unesco

African Union

unicef
for every child

Transforming learning and skills development in Africa

2nd Continental report

Education 2030

UNESCO – a global leader in education

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

unesco
United Nations
Educational, Scientific
and Cultural Organization

The Global Education 2030 Agenda

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

Education 2030

African Union

The African Union (AU) is a continental body consisting of the 55 member states that make up the countries of the African Continent. Guided by its vision of "*An integrated, prosperous and peaceful Africa, driven by its own citizens and representing a dynamic force in the global arena",* AU promotes Africa's growth and economic development by championing citizen inclusion and increased cooperation and integration of African states. In Education, the AU contributes to development of human resources and intellectual capital through facilitating access to revitalised, quality, relevant, harmonised education and training systems, whilst ensuring gender equality, safe and healthy learning environments. The AU is implementing the Continental Education Strategy (CESA 16-25) that capitalises on education actors, Member States, Regional Economic Communities and Development Partners, among others, to collectively transform the education systems in Africa, focusing on Early Childhood Education, Higher Education, TVET, Teacher Development, Curriculum Development, among other CESA strategic objectives.

unicef
for every child

UNICEF is mandated by the United Nations General Assembly to advocate for the protection of children's rights, to help meet their basic needs and to expand their opportunities to reach their full potential. UNICEF works in more than 190 countries and territories in seven regions, across both development and humanitarian contexts. Guided by the Convention on the Rights of the Child and supporting the 2030 Agenda for Sustainable Development, UNICEF works to save children's lives, defend their rights, and help them fulfill their potential, from early childhood through adolescence. As a multisectoral agency with wide on-the-ground presence and deep field experience, UNICEF is able to maximize results for children through its support to reinforce interventions across sectors and systems.

Published in 2025 by the United Nations Educational, Scientific and Cultural Organization, 7, place de Fontenoy, 75352 Paris 07 SP, France,
the United Nations Educational, Scientific, and Cultural Organization Multisectoral Regional Office for West Africa in Dakar, Almadies, Route de la plage de Ngor, BP 3311 Dakar, Senegal, the United Nations Children's Fund (UNICEF) West and Central Africa Regional Office, Immeuble Madjiguene, Route des Almadies, P.O. BOX 29720, Yoff, Dakar, Senegal and the African Union Commission (AUC), P.O. Box 3243, Roosevelt Street W21K19, Addis Ababa, Ethiopia.

ISBN 978-92-3-100755-2
DOI https://doi.org/10.54675/HHVU3314

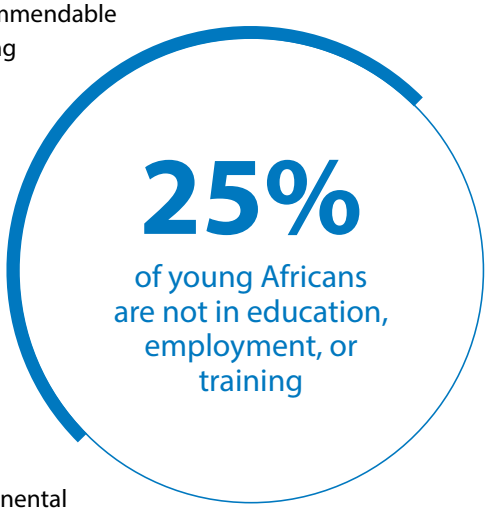
Cover credit: © UNESCO/Weiwei Kang
Graphic design and typeset: Phoenix Design Aid
Printed by Polykrome
Printed in Senegal

SHORT SUMMARY

Africa must transform its education systems to secure its future

On a continent with a rapidly growing youth population, it is essential that all young people, including women, girls and vulnerable populations, can develop the competencies they need to thrive. While many African nations are making commendable strides towards ensuring access to quality education and lifelong learning for all, progress remains gradual.

This report, produced jointly by UNESCO, UNICEF and the African Union, meticulously tracks the progress made in achieving Africa's ambitious education goals. It also identifies gaps and challenges while highlighting successful projects that have positively changed communities and countries. By detailing how to leverage strengths and address weaknesses, the report aims to make learning and skills development more effective, efficient, equitable, and responsive to Africa's economic and social development needs.



As the continent progresses towards developing the next Continental Education Strategy for Africa (CESA 2026-2035), this report aspires to serve as an indispensable tool for policy-makers. It provides data-driven insights, analytical studies, and recommendations to inform future initiatives and contribute to efforts to accelerate progress towards achieving Africa's educational goals.

unesco

"Since wars begin in the minds of men and women it is in the minds of men and women that the defences of peace must be constructed"

unesco

African Union

unicef
for every child

Transforming learning and skills development in Africa

2nd Continental report

Foreword

Africans today are better educated than ever before, and they are reshaping the global workforce, with a working-age population expected to reach 600 million by 2030.

Yet, significant barriers remain in achieving equitable access to education, with one in four young Africans not engaged in education, employment, or training. Learning achievements and skills development levels are alarmingly low, and perhaps most importantly, education financing continues to be both inadequate and stagnant across the continent. To meet the SDG 4 targets and secure its future, Africa must urgently transform its education systems.

This continental report, produced jointly by UNESCO, UNICEF and the African Union, addresses critical questions: What does transforming education mean in Africa? What does it take to scale up and accelerate this transformation?

Published at the close of the African Union Year of Education 2024, the report situates the global movement to transform education within an African context, focusing on enhancing learning and skills development to equip African citizens with the knowledge and competencies necessary to thrive in today's world.

