement, every step needs to be well connected and coordinated. Thus, an effective delivery system is crucial for a successful structured pedagogy program.

**Previous studies have commonly pointed out that ensuring functional and efficient service delivery is the biggest implementation challenge.** Many governments lack the capacity to implement programs with fidelity. For almost all existing programs, donors have brought in their own administrative teams to implement the programs, with governments playing a supportive role. However, many programs have experienced high teacher turnover rates, delays in the distribution of teaching and learning materials, and insufficient training and coaching staff in rural and remote areas. These issues undermine the programs’ effectiveness. To some extent, identifying and preparing a government-led functional service delivery system may be key to ensuring the feasibility and sustainability of a structured pedagogy program.

**An increasing number of developing countries have adopted structured pedagogy in early grades, which is among the most cost-effective interventions (Angrist et al. 2020),** and many have demonstrated encouragingly positive effects on student performance (Eble et al. 2021; Fazzio et al. 2021; Kim et al. 2019). Similarly, multiple AFW countries, as shown in table 4.1, are implementing or have benefited from structured pedagogy programs to increase early literacy and numeracy skills. Particularly, a cluster-randomized trial was conducted in The Gambia to evaluate literacy and numeracy interventions for primary-age children in remote parts of the country. The intervention combined para teachers delivering after-school supplementary classes, scripted lesson plans, and frequent monitoring focusing on improving teacher practice (coaching)—all core elements of structured pedagogy. After three academic years, Gambian children receiving the intervention scored 46 percentage points (3.2 standard deviation units) better on a combined literacy and numeracy test than control children (Eble 2020). A similar intervention previously demonstrated large learning gains in a cluster-randomized trial in rural India. Another example is Tusome (“Let’s Read” in Kiswahili) in Kenya. Tusome is a flagship partnership between the United States Agency for International Development and the Ministry of Education. Tusome focuses on four key interventions: enhancing classroom instruction, improving access to learning materials, expanding instructional support and supervision, and collaborating with key system-level literacy actors. Students made substantial gains in English (the proportion of nonreaders fell from 38 percent to 12 percent) and Kiswahili (the proportion of nonreaders fell from 43 percent to 19 percent).

**Rigorous impact evaluations in Guinea-Bissau (Fazzio et al. 2020) and in Kenya and The Gambia (World Bank 2020a) confirmed the effectiveness of the approach in boosting test scores.** In Kenya, the government has now started to scale the approach nationwide (Crouch 2020). In Edo State, Nigeria, the government is leveraging technology to implement structured pedagogy, using tablets to track teacher progress in delivering scripted lessons in real time and customizing on-site coaching and mentoring for each teacher.

### 4.3. Student Readiness to Learn in the Region

**Many children arrive at school with severe learning handicaps.** More than a third of AFW children under age five are stunted, a condition with long-lasting adverse consequences for their capacity to learn.
Across the region, too few young children are receiving routine immunizations (75 percent) or a minimum acceptable diet (10 percent). Far too many children are receiving insufficient support and stimulation at home: 98 percent of children in AFW do not have three or more books at home and 84 percent of young children experience high levels of violence at home. On average the gross enrollment rate for ECE in the region is only 32 percent. Only five countries in the region offer free ECE (Benin, the Republic of Congo, Equatorial Guinea, Ghana, and Togo), of which only three are compulsory (Equatorial Guinea, Ghana, and Togo); only three of those countries have made ECE compulsory (Equatorial Guinea, Ghana, and Togo). The following discussion highlights the key barriers that impede children’s readiness to learn in the region.

4.3.1. Enrollment in Early Childhood Education Services

Limited access to ECE confines children’s success in acquiring essential foundational knowledge, undermining later learning outcomes. The PASEC 2014 results show large gaps in performance between children who have and who have not attended a preprimary institution. On average, 40 percent of second-grade children who attended a preprimary institution demonstrated the minimum competency in literacy, compared to only 18 percent of second-grade children without preprimary experience. These impacts continue throughout children’s lifetime and carry forward to the next generation. In a landmark study in Jamaica, researchers evaluated a nutrition and early stimulation program and found that children who had been enrolled in the program (from nine to 24 months old) were earning 25 percent more than their peers two decades later (Gertler et al., 2014). Despite these well-documented benefits, many countries around the world continue to underinvest in early childhood.

Enrollment in ECE and other critical services that promote early childhood development are limited in AFW today (figure 4.7). Expanding access to quality ECE presents a game-changing opportunity to boost learning, reduce inequality, and set children on a path toward greater success throughout life. Holistic investments in early childhood are necessary to improve children’s longer-term outcomes.

The benefits of quality early learning include improved school readiness, reduced repetition and dropout rates, and higher achievement in school. These benefits have been amply documented in the literature (Engle et al. 2011; Heckman and Masterov 2007). Quality early learning opportunities promote cognitive

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**Table 4.1. Structured Pedagogy Programs in Western and Central Africa**

<table>
<thead>
<tr>
<th>Education system</th>
<th>Outcomes</th>
<th>Scale</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gambia, The</td>
<td>Improved early grades literacy and numeracy</td>
<td>Medium scale with more than 2,000 student</td>
<td>Eble et al. (2021)</td>
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<td></td>
<td>skills</td>
<td>beneficiaries</td>
<td></td>
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<tr>
<td>Ghana</td>
<td>Early literacy in 11 national languages</td>
<td>Large scale with more than 1 million student</td>
<td>FHI 360 (2017)</td>
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<tr>
<td></td>
<td>and early numeracy</td>
<td>beneficiaries</td>
<td></td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>Improved early grades literacy and numeracy</td>
<td>Medium scale with more than 2,000 student</td>
<td>Fazzio et al. (2021)</td>
</tr>
<tr>
<td></td>
<td>skills</td>
<td>beneficiaries</td>
<td></td>
</tr>
<tr>
<td>Liberia</td>
<td>Improved early grades literacy and numeracy</td>
<td>Large scale reaching more than 1,000 schools</td>
<td>King et al. (2015)</td>
</tr>
<tr>
<td></td>
<td>skills</td>
<td></td>
<td></td>
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<tr>
<td>Mali</td>
<td>Improved literacy skills in grades 1–2 but no</td>
<td>Medium scale with more than 3,000 student</td>
<td>Spratt et al. (2013)</td>
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<tr>
<td></td>
<td>effect on grade 3</td>
<td>beneficiaries</td>
<td></td>
</tr>
<tr>
<td>Nigeria, Bauchi, and</td>
<td>Improved access to school and early grades</td>
<td>Large scale with more than 1 million student</td>
<td>Campos (2017); RTI (2016)</td>
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<td>literacy skills in Hausa</td>
<td>beneficiaries</td>
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<td>Senegal</td>
<td>Improved early grades literacy skills in 3</td>
<td>Large scale reaching more than 1,000 schools</td>
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</table>
and socioemotional skills that help children build language and preliteracy skills that can support them through the rest of their education. Early literacy skills such as word recognition, alphabet knowledge, and phonological awareness are predictive of later literacy skills and will be important in any interventions to tackle learning poverty (National Early Literacy Panel 2008; Scarborough 1998). A recent analysis of the Programme for International Student Assessment 2012 test scores showed that 15-year-olds in low-income and middle-income countries who had attended ECE for more than a year scored 0.67 standard deviations higher in reading and 0.83 standard deviations higher in mathematics than children who had no ECE (controlling for family socioeconomic status); these results are equivalent to more than two years of additional schooling (Garcia, Devercelli, and Valerio, forthcoming). A recent survey of adults in 12 lower- and middle-income countries found that those who had attended childcare and/or ECE programs stayed in school on average 0.9 years longer (controlling for family background and other factors) and tended to enroll in higher-skilled professions (Shafiq, Devercelli, and Valerio 2018).

Figure 4.7. Early Childhood Development in Western and Central Africa and the World

Source: Original calculations based on World Bank and UNICEF databases from 2014 onward.
Note: For AFW and the world, the figure represents the average across countries with data available from 2014 onward.