Education remains the most strategic investment to harness the full potential of Africa's rapidly growing youth population. Investment in foundational learning alone could unlock up to 6.5 trillion US dollars in Africa's economy by 2030. More broadly, access to a complete basic education positively impacts gender equality, poverty reduction, children's health, and overall socio-economic development.

Despite these opportunities, most African countries struggle to meet the internationally recommended benchmark of allocating at least 15 per cent of national spending to education. The COVID-19 pandemic has exacerbated this challenge, and today, the financial gap in education averages 77 billion US dollars per year across the continent. Millions of learners risk being left behind without adequate investment, leaving the continent's human potential largely untapped. Addressing this crisis requires innovative financing solutions, better resource utilisation, and stronger accountability mechanisms to ensure funds are used effectively to improve educational outcomes.

This second edition of the monitoring report on the United Nations Sustainable Development Goal on Education (SDG 4) and the Continental Education Strategy for Africa (CESA 16-25) offers valuable guidance for policy-makers in designing and implementing policies and programmes that will transform learning and skills development in Africa. This guidance will be vital as countries plan for the next decade of the CESA (2026-2035).

Collaboration and coordination among governments, international organisations, NGOs, civil society, and local communities are essential to building resilient education systems that support Africa's development aspirations. By working together, we can ensure that all learners reach their full potential, driving sustainable growth and prosperity.

Stefania Giannini
Assistant Director-General
for Education,
UNESCO

Pia Rebello Britto, Ph.D.
Global Director, Education
and Adolescent Development,
UNICEF

Professor Saidou Madougou
Director, Education, Science,
Technology and Innovation,
African Union Commission

Acknowledgements

This publication of the 2nd monitoring continental report on SDG 4 and CESA, titled "Transforming learning and skills development in Africa", is the result of collaboration between the African Union Commission (AUC), UNESCO and UNICEF within the framework of joint monitoring of the Sustainable Development Goal (SDG) 4 and the Continental Education Strategy for Africa 2016 – 2025 (CESA 16-25). It builds upon the first Continental Report on SDG 4 and CESA 16-25, "Education in Africa: Placing equity at the heart of policy", jointly launched by the African Union Commission and UNESCO in February 2023. The production of this report represents a joint endeavour to ensure accountability towards the objectives outlined in both education agendas and to provide recommendations based on the latest available evidence to policymakers and the education community to realise the vision of ensuring inclusive and equitable quality education and lifelong learning opportunities for all in Africa. It focuses on responses and solutions to key challenges facing education in Africa as the CESA 16-25 and the African Union Year of Education 2024 come to an end, while Africa embarks on a new decade of accelerated education guided by the CESA 2026 – 2035.

Immense appreciation goes to Luc Gacougnolle and Daniel Kelly who led the drafting of the report, based on a series of thematic briefs thanks to the contributions of the technical team members (in alphabetical order): Angela Owusu-Boampong (Programme Specialist, UNESCO Institute for Lifelong Learning), Fata Rouane (Programme Specialist, UNESCO Regional Office for West Africa), Florence Ssereo (Programme Specialist, UNESCO International Bureau for Education), Hyok Il Kim (Associate Project Officer, Education Policy Section, Division for Policies and Lifelong Learning Systems), Lucia Chauvet (Consultant, Higher Education Section, Division for Policies and Lifelong Learning Systems, UNESCO), Mari Yasunaga (Programme Specialist, Division for Policies and Lifelong Learning Systems, Education Sector, UNESCO), Mattia Olivari (Project Officer, Division for Policies and Lifelong Learning Systems, Education Sector, UNESCO), Modou Mar (Economist/Associate Project Officer, UNESCO Regional Office for West Africa), Muhammed Safa Sahin (Associate Project Officer, Education Policy Section, Division for Policies and Lifelong Learning Systems), Omar Thiam (Project Officer, UNESCO International Bureau for Education), Patricia Machawira (Senior Project Officer, UNESCO Regional Office for Southern Africa), Pierre Chapelet (Programme Specialist, Education Policy Section, Division for Policies and Lifelong Learning Systems), Polycarp Otieno (Education Specialist, UNICEF Regional Office for Eastern and Southern Africa), Quentin Wodon (Director of UNESCO International Institute of Capacity Building in Africa), Thomas Dreesen (Education Manager, UNICEF Innocenti), Yacouba Djibo Abdou (Education Specialist, UNICEF Regional Office for West and Central Africa).

Data used for analyses that informed the report was drawn from various open sources, such as the UNESCO Institute of Statistics' SDG 4 data released in September 2024. The report also drew from two consultations, one parallel session titled "Transforming Education and Skills Development in Africa to Accelerate SDG 4 and CESA Commitments" at the UNESCO Chairs and Partners Forum held in Addis Ababa (30 September 2024) and one online consultation titled "Use of Evidence in Policy Monitoring" within the framework of the SDG 4 - Education 2030 High-level Steering Committee Functional Area 1 Learning Series (30 October 2024).

We are most grateful to the African Union leadership and overall guidance for the development of the report, under the leadership of H.E Professor Mohammed Belhocine, Commissioner for Education, Science Technology and Innovation, Professor Saidou Madougou, Director for Education Science, Technology and Innovation, and the steering Committee composed of Sophia Ndemutila Ashipala (Head of Education, African Union Commission), Caseley Olabode Stephens (Education Division, African Union Commission), Borhene Chakroun (Director of UNESCO Division for Policies and Lifelong Learning Systems, Education Sector), Dimitri Sanga (Director of UNESCO Regional Office for West Africa), Eric Falt (Director of UNESCO Regional Office for the Maghreb), Louise Haxthausen (Director of UNESCO Regional Office for Eastern

Africa), Nisha (Director of UNESCO Regional Office for Southern Africa), Nuria Sanz (UNESCO Regional Office for Egypt and Sudan), Paul Coustere (Director of UNESCO Regional Office for Central Africa), Quentin Wodon (Director of UNESCO International Institute of Capacity Building in Africa), Rita Bissoonauth (Director of UNESCO Liaison Office to the African Union and the United Nations Economic Commission for Africa), Therrezinha de Jésus Kinkin (Head of IIEP-UNESCO, Dakar Office), Gilles Fagninou (UNICEF Regional Director for West and Central Africa), Etleva Kadill (UNICEF Regional Director for Eastern and Southern Africa), Laila Gad (Head of UNICEF Liaison Office to the African Union and the United Nations Economic Commission for Africa), and Albert Nsengiyumva (Senior Programs Officer, Association for the Development of Education in Africa).

Sincere gratitude goes to members of the editorial committee who provided valuable contributions to the report's content, including (in alphabetical order) Abdoulaye Salifou (Programme Specialist, UNESCO Liaison Office to the African Union and the United Nations Economic Commission for Africa), Amina Yekhlef (Knowledge Management Officer, Association for the Development of Education in Africa), Biniam Bedasso (Research Fellow, Centre for Global Development), Brad Olsen (Senior Fellow, Brookings Institution), Brenda Haiplik (Regional Education advisor for Middle East and Northern Africa, UNICEF), Edward Makumbe (Monitoring and Reporting Expert, AUC), Guillaume Husson (Head of Education Sector, UNESCO Regional Office for West Africa), Haogen Yao (Education Specialist, UNICEF), Hélène Guiol (Head of Education Sector, UNESCO Regional Office for the Maghreb), Jean-Marc Bernard (Chief Technical Officer, Education.org), Oswald Koussihouede (Senior Education Policy Analyst, IIEP-UNESCO Dakar), Said Ould Ahmedou Voffal (Programme Specialist, UNESCO Regional Office for Central Africa), Xiaohan Bi (UNESCO-ICHEI), Thomas Dreesen (Education Manager, UNICEF Innocenti), Tomoko Shibuya (Regional Education Advisor for West and Central Africa, UNICEF), and Wongani Grace Taulo (Regional Education Advisor for Eastern and Southern Africa, UNICEF).

The report also benefited from comments and inputs from the following experts (in alphabetical order): Aferdita Spahiu (Education Specialist, UNICEF), Christine Hoffman (Senior Regional Skills Specialist for Africa, ILO), Dorcas Beryl Otieno (Senior Lecturer, Kenyatta University, Kenya), Melisew Dejene Lemma (Associate Professor, Hawassa University, Ethiopia), and Sophia D'Angelo (Inclusive Education Consultant).

The development, publication and launch of this report would not have been possible without the consistent efforts of the secretariat members, including (in alphabetical order) Ali-Mohamed Sinane (Programme Specialist, UNESCO Regional Office for West Africa), Dean Chen (Junior Professional Officer, UNESCO Regional Office for West Africa), Jephthe Mve Mvondo (Policy and Advocacy Specialist, UNICEF Liaison Office to the African Union and the United Nations Economic Commission for Africa), Léonie Marin (Communications Officer, UNESCO Regional Office for West Africa), Matthew Robert Goldie Scot (Technical Advisor, UNICEF), and Tomoko Shibuya (Regional Education Advisor for West and Central Africa, UNICEF).

The timely involvement of the editing, translation, proofreading and layout team was essential for producing the report.

Finally, we would also like to thank UNESCO Headquarters Education Sector, Communications and Knowledge Management Team, as well as the UNESCO Publications Unit of the UNESCO Division for Communications and Public Engagement, for their support in the publication process.

Table of contents

List of figures, tables and boxes

Figures

Tables

Boxes

List of acronyms

ACE	African Higher Education Centers of Excellence
ACHPR	African Charter on Human and Peoples' Rights
ACRWC	African Charter on the Rights and Welfare of the Child
ADEA	Association for the Development of Education in Africa
AEA	Egypt's Adult Education Authority
AI	Artificial Intelligence
AIDS	Acquired Immunodeficiency Syndrome
ALE	Adult Learning and Education
ALP	Accelerated Learning Program
ASEFC	Regional Centre for Adult Education, Sirs Alayyan in Egypt
AU	African Union
AUC	African Union Commission
AYC	African Youth Charter
CAMFED	Campaign for Female Education
CapED	Capacity Development for Education
CARES	COVID-19 Action Recovery and Economic Stimulus
CBCCs	Community-Based Childcare Centres
CDG	Center for Global Development
CEFM	Child, Early, and Forced Marriage
CESA	Continental Education Strategy for Africa
CSE	Comprehensive Sexuality Education
CSOs	Civil Society Organisations
CV	Curriculum Vitae
CWR	Connect with Respect
DALYs	Disability-Adjusted Life Years
DDD	Data Driven District
DLRs	Disbursement Linked Results
DNHA	Malawi's Department of Nutrition, HIV and AIDS
EAC	East African Community
ECCE	Early Childhood Care and Education
ECD	Early Childhood Development
ECE	Early Childhood Education
ECOWAS	Economic Community of West African States
EGMA	Early Grade Mathematics Assessment
EGR	Ghana' Early Grade Reading Programme
EGRA	Early Grade Reading Assessment
EHW	Education for Health and Well-Being
EMIS	Education Management Information System
ESA	Eastern and Southern Africa
ESP	Education Sector Plan
ESSP	Education Sector Strategic Plan
EU	European Union
FEHW	Foundational Education for Health and Well-being
FGM/C	Female Genital Mutilation/Cutting
FLAT	Foundational Learning Action Tracker
FLEX	Foundational Learning Exchange
GBD	Global Burden of Disease