In AFW, too many young children face daunting underinvestment in their early years with lifelong and far-reaching consequences for individuals as well as for education systems and countries’ human capital. Increasing investment in early childhood in AFW is a powerful lever with which to address learning poverty and build human capital. Developing high-quality ECE institutions that reach all learners is key to successfully combating long-term negative impacts.

**Countries in AFW have made substantial progress in improving early childhood outcomes, but much more remains to be done.** In the last two decades, the average under-five mortality rate across the region has decreased by half, from 16 percent to 8 percent. Stunting has decreased from 37 percent to 26 percent, and enrollment in ECE institutions has increased from 14 percent to 20 percent. Nonetheless, across AFW, many young children face multiple risk factors that impede their growth, development, and future success in school and life.

The majority of AFW countries have fewer than 25 percent of young children enrolled in ECE programs. Access to ECE programs tends to begin around age three in most countries, lasting two to three years until the start of primary school. Efforts to expand access in
recent years have focused on one year of preprimary education to encourage at least one year of participation. As of 2019, the region’s average preprimary attendance rate in the final year before primary school was 47 percent. Despite some progress in ECE expansion efforts, much more remains to be done. Children from poorer households are much less likely to have access to preprimary school than children from wealthier households (UNICEF 2019). In this region, almost 80 percent of children in the richest quintile are attending at least one year of organized early learning compared to only 34 percent of children in the poorest quintile. Disparities in access are also exasperated by factors such as household location, gender, language, ethnicity, and disability; these factors tend to widen the inequalities that young learners face even before they start primary school. Educational access in AFW suffers from additional disruptions because of long-term violence, displacement, and insecurity. Trauma and toxic stress in the early years have lifelong impacts; these early risks, exposure to violence, and deprivation dramatically affect young children’s development and future outcomes.

4.3. Provision of Early Childhood Services

Many children are attending private ECE institutions led by community-based, faith-based, low-cost private or for-profit providers. The role of private providers varies throughout the region, with private providers covering 10 percent of enrollment in Niger and 81 percent in Mauritania, with a regional average of around 50 percent (table 4.2). This high proportion of privately provided ECE reflects the limited availability of public options in some places, as well as parental preferences, and it points to the need for strong efforts from the public sector to ensure quality and equitable access.

However, access is not the only issue: in many countries with wide performance gaps, student-teacher ratios are high (in Togo, 72:1) or the percent of qualified teachers is low (in Chad, 24 percent). Many teachers at the preprimary levels lack the minimum levels of qualifications (approximately 50 percent on average), and teaching quality deteriorates as the number of students within a classroom grows (40:1 on average across AFW) (figure 4.8).

4.4. Enhancing Student Readiness to Learn

Expansion efforts to reach all early learners with quality ECE will require substantial investments. Current spending on preprimary education is insufficient. Despite nearly doubling the amount of funding allocated to ECE over the past several years, AFW has spent less than one-tenth of a percent of GDP on preprimary education—substantially less than investments in other levels of education, based on calculations from the UNESCO Institute for Statistics database. Across the region, government expenditure on preprimary as a percent of education spending is only 2.5 percent, and per preprimary student spending is often low. For example, in 2017, the government of Mali spent only US$0.50 per preprimary student, Mauritania spent US$3, and Burkina Faso spent US$6 compared to US$24 in Benin per preprimary student (UNESCO Institute for Statistics 2017).

While increased spending is undoubtedly necessary to expand access to preprimary education, countries with high overenrollment rates in early primary grades that shift resources to preprimary education could enjoy some efficiency gains. One-third of all AFW countries have first-grade overenrollment rates nearing 30 percent, meaning that 30 percent of all children in first grade are of the wrong age (either older or younger than they should be). Emerging research suggests that this problem is due to a phenomenon of underage enrollment in primary school; once enrolled, children tend to repeat first grade once or twice and sometimes second grade as well. This problem is global, and figure 4.9 shows the data for the 39 countries in the world with the highest overenrollment rates in first grade. Eight of these countries are in AFW: Benin, Cameroon, Chad, Guinea-Bissau, Liberia, Mauritania, Sierra Leone, and Togo. Countries with high overenrollment rates in first grade largely overlap with countries with very low preprimary enrollment rates.

In some countries, household surveys seem to suggest that parents are enrolling their children in primary school early because it is free and no free preprimary option is available. This underage enrollment and early repetition results in governments wasting as much as 5 to 10 percent of education budgets each
year as they provide 1.2 additional years of schooling per student (due to repetition) (Crouch et al. 2019).

There is a growing—and positive—body of rigorous evidence from around the world that offers insight into how countries can provide high-quality ECE at scale. Emerging good practices and high-impact interventions, many of which are already happening somewhere in AFW, include (a) seeking synergies with other sectors, (b) leveraging parents and communities, and (c) involving nonstate actors.

### Table 4.2. Access to Early Childhood Education by Country

<table>
<thead>
<tr>
<th>Country</th>
<th>Preprimary Gross Enrollment Rate (%)</th>
<th>Net Attendance Rate One Year Before Primary (%)</th>
<th>ECE Official Entrance Age</th>
<th>ECE Duration</th>
<th>ECE Private School Provision (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benin</td>
<td>24%</td>
<td>83%</td>
<td>4</td>
<td>2*</td>
<td>34%</td>
</tr>
<tr>
<td>Burkina Faso</td>
<td>6%</td>
<td>19%</td>
<td>3</td>
<td>3</td>
<td>79%</td>
</tr>
<tr>
<td>Cabo Verde</td>
<td>73%</td>
<td>81%</td>
<td>3</td>
<td>3</td>
<td>59%</td>
</tr>
<tr>
<td>Cameroon</td>
<td>36%</td>
<td>44%</td>
<td>4</td>
<td>2</td>
<td>67%</td>
</tr>
<tr>
<td>Central African Republic</td>
<td>3%</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chad</td>
<td>1%</td>
<td>14%</td>
<td>3</td>
<td>3</td>
<td>74%</td>
</tr>
<tr>
<td>Congo, Rep.</td>
<td>13%</td>
<td>30%</td>
<td>3</td>
<td>3*</td>
<td></td>
</tr>
<tr>
<td>Côte d’Ivoire</td>
<td>8%</td>
<td>22%</td>
<td>3</td>
<td>3</td>
<td>28%</td>
</tr>
<tr>
<td>Equatorial Guinea</td>
<td>43%</td>
<td>44%</td>
<td>4</td>
<td>2**</td>
<td></td>
</tr>
<tr>
<td>Gabon</td>
<td>35%</td>
<td></td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Gambia, The</td>
<td>43%</td>
<td>61%</td>
<td>3</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Ghana</td>
<td>117%</td>
<td>87%</td>
<td>4</td>
<td>2**</td>
<td>44%</td>
</tr>
<tr>
<td>Guinea</td>
<td>15%</td>
<td>42%</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Guinea-Bissau</td>
<td>7%</td>
<td>40%</td>
<td>3</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Liberia</td>
<td>125%</td>
<td>79%</td>
<td>3</td>
<td>3</td>
<td>48%</td>
</tr>
<tr>
<td>Mali</td>
<td>7%</td>
<td>45%</td>
<td>4</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Mauritania</td>
<td>10%</td>
<td>20%</td>
<td>3</td>
<td>3</td>
<td>81%</td>
</tr>
<tr>
<td>Niger</td>
<td>7%</td>
<td>23%</td>
<td>4</td>
<td>3</td>
<td>10%</td>
</tr>
<tr>
<td>Nigeria</td>
<td>42%</td>
<td>61%</td>
<td>5</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Senegal</td>
<td>17%</td>
<td>16%</td>
<td>3</td>
<td>3</td>
<td>44%</td>
</tr>
<tr>
<td>Sierra Leone</td>
<td>19%</td>
<td>42%</td>
<td>3</td>
<td>3</td>
<td>29%</td>
</tr>
<tr>
<td>Togo</td>
<td>25%</td>
<td>95%</td>
<td>3</td>
<td>4**</td>
<td>31%</td>
</tr>
</tbody>
</table>

Source: Original calculations based on World Bank database from 2014 onward.  
Note: ECE = early childhood education.  
* = free, ** = free and compulsory.