GBV	Gender-Based Violence
GDP	Gross Domestic Product
GEM	Global Education Monitoring
GEQIP-E	General Education Quality Improvement Programme for Equity
GPE	Global Partnership for Education
GRALE5	Fifth Global Report of Adult Learning and Education
HDI	Human Development Index
HELA	Hybrid Education, Learning and Assessment
HGSF	Home Grown School Feeding
HIV	Human Immunodeficiency Virus
HR	Human Resources
HRMIS	Human Resources Management Information System
IBE	UNESCO's International Bureau for Education
ICOLEW	Integrated Community Learning for Wealth Creation
ICT	Information and Communication Technology
IDPs	Internally Displaced Persons
IHME	Institute for Health Metrics and Evaluation
IICBA	International Institute for Capacity Building in Africa
IIEP	UNESCO International Institute of Educational Planning
ILO	International Labour Organization
IPA	Innovations for Poverty Action
ISEC	Higher Institute of Education and Communication
ITGSE	UNESCO's International Technical Guidance on Sexuality Education

K-YES	Kenya Youth Employment and Skills Programme
LAMP	Literacy Assessment and Monitoring Programme
LLL	Local Leaders of Learning
MECC	Ministry of Education, Culture and Science
MELQO	Measuring Early Learning Quality and Outcomes
MESD	Ministry of Education and Skills Development
MHPSS	Mental Health and Psychosocial Support
MICS	Multiple Indicator Cluster Survey
MoEs	Ministries of Education
MTR	Mid-Term Review
M&E	Monitoring and Evaluation
NAT	National Assessment Test
NCDs	Non-Communicable Diseases
NER	Net Enrolment Rate
NGO	Non-Governmental Organisation
NLA	National Learning Assessments
NLLs	National Leaders of Learning
NQF	National Qualification Frameworks
PACE	Pan-African High-level Conference on Education
PASEC	Programme for the analysis of educational systems of the CONFEMEN countries
PC	Personal Computer
PD	Professional Development
PIRLS	Progress in International Reading Literacy Study
PLCs	Professional Learning Communities
PPP	Public-Private Partnership

PQTR	Pupil-Qualified Teacher Ratio
PTR	Pupil-Teacher Ratio
PTSD	Post-Traumatic Stress Disorder
PUC-Rio	Pontifical Catholic University of Rio de Janeiro
RAMAED	Action Research on Measuring Literacy Learning and Educational Alternatives
RBF	Results-Based Financing
RPL	Recognition of Prior Learning
RVA	Recognition, Validation and Accreditation
SABER	Systems Approach for Better Education Results
SACMEQ	Southern Africa Consortium for Measuring Learning Quality
SADC	South African Development Community
SDG	Sustainable Development Goal
SRGBV	School Related Gender-Based Violence
SRHR	Sexual and Reproductive Health and Rights
SSA	Sub-Saharan Africa
STEM	Science, Technology, Engineering and Mathematics
STIs	Sexually Transmittable Infections
TaRL	Teaching at the Right Level
TES	Transforming Education Summit
TIMSS	Trends in International Mathematics and Science Study
TMIS	Teacher Management Information System
TPN	Teacher Professional Network
TSOLATA	Tsogolo la Thanzi
TVET	Technical and Vocational Education and Training
UIL	UNESCO Institute for Lifelong Learning
UIS	UNESCO Institute for Statistics
UNAIDS	Joint United Nations Programme on HIV/AIDS
UNECA	United Nations Economic Commission for Africa
UNESCO	United Nations Educational, Scientific and Cultural Organization
UNFPA	United Nations Population Fund
UNHCR	United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
USAID	United States Agency for International Development
VVOB	Flemish Association for Development Cooperation and Technical Assistance
WASH	Water, Sanitation, and Hygiene
WCA	West and Central Africa
WFC	Women, Family, and Community
WFP	World Food Programme
WiLL	Women in Learning Leadership

Introduction

Context

The Continental Education Strategy for Africa (CESA 16-25) was adopted by African Union (AU) heads of state and governments as the framework for transforming education and training systems on the African continent. CESA concretises the vision set out in its Agenda 2063 for enabling citizens to be effective agents of change to achieve the 'Africa We Want'. It also complements the United Nations 2030 Agenda for Sustainable Development Goal on Education (SDG 4) and the Education 2030 Framework for Action by focusing on the continent's priorities. In doing so, CESA put forward 12 strategic objectives, six guiding principles, and nine pillars to guide the implementation of these objectives.

Education is a human right, as highlighted in Agenda 2063, which contains multiple references to human rights. The right to education is enshrined in Article 26 of the United Nations' Universal Declaration of Human Rights and Article 17 of the African Charter on Human and Peoples' Rights. This right encompasses more than just schooling and acquiring skills for the labour market; it also involves culture, communities, and societies. Fulfilling the right to education enhances individuals' ability to exercise other human rights. This importance is underscored by the focus on peace education and the prevention and resolution of conflicts, which remains extremely relevant. At the Pan-African High-level Conference on Education (PACE 2018), the participants, through the Nairobi Declaration and Call for Action on Education, committed the AU and the United Nations Educational, Scientific and Cultural Organization (UNESCO) to produce a biennial report monitoring progress on the achievement of CESA 16-25 and SDG 4-Education 2030 implementation.

In February 2023, UNESCO and the African Union Commission (AUC) unveiled a groundbreaking continental report entitled "Education in Africa: Placing Equity at the Heart of Policies". This pivotal document offered a comprehensive overview of the implementation of SDG 4 and CESA from 2016 to 2022. By analysing these crucial education agendas across African nations, the report highlighted the progress made and the challenges that remain. It also provided strategic recommendations for policymakers to accelerate Africa's advancement towards achieving the ambitious targets set by both CESA and SDG 4. This initiative underscores the importance of equity in education policies, striving to ensure that all African children have access to quality education and equal opportunities for success.

The effort to track progress in education in Africa is undertaken with the addition of several partners, including the African Union Commission (AUC), UNESCO—primarily through its Institute of Statistics (UIS) and its International Institute for Capacity Building in Africa (IICBA)—and United Nations Children's Fund (UNICEF). Organisations such as the United Nations High Commissioner for Refugees (UNHCR), United Nations Population Fund (UNFPA), UN-Women, the International Labour Organization (ILO), the Association for the Development of Education in Africa (ADEA), and the United Nations Economic Commission for Africa (UNECA) have also joined this initiative. These partners are providing analytical studies, capacity-building initiatives, and knowledge sharing to address the situation at stake. Additionally, think tanks such as the Brookings Institution, the Center for Global Development (CDG), and the Bill and Melinda Gates Foundation contribute their expertise. These partners focus on areas such as, but not limited to, education for refugees, integrating education with population strategies, promoting gender equality, supporting skills development and employment, and enhancing educational development across Africa.

The combined efforts of these organisations underscore the importance of accountability and continuous improvement in education. This report serves as a critical tool for policymakers, providing data-driven

insights, analytical studies, and recommendations that can inform future actions. It not only tracks progress but also identifies gaps, challenges, and promising responses, supporting the continent in achieving its ambitious educational goals. By capitalising on strengths and addressing weaknesses, the report aims to transform learning and skills development into more effective, efficient, equitable, and responsive to Africa's needs for harmonious economic and social development. Through these collaborative and transparent efforts, Africa can build robust education systems that support its development aspirations.

Purpose

Against this backdrop, in the final year of implementation of the CESA in 2025 and with the fast-approaching 2030 target to achieve the SDGs, this second continental report takes stock of the implementation of CESA and SDG 4 and looks into the future of education in Africa. In contrast to the first continental report, which provided a comprehensive overview, this report is focused on thematic areas, identifying their related challenges and promising responses, including effective, evidence-backed solutions.

The overarching theme of the report is *Transforming learning and skills development in Africa to accelerate SDG 4 and CESA commitments*. This report focuses on identifying and learning from promising and evidence-based solutions to improve education and skills development outcomes. This report aims to contribute to efforts to accelerate Africa's progress towards CESA and SDG 4's objectives and targets and to inform the development of the CESA 2026-2035 by clearly identifying promising responses to the most pressing challenges and by providing practical recommendations that synthesise the critical common characteristics of successful solutions.

Transforming learning and skills development in Africa to accelerate SDG 4 and CESA commitments

The theme of transforming learning and skills development is one of global relevance and critical global importance, as confirmed by the Transforming Education Summit (TES) of the 77th Session of the United Nations General Assembly, where 143 Member State governments committed to transforming education and accelerating progress towards SDG 4. One of the major outcomes of the summit was the call for a global movement to transform education and global initiatives that leverage greater financial, technical, and political support for country-level implementation.[1] However, for this global movement and any global initiatives to be effective, they must be tailored to the unique realities of each context, including political environment, institutional capacity, and economic and socio-cultural conditions. Furthermore, the success of education transformation will depend on having a shared vision, local ownership of the transformation agenda and the engagement and empowerment of local actors.[2]

The particular importance of transforming education for Africa and the need to contextualise the global movement to the realities of the continent was established by the High-Level Side Event at the Margins of the TES, organised by the AUC, UNICEF, UNESCO, World Food Programme (WFP) and the European Union. There, a Youth Manifesto on education called on governments, the AU and development partners to transform Africa's education systems, including in teaching and learning, the numbers and quality of teachers, and in ensuring school environments that are safe for learning. The side event led to the creation of a continental movement on transforming education in Africa, including increasing the visibility of and focus on education, which resulted in education being adopted as the AU's theme of

[1] UNESCO (n.d) *Transforming Education Summit,* SDG 4 Education 2030. Available at: https://www.unesco.org/sdg4education2030/en/transforming-education-summit.

[2] UNESCO. (2024h). *Transforming education towards SDG 4: report of a global survey on country actions to transform education.*

the year for the first time in 2024.[3] Since then, the momentum has been further reinforced by the Africa Skills Week held in Ghana in October 2024, the Africa Foundational Learning Exchange (FLEX) held in Rwanda in November 2024, and the Continental Education Conference held in Mauritania in December 2024.

In order to *Educate an African fit for the 21st Century*,[4] African education systems will have to be transformed. Business as usual will not suffice or accelerate efforts towards SDG 4. This report forms part of the called-for global movement for transforming education and the continental effort to contextualise transforming education to the realities of Africa. It outlines the urgency to transform education systems considering the stagnation in progress towards SDG 4 and CESA targets, rapid population growth, and the potential negative impact of system expansion on learning achievements. The report focuses on the responses and solutions to these challenges, how and where education in Africa is currently being transformed and how this transformation can be improved, scaled, and successfully implemented in other contexts.