#### 4.4.1. Seeking Cross-Sector Synergies and Investing in Nutrition, Health, and Early Stimulation

Seeking synergies with other sectors can promote cross-sectoral investments in nutrition, health, early stimulation, and protection of newborns from stress in the first 1,000 days of life. Young children need support to develop holistically across physical, socioemotional, and cognitive domains. To foster holistic development, countries need to consider a myriad of ways to support young children and their families. Several opportunities are available to leverage existing sectoral entry points. The poor nutrition, health, and early stimulation
outcomes in early childhood are often a result of the disconnect between health, nutrition, social protection, and education interventions at the community level and at the policy and planning level. Collaboration between the relevant sectors will help strengthen alignment for programs dedicated to supporting young children. For example, promoting cross-sectoral partnership between early childhood development and the gender sector is important for families, particularly women who are entering the labor force and trying to find affordable and quality childcare. Links and continuity across other human development sectors for early childhood development will help promote positive behavior change through parenting programs and connections to cash transfers. Additionally, nutrition and health programs within communities are powerful entry points to improve young children’s outcomes, in many cases offering affordable options by piggybacking on existing programs. Synergies across sectors can be explored at the national and subnational levels of government as well as within the World Bank’s portfolio. For example, the Mauritania Social Safety Net project provides conditional cash transfers to vulnerable families to help pay for their children’s health, nutrition, and education. The program will reach over 45,000 families to develop an economic inclusion scheme and encourage community participation in good early childhood development practices. Senegal’s Investing in Early Years for Human Development is a multisectoral project that will reach 2.5 million children and parents through integrated community-based nutrition and early stimulation programs. It is expanding access to...
preprimary education while scaling quality, reaching over 210,000 children from formal preschools, Koranic preschools, and community-based programs.

4.4.2. Leveraging Parents and Communities: Encouraging Reading at Home

Limited learning opportunities for children at home and at school drive low levels of literacy and numeracy. Increasing opportunities for children to read and experience other early stimulation at home could dramatically improve a series of outcomes critical to later learning outcomes, including vocabulary and early literacy and numeracy skills. In fragile and conflict situations in particular, support from engaged parents and caregivers can mitigate the disruptions, stresses, or trauma that children experience. There are a number of ways to foster children’s development through parents, including leveraging parents’ participation in existing community-based programs (such as women’s groups, religious organizations, microfinance organizations, agricultural cooperatives, or cash transfer programs). The Reading for All Children and Read@Home programs encourage parental and community engagement to enhance early grade reading and learning through reading materials available both at home and in school. Both programs also promote accountability and ownership for parents and the community. A recent study looking at 35 countries of varying income levels showed that having at least one children’s book at home almost doubled the likelihood of the child being on track in literacy and numeracy (Manu et al. 2019). Under the World Bank umbrella, the Read@Home program delivers reading and learning materials to families in hard-to-reach homes and helps parents to engage with their children to increase reading at home; it is active in Senegal, Cameroon, and São Tomé and Príncipe.

4.4.3. Involving Nonstate Actors, Including Community-Based Early Childhood Development

The main challenge for widespread and equitable access to quality ECE is limited preprimary facilities, particularly in rural and remote areas. Online learning, interactive audio instruction, and other remote learning programs are limited or nonexistent in most AFW countries. It is important to promote different types of provision and to engage with a variety of stakeholders. Different types of provision include community-based early childhood development centers; faith-based programs; private preprimary schools; public preprimary school; childcare facilities; safe learning spaces in conflict zones; and home-based and remote learning strategies, including Read@Home and television, radio, and internet-based edutainment. Combining remote learning options with scaling of ECE centers attached to primary schools could enhance access to preprimary education and reduce the cost of schooling in the region. The Côte d’Ivoire Education Service Delivery Enhancement Project (P163218) focuses on preprimary teacher training and expanding access to community-based ECE in partnership with UNICEF. The Burkina Faso Education Access and Quality Improvement Project found a cost-effective way to expand access to ECE in remote areas and in times of conflict: interactive audio instruction. The program aligns with the national curriculum standards, and the government will also use interactive audio instruction to provide untrained teachers with continuous guidance and reinforcement, linked with a project-designed system of teacher certification, opening a cost-effective, practical option for teacher training in rural areas. The Gambia’s Education Support program developed a play-based curriculum annexed to primary schools and through community-based centers. The program will aim to reach over 32,000 children in early childhood development programs and develop a quality standards metric to support teacher training and curriculum development. An impact evaluation comparing the two models found better learning outcomes in the annexed approach. Zanzibar’s Radio Instruction to Strengthen Education program trains community teachers to teach government curriculum competencies in nonformal settings for young children unable to access school using interactive audio instruction. This program has been running for more than a decade and has reached over 35,000 children, leading to the successful establishment of a tech-based distance learning division within the Ministry of Education. A follow-up evaluation found that students of the program demonstrated better mastery of grade-level concepts, with girls showing greater overall growth, than students who did not participate. Outside the region, the Aga Khan Early Childhood Development program in East Africa established community-based preschools. These preschools are often affiliated with
mosques and led by school management committees made up of parents and community members. This program has reached more than 60,000 children, successfully providing a better learning environment and developing a detailed costing model.

### 4.4.4. Considering Other High-Impact Interventions to Improve Children’s Readiness to Learn

**AFW countries must ensure continuity between ECE and education sectors.** Service delivery for ECE is often fragmented, which exacerbates quality and planning challenges. The development of robust and effective quality assurance systems will help countries to provide stimulating environments. To develop such systems, most countries need a more formal integration of ECE into the education sector along with efforts to ensure continuity in curriculum, teacher training, and other aspects of quality, planning, and finance between preprimary education and basic education. An impact evaluation comparing the two models found better learning outcomes in the annexed approach.

**AFW countries should invest in quality while scaling access.** For learning to be effective at school, teachers need to receive specific training directly related to early learning and the development and specific needs of young children. ECE teachers should be trained to teach children in reading and learning in their local language. Developing flexible training pathways can provide those entering the workforce with limited formal education alternative training to gain the requisite skills. A flexible and realistic approach will be necessary in most countries to help upscale existing workforces, which, though not formally accredited, are reservoirs of talent, experience, and earned knowledge. For most countries, the temptation will be to focus on investments in physical infrastructure; the literature and evidence from countless countries, however, make clear that a responsive classroom environment (regardless of the physical structure in which learning takes place) is the most important area for investment. Where countries choose to invest in construction, it is important to incorporate affordable, sustainable, environmentally responsive features that respond to local needs. Ghana’s Quality Preschool program focuses on improving school readiness for young children by providing high-quality ECE teacher training and increasing parental awareness. The program has trained teachers from over 200 schools in both the public and nonstate sectors to provide high-quality training and promote school readiness. After two years, the program demonstrated improved teacher professional development, classroom quality, and school readiness for young children.

An increasing number of developing countries have adopted structured pedagogy in early grades, with many having found encouragingly positive effects on student performance (Eble et al. 2021; Fazzio et al. 2021; Kim, Lee, and Zuilkowski 2019). Similarly, multiple countries in AFW (table 4.1) are implementing or have benefited from structured pedagogy programs to increase early literacy and numeracy skills. Particularly, a cluster-randomized trial in The Gambia evaluated literacy and numeracy interventions for primary-aged children in remote parts of the country. The intervention combined para teachers delivering after-school supplementary classes, scripted lesson plans, and frequent monitoring focusing on improving teacher practice (coaching)—all core elements of structured pedagogy. After three academic years, Gambian children receiving the intervention scored 46 percentage points (standard deviation of 3.2) better on a combined literacy and numeracy test than children in the control group (Ebel et al. 2020). A similar intervention previously demonstrated large learning gains in a cluster-randomized trial in rural India. Another example is Tusome (“Let’s Read” in Kiswahili) in Kenya. Tusome is a flagship partnership between the United States Agency for International Development and the Ministry of Education. Tusome focuses on four key interventions: enhancing classroom instruction, improving access to learning materials, expanding instructional support and supervision, and collaborating with key system-level literacy actors. Students made substantial gains in English (the proportion of nonreaders fell from 38 percent to 12 percent) and Kiswahili (the proportion of nonreaders fell from 43 percent to 19 percent).

### 4.5. Learning Resources and Gaps in Provision to Support Teaching and Learning

Books and learning materials as well as pedagogical tools enable effective teaching and learning. Their availability varies in AFW, both across and within countries, as the following discussion shows.
4.5.1. Gaps in the Provision of Textbooks and Learning Materials

Availability of textbooks is low in most AFW countries and particularly problematic in rural areas. High costs have made it difficult to provide high-quality, age-appropriate books for teachers and students. In Nigeria, for example, each textbook is shared by 17 students. In Togo, 23 students share a single textbook.

The long process of financing, developing, selecting, procuring, printing, distributing, and implementing textbooks poses a series of key challenges in AFW. All decisions are interrelated and need to be carefully balanced to create an enabling context for textbooks. Countries must develop and validate a context-specific textbook policy to clarify options and decisions at each step. Box 4.1 outlines the key challenges involved in getting textbooks into classrooms and utilized.

4.5.2. Gaps in the Provision of Educational Technology Tools

Given the magnitude and endemic nature of the region’s education challenges, business as usual is unlikely to move the needle. Innovation and leveraging the potential of technology will be key. Educational technology offers exciting possibilities for increasing access to learning inside and outside the classroom at all levels of the education sector. It can effectively manage and support teachers, ensuring they show up, teach the right material, assess children regularly, and offer targeted support at the right level of each child. Moreover, educational technology can do all of this at scale. It can enable school-, district-, and national-level decision-makers to make informed decisions based on data. Integrating new digital technologies also helps equip students with digital skills, which better prepares them for work in the digital economy.

While the possibilities are exciting and could be revolutionary, there are still many barriers to overcome before educational technology can have a real impact. Critical barriers include access to affordable and reliable internet connectivity and devices for schools, teachers, and students; availability of locally relevant and curriculum-aligned digital content; and acquisition of the necessary digital skills in all students and teachers. The AFW region, as well as Africa in general, has made tremendous strides in the adoption of technology. The mobile phone has achieved a median penetration of 99 percent. However, digital technology adoption remains quite low if measured by internet penetration and computers per household. Median internet penetration is 28 percent, almost half of global median penetration, and on computers, the situation is worse, with a Sub-Saharan African median of 7 percent household penetration versus 45 percent globally.

4.6. Providing Learning Resources and Educational Technology Tools

Given the foregoing gaps in learning resources and tools, the Regional Education Strategy advocates for increased provision through multiple high-impact interventions.

4.6.1. Ensuring That All Children Receive High-Quality, Age-Appropriate Books

Ensuring a minimum package of quality teaching and learning resources and encouraging pedagogical innovation are essential in all schools. Children cannot learn to read if they and their teachers lack textbooks and other learning materials. But shortages of basic learning materials, including textbooks, are pervasive in AFW. Low-cost approaches can ensure that all children have access to high-quality, age-appropriate books. In Cameroon, the textbook reform, which clarified the rules of the textbook selection process and created a transparent and regulated textbook supply chain, has lowered the cost of a textbook from US$6–7 to US$3–4; the first new textbooks were delivered to schools in October 2020. In some cases, the private sector can assist with ensuring certain services without necessarily managing the schools. In Edo State, Nigeria, the government has improved the quality of primary education by introducing technologies in the classroom and increasing the accountability of schools through a private service provider.
Box 4.1. What Does It Take to Get Textbooks into Classrooms and Utilized?

a. Financing textbooks. AFW countries struggle to ensure regular availability of updated textbooks to support teaching and learning processes. Overall investment is limited, and the textbook unit cost is higher than in other regions. Three main sources of financing coexist in AFW: government, development partners, and parents. Sources of financing can vary inside countries from one level to another (primary, secondary) and from one subject to another. In many countries, parental financing poses a great equity challenge, and donor financing generally leads to irregular textbook provision followed by long periods of scarcity.

b. Developing textbooks. Textbook development is a complex, long, and labor-intensive exercise based on preliminary decisions at the highest level. Those decisions include the following:

- Language of instruction. Textbooks need to be available in the language of instruction. While this decision may seem trivial in many contexts, it can represent a major constraint in AFW if a country uses different languages.
- Structure of programs and curricula. Textbooks need to reflect current curricula, teaching, and learning methodology and be contextualized and illustrated. How curricula are designed affects the whole process (design, number of subjects, number of textbooks to be created and distributed, number of pages, duration of the program, cost, and so on.)
- Responsibility for designing textbooks. While some countries make Ministry of Education staff responsible for designing textbooks, the current tendency is to give this mandate to private editors (national or international).
- Copyrights. Even if textbooks are produced by private editors, states can purchase copyrights for reimpersion.

c. Selecting and procuring textbooks. Textbook policy needs to clarify who is responsible for textbook accreditation and selection. Transparency is critical as potential for corruption is important in the sector. The following questions must be raised:

- Accreditation of textbooks to be used in a country. How many textbooks are accredited? On what basis? What criteria are used? Which governance model?
- Selection of textbooks. In case multiple titles are selected, who is responsible for selection of the textbook? Is it the local administration, each school, or each teacher?
- Durability of textbooks. Beyond physical solidity, textbooks need to be approved for a sufficient time to ensure a sustainable investment.
- Procurement. Procurement of textbooks is highly dependent on each of the decisions above. In addition, the decision should be made whether the procurement relates to the textbooks only or whether it includes their distribution.


37 To minimize program cost, curricula need to be streamlined to limit both the length of books and the number of books required. Countries also need to consider how curriculum revisions will affect textbook costs.
Box 4.1. What Does It Take to Get Textbooks into Classrooms and Utilized? (continued)

- **Implementing textbooks.** Textbooks need to be maintained and used in the classroom.
  - Utilization requires a textbook policy, or a policy that mandates textbook renewal in a reasonable number of years. Lack of such a policy hinders utilization, as teachers may not let students take books home or even not distribute textbooks at all for fear of damage.
  - Poor rationalization also leads to lack of usage. The country may assume that a textbook is given to each student, but improper distribution due to a lack of accurate data leads to textbooks kept in storage in schools where they are not required. Numbers are not updated when enrollment changes, leading to inaccurate distribution and low utilization despite availability.
  - Utilization is low because teachers know that textbooks could be costly and difficult to replace, so teachers resort to copying the text from the textbooks on a blackboard, denying textbook access to students.
  - Teachers are often absent, which means students may not have access to the textbooks on those days.

The World Bank will redouble efforts to put more high-quality texts into the hands of students. These efforts fall into five categories: promote development of local educational publishing industries to broaden availability of locally relevant reading materials; shape the supply of literacy and numeracy materials for use in low-income educational settings by collaborating with private and nonprofit educational publishers and providers of literacy materials; protect the delivery of books through greater accountability and harnessing of new technologies, including encouraging the use of results-based financing and new technologies such as “track and trace” to drive improvements along the book supply chain; disseminate key principles and techniques for development of suitable early reading materials for students and teachers; develop supplementary learning materials as a complement to textbooks; and blend printed material with digital material using new technologies when appropriate. These efforts will include putting reading materials into the homes of the most vulnerable children and innovations such as energized textbooks, which include QR codes in printed textbooks to enable access to online digital resources or high-quality open-source global public goods such as levelled readers in multiple languages and for different cultural contexts.