Structure

The report is structured around three sub-themes:

1. Equitable access, retention and learning environment

The first section focuses on the current challenges and responses to education access and retention in Africa and key factors known to affect it, including protection and well-being, and school facilities and services.

2. Quality teaching and learning & skills development

The second section outlines current challenges and responses to learning and skills development at all education levels and throughout the lifecycle, including curricula and teaching materials, teachers and teaching, foundational learning skills, TVET and Higher Education.

3. Governance and management of the education system

The challenges and responses presented in Section 3 relate to the key levers to transform education at the system level, including planning, management, and financing of education systems, and evidence generation and uptake in education policymaking and implementation.

The sub-themes are further divided into eleven topics. This allows for a more focused and nuanced analysis of the specific challenges being faced and a detailed analysis of relevant promising responses and good practices across Africa. In response to the overall aim of the report, the balance of the analysis is intentionally towards responses and solutions. The report frequently refers to specific examples and uses detailed case studies to provide additional information on how successful interventions are designed and implemented and what lessons can be drawn from them. Attempts have been made across the report as a whole to draw on the most compelling and relevant examples while maintaining a geographic and contextual balance.

[3] African Union. (2024b). *Concept note with roadmap: African Union Theme of the Year.* Available at: https://au.int/sites/default/files/documents/43425-doc-EX_CL_1476_XLIV_Rev._1_-_CONCEPT_NOTE_with_Roadmap_AU_Theme_E.pdf.

[4] Ibid.

The fourth and final section of the report draws conclusions from the findings of the previous sections. It formulates recommendations for policymakers, implementation agencies, and development partners to build on the progress so far and promising solutions to remaining challenges.

Methodology

The report consolidates eleven thematic briefs that provide the analytical foundation for the eleven topic sub-sections. The thematic briefs were prepared by international and regional experts on each respective topic from various UNICEF and UNESCO offices and institutes and draw upon a wide range of data sources, including international databases, research journals, international and regional multi-lateral agency reports and guidelines, impact evaluations, and national government and media sources.

Reflecting the equity commitments of CESA and SDG 4, equity, in multiple dimensions and gender in particular, is a cross-cutting analytical lens throughout the report. Data and statistics are analysed and presented through disaggregation by sex, geographical location, socio-economic status and other equity dimensions where relevant. Furthermore, the analysis of possible solutions and best practices emphasises their impact, if any, on equity and reaching the most marginalised with quality education.

Overview of findings

This section summarises the findings of the eleven topics under the three report sub-themes.

1. Equitable access, retention and learning environment

1.1 Equal access: schooling coverage, access to school and completion

Despite 75 million more children being enrolled in school in Africa by 2024 compared to 2015, the number of out-of-school children has increased by 13.2 million since 2015 to over 100 million, and the rate of progress in reducing the number of out-of-school children has been five times slower than between 2000 and 2010. Location and wealth are the most significant factors driving inequitable access, while the size and direction of the gender gap vary significantly. Completion rates at primary, lower and upper secondary are increasing, very slowly, at less than one per cent a year in both Northern and Sub-Saharan Africa. Achieving equal access to education in Africa requires a holistic and multifaceted approach that addresses the diverse barriers preventing children and adolescents—particularly the most disadvantaged—from enrolling, attending, and completing their education. Developing and implementing inclusive education policies has proven instrumental in expanding equal access across Africa, such as in the Democratic Republic of the Congo, Morocco, and Sierra Leone. Multi-sectoral approaches are required to address underlying barriers and external root causes of educational inequities, such as in Lesotho, where they successfully targeted learners in rural and mountainous regions, and in Nigeria, where they were used to support the return to school of vulnerable learners post-COVID-19. Providing flexible education models and alternative learning pathways caters to out-of-school children and those unable to attend traditional schools. The Speed School programme is an alternative learning programme successfully implemented in Burkina Faso, Ethiopia, Mali, and Niger. Similarly, the Community Schools Programme in Egypt, with active community involvement, has successfully provided flexible education opportunities, benefiting girls and other marginalised groups.

1.2 Protection and well-being

Achieving SDG 4 and CESA objectives is inextricably linked with the health and well-being of learners. Nearly one in four Africans are between the ages of 10-19. Still, the demographic dividend they represent may be limited by their mental and physical capacity to become fully productive members of society. Despite the documented importance of providing life skills-based HIV and reproductive health and the commitments made through SDG 4 to enhance it, progress is limited, especially in Northern Africa. The promotion of education, health and well-being across the continent has been supported by the development of frameworks, policies and strategies in recent years, including the AU's Continental Strategy on Education for Health and Well-Being. The most effective education for health and well-being starts early and builds progressively as learners mature, and this can be supported by recently developed guidance. An important component of protection and well-being through education is preventing and addressing violence, including school-related gender-based violence, as in the school-based approaches in Eswatini, the United Republic of Tanzania and Zambia. Successful initiatives addressing education for health and well-being, like that in the Democratic Republic of the Congo, demonstrate the importance of a comprehensive approach when addressing protection and well-being. They also need to speak to all spheres of influence affecting young adolescents: individual, family, school and community.