4.6.2. Harnessing Technology to Achieve Learning Objectives

The pandemic has forced many countries to make varying levels of investments in educational technologies. Almost every country in the region has deployed a national e-learning portal and invested in content acquisition or development. Active measures are addressing connectivity through partnerships with private providers, through global initiatives such as Giga, and through the World Bank–funded [Digital Economy for Africa Initiative](#). The time is right to build on and accelerate all these initiatives to drive large-scale use of educational technology to address the long-standing education challenges in the region.

Countries will need to scale up and focus investments in digital and human infrastructure. As countries invest in technology and human capital, they will face the challenges of striking a balance between...
technology and the human factor and ensuring that technology is deployed strategically, always in support of student learning processes and outcomes. Countries will need to invest in human infrastructure—teacher training, teacher and student digital skills, parental support—so that all students benefit from digital learning. Countries should strive for flexible, expandable, compatible, interoperable systems and avoid vendor lock-in. Innovative public-private partnerships can help increase the use of educational technology. For example, during the pandemic, several governments have been working with telecommunication companies to provide free connectivity to online learning resources through “zero rating” mechanisms (providing internet access without financial cost under certain conditions) (World Bank 2021f). The education sector will also have to address market information asymmetry and devise innovative financing and procurement strategies for digital infrastructure. Accordingly, ministries of education should promote transparent standards that facilitate interoperability of systems, data, and content to promote a data-driven decision-making culture.

Expanded access to and use of data present challenges in terms of privacy, data ownership, transparency, and inclusion. Countries will need significant investments in essential digital infrastructure (connectivity and devices) and good-quality digital content. Countries will also need to ensure that this digital infrastructure has built-in safeguards to protect the privacy and security of users and avoid biases against disadvantaged groups. Educational technology offers opportunities for evidence-based, transparent decision-making on delivery and management of education services. The use of technology in support of teaching and learning leaves a digital footprint that can be collected, analyzed, and shared in ways that can compromise privacy, data ownership, and digital security. Clear policy guidance and rules need to be established, recognizing that trade-offs must be considered and that related guidance and rules need to evolve over time.

The World Bank advocates attention to five key principles when education systems invest in educational technology. (a) Ask why. Educational technology policies and projects need to be developed with a clear purpose, strategy, and vision of the desired educational change (for example, establishing remote learning, reaching out-of-school children, training teachers, or improving education management information systems). (b) Design and act at scale, for all. Educational technology initiatives should have a flexible and user-centered design with an emphasis on equity and inclusion; these characteristics will help realize scale and sustainability for all. (c) Empower teachers. Technology should enhance teacher engagement with students through improved access to content, data, and networks, helping teachers better support student learning. (d) Engage the ecosystem. Education systems should take a whole-of-government and multistakeholder approach to engage a broad set of actors to support student learning. (e) Be data-driven. Evidence-based decision-making within cultures of learning and experimentation, enabled by educational technology, leads to more effective, responsible, and equitable uses of data.

In primary education, educational technology can promote the use of scripted lessons through digital devices (box 4.2). Scripted lessons are directed instruction plans that can be loaded to tablets/devices to help teachers with classroom delivery. These lessons provide teachers with content matched to curricula that teachers can quickly deploy in situations where (a) schools are in remote and difficult-to-reach areas with limited resources and (b) teachers are under- or unqualified. According to the Global Education Evidence Advisory Panel, which analyzed and identified “smart buys” in education, structured lesson plans produce large gains in learning with low variance across settings. An analysis of structured teacher guides across 13 countries in the Global South finds that “programs that use teachers’ guides show significant impacts on learning outcomes, associated with approximately an additional half year of learning, showing that structured teachers’ guides contribute to improved learning outcomes” (Piper et al. 2018, ii). Lesson plans or guides for teachers make teaching easier and provide information on what to teach and how to do it. Lesson plans can be printed and distributed to teachers or provided digitally through tablets.

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40 For example, under the Chad Education Sector Reform Project Phase 2, the Chadian government reformed the payment of community teacher subsidies from cash to mobile payment. This reform improved not only the rapidity of the payment but also the governance of the payment system and security of Ministry of Education staff and teachers.
or other devices. Providing them digitally is no less effective and can save costs in terms of distribution and when lesson plans need to be updated or revised. The EdoBEST program in Nigeria seeks to transform learning for around 300,000 children in 1,500 schools over the next four years. EdoBEST is partnering with Bridge to support teacher training and development on the Supporting Teachers to Achieve Results (STAR) component. Specifically, the programs seek to enhance teacher effectiveness through a training program that leverages technology and empowers teachers to improve children’s learning. During the pandemic, the EdoBest program was adapted to EdoBest@Home. The delivery methods that were implemented combine WhatsApp, interactive text messages, and the EdoBEST@Home web platform.

4.7. Pedagogy for Effective Teaching and Learning

Language of instruction and alignment of teaching with students’ ability to absorb the content of lessons are two critical challenges in achieving learning outcomes in AFW countries. The following discussion elaborates on these challenges.

4.7.1. Difficulties with the Language of Instruction

Low test scores may reflect a “near total lack of understanding of the language used for teaching and/or testing; they do not indicate any inability to learn under the right learning conditions” (p. 8). A significant and growing body of research shows that children learn better in their first language (L1) than in a second language (L2). Substantial evidence also shows that children who first learn in their L1 are more likely to become proficient in an L2 over time and more likely to remain in school. Further, instruction in an L2 without support in an L1 is more likely to affect children in the bottom 40 percent of the socioeconomic distribution. Poor language-of-instruction policies contribute to early dropout rates, repetition rates, and low learning overall. According to the World Bank’s (2021c) first policy approach paper on language of instruction, an estimated 37 percent of children around the world learn in a language other than their L1. Sub-Saharan Africa is disproportionately affected, with percentages reaching as high as 90 percent of children in some countries. The percentage of the population speaking the official language of instruction (French) is as low as 12 percent in Niger, 15 percent in Mali, 21 percent in Burkina Faso, 28 percent...
in both Senegal and the Central African Republic, and 38 percent in the Democratic Republic of Congo (Ethnologue 2020, as cited in RTI 2020). This lack of L1 instruction leaves millions of children in the subregion unable to learn in a language they understand.

Despite the broad linguistic diversity of AFW, many children speak a relatively small number of untaught L1s. Globally, 37 percent of children are not learning in their L1. Of that figure, 27 percent speak a minority written language, which is a language that currently has more than 1.5 million speakers, is written, and is not the official language of the country. The remaining 10 percent represent what is described as a “long tail” of many languages, each with relatively few speakers. Based on estimations from 2020 Ethnologue data, over 241 million minority written language speakers reside in AFW, representing nearly 60 percent of the population in Central Africa and 34 percent of the population in West Africa (table 4.2; World Bank 2021c). By the time children who speak long-tail languages enter school, in many cases, they are already bilingual in a less widely used language and in another language used across a larger population (sometimes referred to as a “market language”). In these cases, the children may be able to use the market language as their L1. For example, although Senegal is linguistically diverse (with 31 living indigenous languages, as noted above), approximately 90 percent of the population speaks one of the six national languages recognized by the government in 2001 (Conférence des Ministres de l’Éducation des Etats et Gouvernements de la Francophonie 2010; Leclerc 2013, as cited in RTI 2015).

A range of models relate to language of instruction, though some are significantly less effective than others (box 4.3).

Although not captured in the typology above, language models also vary by the subjects taught in the L1. In some cases, the L1 is utilized only as part of reading instruction, with all other subjects taught in the L2 (for example, in the case of The Gambia and in pilot programs in Senegal). In other cases, the L1 is used for all subjects (as in the case of Burkina Faso models, which have a late exit program in 2 percent of schools). Table 4.3 shows a snapshot of the types of policies utilized in AFW countries. The actual situation in each country situation is, of course, more complex. For example, although Burkina Faso and Senegal officially have immersion programs based on the language-of-instruction policy, both countries also have extensive pilots in L1 instruction. Further, although The Gambia has L1 instruction in primary, this model teaches only reading in the L1.

Box 4.3. Typology of Language-of-Instruction Models

- **L1-based instruction.** Instruction is fully in the L1. This model is common in much of the world (Europe, United States, Latin America, parts of Asia). Foreign languages are sometimes taught as subjects.
- **Immersion.** Instruction is in the L2 from school entry onward. This model is the most common model in AFW countries: “The model is often misapplied to the African context from very different environments in which it has been used in North America or Europe, based on the mistaken idea that children will learn a language if they learn in the language. Because instruction is provided primarily in a language that is not familiar to learners, with limited exposure to the language out of school, this model is often referred to as ‘submersion’ in the African context” (USAID 2012).
- **Early exit transitional.** Instruction is in the L1 for a few years before transition to instruction in English, French, Portuguese, or Arabic prior to the end of primary school.
- **Late exit transitional.** Instruction is in the L1 through the end of primary school (and sometimes beyond). The L1 is sometimes taught as a subject in secondary school.
- **Additive bilingual.** Instruction is in the L1 while children learn an L2 that is introduced gradually (as a subject and then later as a language of instruction).

Source: Based on World Bank (2021c) derived from the United States Agency for International Development EdData.
4.7.2. Gaps between Teaching and Students’ Capacity to Absorb Lessons

Many primary school children in AFW do not meet the academic standards for their grade. The PASEC 2019 found that 52.1 percent of sixth-grade children in the 14 participating countries—13 of which were AFW countries—were below the competency threshold in reading. Of these children, 21 percent were at level 1, meaning that the students had developed decoding skills and could use those skills to understand isolated words from their daily lives or very short isolated sentences, but they could not understand a simple text. About 6 percent did not even reach level 1. In Chad, more than 14 percent of students belong to this level, and that figure is 13 percent for Niger. PASEC 2019 also revealed that almost 60 percent of students do not have foundational reading skills, and more than 41 percent have not mastered basic mathematics skills. The annual secondary-grades learning assessments carried out in Sierra Leone showed that students’ learning performance is poor and significantly below curriculum expectations. In Ghana, fewer than half of second-grade students could read a single word in English or an official Ghanaian language of instruction. Of fourth- and sixth-grade students, only 25 percent were proficient in mathematics and only 37 percent in English.

4.8. Teaching in a Language That Children Understand and at the Right Level

Given the problems highlighted above, the Regional Education Strategy advocates for renewed efforts by AFW countries to rationalize their policies on language of instruction and teaching at the right level.

4.8.1. Using Mother Tongue as Language of Instruction

Ensuring that children begin their schooling in a language that they understand is important for their success throughout the learning cycle. One central intervention is to teach students in the languages they use and understand. AFW has five official languages (English, French, Spanish, Portuguese, and Arabic) and 940 minority languages. When children are first taught in a language that they speak and understand from their home experience, they learn more and are better positioned to learn other languages. This approach also lays the strongest foundation for learning in a second language later in school. Students taught in a language
they do not speak at home, in contrast, have great
difficulty learning and tend to leave school earlier
and with less knowledge (August and Hakuta 1997;
Duc and Tam 2013; Kim et al. 2016; Programme
in International Student Assessment 2015; Smits,
Huisman, and Kruijff 2008; Trudell 2016; Vygotsky
1986). Effects persist over a lifetime, with higher
average earnings accruing to students who begin
their schooling in their home language (Patrinos
and Velez 2009). Some countries are already mov-
ing in this direction. For example, the Democratic
Republic of Congo’s Global Partnership for Educa-
tion project supports the introduction of four local
languages, and the first textbooks in local languag-
es have already reached the schools. The Central
African Republic Global Partnership for Education
project will support use of Sango, a language spoken
by almost all Central Africans. Under the Chad
Education Sector Reform Project Phase 1, use of the
mother tongue as the language of instruction took
place in 135 schools in the province of Moyen Chari.
The evaluation showed that mother tongue schools
obtain better results than traditional schools, inte-
grate into the community more effectively, and elici-
greater enthusiasm from parents and students
about participating in activities. Benchmarking re-
sults in 2017 show that at the end of fourth grade,
student performance in reading comprehension
and writing in Sar and French was significantly high-
er for students in pilot classrooms than for those in
control schools (Enfants du Monde Tchad 2017).

**Barriers to implementing better language-of-in-
struction policies are varied and depend heavily on the context.** Linguistic, demographic, and po-

titical economy aspects all play into the question
of language of instruction and are highly contextual.
However, AFW does have some shared challenges.
Political buy-in is critical to moving forward with lan-

guage-of-instruction policy reforms. In Benin, a pilot
for first to fifth grade in local languages from 2012 to
2016 showed positive results, but the government
decided not to pursue the reform. Cameroon and
Guinea-Bissau also piloted approaches with posi-
tive results that the governments ultimately did not
implement. In the Central African Republic, a lan-
guage-of-instruction reform for primary has been in
discussion since 2000, but lack of political buy-in and
instability due to changing governments has prevent-
ed any progress. In Guinea-Bissau, the government
has been intentional about reinforcing Portuguese as
the medium of instruction in schools, driven in part by
nation building. In some cases, however, the reverse
has been true, and government transitions have led
to uptake of local language policies. For example,
after Guinea gained independence from France in
1960, the country actively pursued local language in-
struction as per the order of the communist president
at the time.

To support the teaching of children in their moth-
er tongue, the World Bank will work with countries
on understanding the language landscape, creat-
ing materials, and deploying new technology. In par-
cular, the World Bank will help countries create or
update maps of students’ first languages and in-
structional languages. Specifically, the World Bank
will help countries to

- Develop community-based approaches to lan-
guage-of-instruction mapping;
- Formulate language-of-instruction policies,
which can take many forms (for example, reading
instruction only, early exit, late exit);
- Produce a well-developed scope and sequence
in local languages that takes into account the nu-
ances of each language;
- Develop structured teaching materials and ac-
companying reading materials in students’ moth-
er tongues;
- Promote authorship and build publishing capaci-
ty in different languages;
- Engage in South-South cooperation on good prac-
tices for instruction in students’ mother tongues
and transition to the national language of instruc-
tion where pertinent; and
- Use technology to develop mother-tongue titles
and provide support for diverse learners.

In cases where shifts to local language instruction are
not politically feasible, the World Bank would em-
phasize teaching approaches that focus on oral lan-
guage development for English, French, Portuguese,
or Spanish language learners since acquisition of the
L2 is essential. Education technology can reduce the
cost of producing content in local languages and aug-
ment the printed word with multisensory utilities such
as audio playback and word tracking. Regardless of
the country’s choice, strengthening teachers’ com-
petency in the language of instruction is also key.
Further, the many shared languages within certain subregions may offer significant opportunities for economies of scale across countries. For example, although the two countries vary slightly, both Nigeria and Niger have a large number of speakers of Hausa; creation of new teaching and learning materials in Hausa could therefore take into account existing resources within both countries. In cases of cross-border languages, countries should explore translation/versioning/adaptation of teaching and learning materials. This process requires close coordination with language experts and intensive support to governments.

Building capacity within the country is critical to language-of-instruction reforms. Capacity building should take place at various levels so that rationale for language-of-instruction policy changes, strategy for operationalization of the rollout, and plans for accompanying materials development are well understood. Scope and sequence, pace, and amount of emphasis on various reading subskills are highly language specific. Accomplishing this kind of curriculum development across multiple languages will require careful partnerships with technical experts, linguists, and government counterparts to be successful. Other institutions such as universities (internal and external), publishers, and materials developers are also critical.