1.3 Facilities and services

The importance of education infrastructure and related services to expanding access to quality education is recognised in SDG 4 and CESA, and the positive relationship between the presence of basic school infrastructure and educational outcomes is well established. Since the beginning of SDG 4 and CESA, there has been limited progress in improving the percentage of schools in Africa with basic facilities or ICT infrastructure—however, best practices and international guidance point towards how this may be improved. Aspirational goals and targets can be beneficial in inspiring and guiding long-term progress. However, in the context of constrained resources, perfect is often the enemy of the good, and priority should be given to delivering the minimum package of acceptable, resilient and climate-adaptive, infrastructure and services with prioritisation given to the most disadvantaged. The provision of education infrastructure and related services is most effective and sustainable when done with the involvement and support of the local community, and when working with what already exists first, that is, renovating and repairing before constructing. Additional data on infrastructure and service provision is required for effective planning, decision-making and implementation. Nevertheless, improvements can and should begin with better use of existing data.

2. Quality teaching and learning & skills development

2.1 Curricula and teaching materials

Curricula and teaching and learning materials are fundamentally important to achieving all learning-related SDG 4 targets and CESA objectives. However, related data collection and monitoring have not been prioritised. This fundamental importance, especially for Africa, has been emphasised by the recent Learning Counts report and its number one recommendation for improving learning: "Give all children a textbook—and all teachers a guide".[5] Textbooks and learning materials play a crucial role in learning in all contexts, especially where teachers are not adequately and/or sufficiently trained and have little teaching experience, as is often the case in rapidly expanding systems. Equitable access to quality education and training is a key policy goal for all countries. In this context, inclusive, diversified, quality teaching and learning materials, including effective use of technology, should be available to all students. However, even the most basic teaching materials are often lacking. Projects in Africa have demonstrated

[5] UNESCO. (2013). *Education in Africa: Placing Equity at the Heart of Policies.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000389481.

the potential benefits of technology in education as well as the significant and varied implementation concerns and challenges. Cameroon has successfully implemented a textbook revolution, simultaneously increasing the quality and supply of textbooks, including for the most vulnerable learners, while dramatically reducing the costs. Its success was achieved through comprehensive policy reform based on a clear understanding of the root causes of the issue, supported and informed by high-level and wide-ranging consultations.

2.2 Teachers and teaching

Despite the recognition that teachers are at the heart of the education process and, therefore, also at the heart of the SDG 4 and CESA commitments, the supply of qualified teachers is not improving and is, in fact, worsening in a number of education sub-sectors and regions of Africa. The status of the teaching profession can significantly impact the number and quality of entrants into the profession. In Africa, stakeholders believe the profession is not sufficiently attractive. In addition to overall supply, inequitable teacher deployment is also a common challenge. Financial incentives are often used to entice teachers to go underserved areas, but their success varies significantly based on their design and implementation. Less cost-intensive approaches, including local recruitment, mandatory rotation, and changes in how vacancies are advertised, have also successfully attracted teachers to marginalised schools. A results-based financing approach in the United Republic of Tanzania incentivised national-level decision-makers to improve the equity of teacher deployment to districts and district-level decision-makers to improve the equity of teacher deployment to schools. Teacher quality is also a significant challenge. In response to this, education systems are moving away from one-off training to developing cultures and systems that support effective continuous professional development. Effective school leadership is associated with improved teacher retention rates, higher levels of teacher job-satisfaction, increased student motivation, reduced student drop-out rates, and parental involvement in schools. Its importance is now being recognised and effectively addressed, for example, in Rwanda through school leaders' continuous professional development communities.

2.3 Foundational learning skills

Foundational learning skills are the pillars upon which all future learning and personal development are built, enabling children to actively participate in further education and engage meaningfully in their communities. The foundational learning crisis in Africa is significantly compounded by the lack of systematic and frequent assessments to effectively measure foundational learning outcomes. The limited existing data estimate that 4 out of 5 children aged 10 in Africa cannot read and comprehend a simple text. This suggests that low and gradually decreasing levels of learning are at the end of primary school, especially in mathematics. Early childhood education is widely recognised as one of the most effective interventions for improving foundational learning outcomes, such as in the community-based childcare in Malawi, pre-primary education in Rwanda, and play-based learning in Morocco. Structured pedagogy, often using the Teaching at the Right Level approach, has proven highly effective in addressing foundational learning challenges across Africa, for example, in Botswana, Ghana and Zambia. Successful scaling and transferring effective interventions such as these and cluster-based teacher training require contextualisation and adequate support from education stakeholders, especially governments. Collaboration between governments, donors, and civil society is also crucial, as is flexibility, based on adequate monitoring and evaluation, to ensure effective scaling, especially in fragile or conflict-affected contexts.

2.4 Literacy and foundational skills for youth and adults

Literacy and numeracy are at the core of foundational skills and lifelong learning, and there has been limited progress in improving literacy rates in Africa. However, the rate of progress has slowed considerably since 2019. The participation of youth and adults in formal and non-formal education and training is similar to that of nearly 10 years ago, meaning they remain low with significant gender gaps. Youth and adult literacy programmes are generally underfunded, with informal and non-formal education often receiving just 1 per cent of total education budgets. A holistic, lifelong learning approach based

on the latest concept of literacy is required. The most effective initiatives involve collaboration and coordination across multiple actors while keeping learners at the centre. In Egypt, for example, the Adult Education Authority has collaborated with national universities to successfully implement community-centric literacy projects to promote social and economic development, particularly for disadvantaged groups in rural areas.