4.8.2. Teaching at the Right Level: Targeted Instruction

Instruction needs to target children’s level with a focus on foundational reading and mathematics skills. Teaching at the level of the children enables them to acquire foundational reading and mathematics skills quickly. Indeed, children learn best when presented with instruction that is suitably demanding: not too difficult and not too easy, so it can expand their capabilities. Evidence shows there are detrimental effects to asking students to complete a learning task for which they lack sufficient prior learning. Valiandes (2015) demonstrated the benefits of aligning instruction with current learning levels. The World Bank will support countries in implementing interventions to target teaching instruction according to learning level, not grade. Targeting instruction according to level ensures that students are given the tasks they need to master in their learning progression (box 4.4). For example, students who are struggling with letter sounds will continue to work on letter sounds, mastering them before moving on to word reading. These interventions have to be adapted to the country contexts and must include grouping children. Grouping can take place according to level of knowledge instead of age (Duflo, Dupas, and Kremer 2011). Grouping could also alternatively be based on parts of the school day (Banerjee et al. 2016). Groups could even be formed and gathered after school or during holidays using teachers and volunteers (Banerjee et al. 2008) or teaching assistants (Banerjee et al. 2007). Targeted instruction can benefit from educational technology as well. For example, an after-school program in India uses adaptive learning software that customizes content based on the level and rate of progress of each student (Muralidharan, Singh, and Ganimian 2019). In Botswana, targeted text messages were sent based on children’s levels, focusing on remediation for the students furthest behind (Angrist et al. 2020). India conducted learning camps to improve the basic learning outcomes of primary school children (Banerjee et al. 2017). In Côte d’Ivoire, a program was embedded during the school day (90 minutes per day and five days a week); the proportion of students who could at least read a paragraph increased by 18 percent, and the proportion of students who could do subtraction increased by 26 percent. The Chad Improving Learning Outcomes Project (P175803), currently under preparation, will support the design and introduction of a “right-level” instructional model as remedial education outside school hours for primary-school students at risk of dropping out as well as for primary school–age out-of-school children in the school catchment.

4.9. Nascent Systems for Student Learning Assessment and How to Improve Them

Student learning assessment keeps the focus on a performance indicator that matters to students, schools, and the education system as a whole. High-stakes examinations feature prominently in the assessment systems of most AFW countries. While they serve a useful purpose, such examinations are insufficient to provide the more dynamic tracking of student
Box 4.4. Targeted Instruction (from the Teaching at the Right Level Model Developed by Pratham)

- **Definition**: Targeted instruction is an evidence-based approach to improving students’ foundational skills by providing instruction that is appropriate to the learning levels of each child.

- **Approach**: Targeted instruction entails assessing students’ learning levels and grouping students accordingly—that is, by their level of proficiency rather than by age or grade. Grouping often brings together students from across classrooms or even grades. Groups tend to be implemented for specific periods during the school day. For example, Côte d’Ivoire conducted 90-minute sessions in which national trainers (trained by Pratham) trained school heads/pedagogical advisors, who then trained teachers on targeted instruction. Groups may also be implemented in after-school sessions or during vacation breaks, as Niger and Madagascar did under the School for All program supported by the Japan International Cooperation Agency. Another approach is to group students by learning level within a classroom, such as by having similar students sit in small tables to receive instruction. Teachers then align instruction to the current learning level of students rather than start at an assumed level or curricular expectation.

- **Basic model**: First, a brief assessment of language or mathematics proficiency is conducted with each child to understand the child’s current learning level. Second, students are grouped based on the level scored in the assessment. Teachers/facilitators are trained to deliver instruction that is targeted or tailored and designed to help students move quickly through these level-based groups. The instruction focuses on foundational skills in both reading and mathematics and uses basic and simple tools adjusted to the school context. Both indoor and outdoor (play-based) activities are included. Finally, children are reassessed and moved up through the levels as they progress.

- **Fundamental principles**: The following five principles are necessary for an effective model: (a) Set clear learning goals. Clearly articulate those learning goals and identify which goals to achieve in a specified time duration. (b) Use assessments to understand learning levels. Targeted instruction programs and interventions depend on the use of assessments to understand baseline levels and to inform instruction and organization of groups for learning. (c) Align instruction. Instruction must be coherent with current learning levels and the targeted learning progress. (d) Provide effective support to teachers and instructors. Ongoing teacher training and mentoring should ensure delivery of instruction with program fidelity, provide continuous feedback for improvement, and highlight further training or possible modifications to a program. (e) Track progress periodically. Conduct regular assessments throughout the duration of an intervention.

- **Typology of models**: The program can be embedded during the school day, either for the whole day, as in the case of Côte d’Ivoire, or during a dedicated period of the day. The program could adopt a learning camp model during the school year, as was the case in Botswana, or a summer camp model, as Zambia did.

- **Source**: Based on the Foundational Literacy and Numeracy Hub resources on the Teaching at the Right Level method (https://the-fln-hub.webflow.io/focus-area/teaching-at-the-right-level).


Learning assessments in AFW countries heavily rely on high-stakes examinations. In many AFW countries, students take three public examinations before completing general education. The examination...
systems in many AFW countries face both technical and administrative challenges. First, there is a weak alignment between curriculum objectives and examinations. Second, because of their high stakes, public examinations tend to exert considerable pressure on students, parents, teachers, and schools, limiting educational success benchmarks to examination results. This pressure not only leads to neglect of critical thinking, problem solving, and practical skills, all of which are less favored in examinations, but also increases repetition rates in these countries. In addition, national examinations heavily inform the flow of students between cycles and often restrict students’ progress from primary to lower-secondary or from lower- to upper-secondary education.

Classroom and large-scale assessments need strengthening to improve learning and enhance the quality of education. Classroom assessment can complement public examination and even enhance the validity of external examinations; namely, it can closely align with the national curriculum while also assessing student outcomes that external examinations, due to their format, fail to measure. Many AFW countries have the basic elements of classroom assessment in place to diagnose student learning issues. However, classroom assessment in practice tends to be weak and in need of further system-level support. Large-scale assessments (national, regional, and international) aiming to provide evidence of the performance of a country’s education system are becoming more common, but they are still mainly for primary education. Of the AFW countries, 17 countries have developed national assessment systems, 9 countries have carried out at least one Early Grade Reading Assessment and/or Early Grade Mathematics Assessment, and 8 countries have carried out at least one Service Delivery Indicator. All 13 Francophone countries have participated in at least one PASEC, but only Ghana and Senegal have participated in international assessments such as the Programme in International Literacy Survey, the Programme for International Student Assessment for Development, or the Trends in International Mathematics and Science Study. Assessing student performance against international standards and comparing it with student performance in other countries is therefore difficult. Systematic use of regional assessments, such as PASEC, Early Grade Reading Assessments, and Early Grade Mathematics Assessments would help countries to identify bottlenecks and use regional synergies to address them.

Fostering a culture of regular assessment is essential to keep the focus on learning. Most AFW countries lack robust systems for classroom, national, and international assessment. Instead, these countries tend to rely exclusively on high-stakes examinations like the West African Senior School Certificate Examination. In contrast to high-stakes examinations, assessments can track student progress against benchmarks specified in the national curriculum using a variety of formats and tools such as periodic rigorous large-scale assessments and frequent in-class formative assessments. Regular classroom observation and assessment of students by teachers helps with identifying and narrowing student knowledge gaps. Large-scale assessment helps monitor the performance of education throughout a country and allows the Ministry of Education to make evidence-based decisions about managing the system. Details on how to develop and implement these critical points are below.

4.9.2. Improving the Quality of Examinations

Well-designed and well-implemented high-stakes examinations can level the playing field by giving all students the same opportunity to show what they know and can do. High-stakes examinations are typically used to select or certify students as the students move from one level of the education system to the next (or into the workforce). In many countries, these examinations provide decision-makers with a standardized measure of student knowledge that can inform important decisions. Examinations may also play an important equity role by limiting patronage and opening access to educational opportunities for students from disadvantaged backgrounds. Given their high-stakes nature, these examinations must test competencies, higher-order thinking, and reasoning skills without creating perverse incentives for teachers and students (such as encouraging shallow forms of learning like cramming and rote memorization) (El-Kogali and Krafft 2020). Measures to prevent and address misuse of examinations are essential. Depending on the objective and scope of the
Box 4.5. Improving the Quality of Examinations in AFW Countries

To increase the power of high-stakes examinations as a tool for improving student learning, AFW countries might consider the following practical measures:

- Improving the technical aspects of examinations. Decision-makers could ensure each examination’s alignment with the national curriculum; introduce multiple-choice tests; incorporate students’ real-life situations, practical skills, and noncognitive skills; and design assessment practices that contribute to meeting the challenges facing education in each country.

- Using student performance information to generate feedback. Ministries of education, as well as examination authorities, should use examination results to help improve the quality of classroom teaching. Examinations can generate valuable feedback that helps teachers to pay particular attention to the most common errors made by students.

- Enhancing validity. Validity, as a principle of educational measurement, relates to the appropriateness of the inferences, uses, and consequences of an assessment. Ministries of education, as well as examination authorities, should identify threats to validity in their systems and take actions to mitigate them. Threats may include lack of alignment with the national curriculum, method of measurement, choice, overpredictability, administrative conditions, and aspects of administration.

- Using technology to improve administrative practices. Many examination authorities heavily invest in technology. The use of information technology in examinations offers several advantages: increased processing speed; increased security; increased accuracy; increased opportunities for analysis of performance; and reduced costs due to savings in storage, printing, and payment of examiners.

- Eliminating examination malpractice and improving examination-related security. Appropriate legally backed sanctions should be in place, and the resulting laws and regulations should be both enforceable and enforced. Technology could help mitigate examination malpractice, enhance security, and increase efficiency.

- Abolishing unnecessary exit or selection examinations. Many countries have already abolished examinations at the primary education level because all or most students transfer to the next phase of education. Bashir et al. (2018) reported that data from some AFW countries indicated an increase in the repetition rate in the grade immediately prior to the national examination, while data from other countries indicated high repetition rates in the grade where the examination was administered.

- Creating a balanced assessment system. Much effort at assessment reform in many countries has focused on reducing the burden of examinations on students while improving the quality and the validity of the assessments. These efforts have emphasized classroom/school-based assessment and large-scale assessment and should be expanded.

4.9.3. Improving Classroom Assessment Practices

Classroom-based formative assessments can help monitor student progress in real time, inform classroom teaching practices, and guide teacher professional development. Such assessments thus complement large-scale, system-level assessments that serve a separate and vital role in setting national goals, monitoring progress toward these goals, and giving a bird’s-eye view of trends in student examination, the high-stakes decision-making process should also take into consideration criteria other than examination scores (such as school grades, capstone projects, or interviews). If stakeholders are concerned about existing inequities affecting the fairness of examination results, additional measures could be introduced to increase access to learning opportunities for disadvantaged subgroups, particularly where there is scope to expand provision of schooling. Box 4.5 highlights how AFW countries might improve the quality of their national examinations.
learning and skill development. Continuous classroom and formative assessments, in comparison, provide immediate feedback to inform classroom instruction and ongoing teacher professional development to improve teachers’ pedagogical effectiveness. Classroom assessments are also critical to provide instruction to the level (and needs) of students. They can range from rigorous assessments to less formal methods such as “turn and talk,” error analysis of homework, and standard observations of student responses during class. Box 4.6 highlights good practices in classroom-based formative assessments.

Box 4.6. Good Practices for Classroom-Based Formative Assessments

All such assessments should measure student results against the explicit goals developed in the curriculum or national reading goals. Good practices to this end include the following:

- Clarifying expectations. Ensure that the curricula or syllabi for all subjects identify the key skills, understanding, and knowledge that students should acquire by the end of their courses. Without this clear guidance, it is difficult to implement classroom assessments successfully.
- Establishing required system-wide mechanisms for classroom-based assessments. System-wide mechanisms, such as pre- and in-service training that incorporates the classroom assessment element, help teachers conduct more effective classroom assessments and use assessment information more appropriately.
- Providing schools with guidance, resources, and materials for classroom assessment. Teachers need the assessment skills required for the task. Instructional guidance, resources, and materials are also helpful in promoting classroom assessment at the school level.
- Institutionalizing mechanisms for systematic monitoring of the quality of classroom assessment. Classroom assessment practices can be monitored, for instance, as part of school inspection and teacher supervision and evaluation.
- Including an element of classroom assessment in an examination framework to increase equity, effectiveness, and efficiency. Some countries (mainly middle- and high-income countries) have allocated a certain percentage of examination marks to school-based assessments. AFW countries cannot introduce this allocation in the short term, but it is worth considering as a long-term reform.

4.9.4. Improving Large-Scale Assessments at the National and Cross-Country Levels

**AFW countries can consider introducing at least one large-scale national assessment to monitor student learning in their effort to enhance the quality of education systems.** It is important to have a regular schedule for a large-scale assessment and to invest in strong national assessment programs that can produce comparable data over time. Assessment data are necessary to monitor progress in the goals set under global initiatives, such as the SDGs for education and the Human Capital Index. Ministries of education should establish regulations and guidelines for large-scale assessments and provide policy guidance to those who are developing and administering them.

**AFW countries might also consider joining at least one regional or international assessment.** The data would permit regional or international benchmarking for student learning and measurement of progress over time relative to regional peers or middle- and high-income countries with which AFW countries aspire to compete. Participating in such assessments also creates opportunities for peer learning and capacity building in data collection, analysis, and policy development to improve student learning. For this purpose, Francophone countries in AFW already benefit from being part of...
Box 4.7. Strengthening Large-Scale Assessments of Student Learning in AFW

Large-scale student assessments generate high-quality data for benchmarking and tracking student learning progress. They require a large investment of resources and careful planning, execution, and management of the data to yield maximum benefit as a system-level tool for improving student learning. Some of the main measures to this end are identified as follows:

- Provide adequate fiscal and human resources. The team in charge of the development and implementation of activities should consist of technically proficient and well-trained staff. Such staff can help design and administer large-scale assessments in accordance with best practices and, in turn, increase stakeholder confidence in the results. Assessments are costly in general, but ensuring sufficient funding is critical to the success of a large-scale assessment. The money that countries save as a result of implementing changes to their education systems based on large-scale assessment findings exceeds the cost of investing in these assessments.
- Clearly define the knowledge domain to be assessed and align it with the national curriculum or learning standards. Large-scale assessments can provide useful information when the assessment content is well defined and aligned with relevant and representative elements of the curriculum. This alignment should be codified in the assessment framework.
- Use the results to shape classroom practices and build the capacity of teachers. National assessments can identify areas and groups that are lagging in terms of achievement and then design strategies to address these disparities. Teachers should receive guidance and training on how to make good use of assessment results and take corrective measures in teaching.
- Ensure that assessment findings are widely disseminated and used. The audience includes educators at both the system and school levels, and the findings should be systematically assessed for their implications for policy and follow-up action. Assessment findings should be publicly available to ensure stakeholders can learn from and leverage the results of assessment activities. Assessment results should also guide system improvement as well as program and policy design. Annex 3 presents how some countries have used assessment results effectively.

4.10. Priorities for Reducing Learning Poverty

*Improving teaching and learning in basic education is a very important issue to address in order to reduce learning poverty.* As discussed above, there are five high-impact interventions that can be grouped into two categories. The first category relates to teachers, and the second relates to children’s readiness and the effectiveness of pedagogy including learning resources, language of instruction, and learning assessment (figure 4.10). These interventions are based on the general context of the region, but each country must prioritize and develop its action plan considering its specific context.
## Figure 4.10. Interventions to Improve Teaching and Learning

<table>
<thead>
<tr>
<th>What</th>
<th>Why</th>
<th>How</th>
</tr>
</thead>
</table>
| **Transform the teaching profession** | Students of skillful teachers learn more and attain more years of schooling | • 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 | • 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 | • 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 | • 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 | • Institutionalize periodic, rigorous, large-scale assessments (national or international)  
• Support frequent in-class formative assessments using technology |

Note: EdTech = educational technology; ECD = early childhood development.