2.5 TVET, including life skills for poverty reduction, solidarity and sustainable development

Technical and Vocational Education and Training's (TVET's) important role in bridging the gap between education and employment is recognised in global and regional frameworks. Despite international and regional commitments to TVET, access levels remain low across Africa, especially Sub-Saharan Africa, and there is limited sign of significant improvement in recent years. The varied and ever-changing nature of economies and related TVET landscapes provide much scope for innovation in TVET content, delivery methods, and financing. Still, scale-up should be guided by rigorous data collection and evidence, such as the innovative use of results-based financing of TVET providers in Ethiopia. Effective partnerships and collaboration, including target communities, are required if TVET is to be relevant and sustainable and to effectively address inequities. Initiatives in Togo are improving the quality and workplace relevance of TVET while also addressing equity barriers through integrating national languages. TVET is remarkably varied in content, delivery methods and duration. Such variation provides much scope for mutual learning and cooperation within and across African countries. Therefore, actors should be supported in promoting the sharing of best practices, standardisation of certifications, and mutual recognition of qualifications.

2.6 Higher education

Higher education is essential for Africa's socio-economic transformation, driving the development of innovation, research, and skilled human capital. However, access to higher education in Africa is growing unevenly, with persistent gender gaps, with most of the expansion coming in Northern Africa and from better-resourced but less equitable private institutions. Labour market alignment is a persistent challenge for higher education. Some countries have made progress by modernising curricula, while others have developed close ties between institutions and the private sector. Lifelong upskilling is becoming increasingly common in higher education institutions in Africa, with more variety in the duration and modalities of learning. At the same time, progress is also being made in relation to recognition and certification. The future of higher education in Africa is diverse—with more students from diverse backgrounds and education experiences, diverse and flexible learning pathways, and diverse providers and funders.

3. Governance and management of the education system

3.1 Planning and management of education systems

The development of credible, evidence-based education sector plans is essential for addressing the unique challenges facing African countries. The successful implementation of these plans is equally important. Countries such as Malawi and Namibia have made significant progress aligning their strategies and plans with data-driven policies. Yet, many others are still in the early stages of operationalising their plans, often hampered by inadequate institutional capacity and insufficient funding. Education financing plays a fundamental role in implementing plans and developing sustainable and equitable education systems. However, education remains underfunded in Africa, with governments, on average, dedicating a smaller part of their own resources to the sector over the past 10 years, meaning only seven countries in Africa now meet the benchmark of 20 per cent of national spending going towards education. In response to the challenges of meeting spending benchmarks from domestic resources, innovative financing in education is increasingly common, for example, Public-Private Partnerships in Ghana and Tunisia and impact bonds in Uganda. While these mechanisms potentially offer significant additional revenue streams, they also emphasise the need for adaptable and

transparent regulatory systems and effective monitoring and evaluation systems to measure agreed results.

3.2 Evidence generation and uptake in education policymaking and implementation

Data and evidence are widely recognised as essential to achieving education goals in Africa. Despite significant longstanding national and international investments, important data gaps exist, and where data and evidence are available, they are often underutilised or poorly utilised. Effective use of data and evidence can be supported by having a clear strategic vision or policy that focuses on data use rather than collection. Coordination and collaboration are necessary to maximise the utility of different data systems and evidence-generation efforts, as in the systematic use of learning assessment data across the education system of the Gambia. End-user utilisation can be maximised by ensuring relevance and user-friendly accessibility and providing related capacity building to understand and effectively use the available information. The Data-Driven Districts initiative in South Africa demonstrates how an active user community can be developed and supported to promote effective use and continuous adaptation and improvement.

Conclusions and recommendations

At a continental level, the trend analysis of the targets and goals of CESA and SDG 4 suggests extremely limited progress. It appears that access to education in Africa, including basic, TVET and higher education, is not increasing significantly and is certainly not at the hoped-for rates. Perhaps of even more concern is that the quality of education is also not improving, whether measured in terms of basic infrastructure and inputs or learning outcomes. The average school student in Africa today is about as likely to have a qualified teacher and have access to basic facilities such as water and electricity as their peers from 10 years ago. In terms of learning outcomes, the limited evidence available suggests that levels of learning are very low and are decreasing rather than increasing.

This lack of significant progress can be partly explained by three major contextual factors: the rapid population growth across the continent, ongoing humanitarian crises and fragility, and the inadequate financing of education systems. Rather than increasing investments in education, in line with international commitments and population growth, African countries are now generally investing less in education than they did in 2020 or 2015.

Although the continental-level trend analysis describes slow or stagnating progress, the reality within countries, regions, and education settings is much more complex and varied. While not shying away from the overall context, the report shines a light on several promising responses to the identified challenges to highlight specific solutions in specific contexts. The aim is not to identify these interventions as "silver bullets" to be transplanted and replicated in all contexts but rather to examine and learn from them, to identify and promote them so that education actors may also investigate them in greater detail and in relation to their own specific contexts and needs. An attempt has also been made to analyse these interventions as a whole and to identify common characteristics or principles of success so that their lessons may inform the design and implementation of other successful interventions.

Make better use of what already exists

Education systems everywhere are resource-constrained and are likely to be so in the foreseeable future. Even if efforts to increase education financing are successful, it is vital that better use is made of the limited available resources. This principle can refer to physical infrastructure, which is more cost-effective to maintain, repair and renovate rather than construct something completely new. It can refer to vital support services offered by the school, such as homegrown school feeding programmes that utilise local resources and capacities. It can refer to using already teaching and learning materials by improving distribution and providing teachers with structured pedagogy support. It can be applied to

teachers themselves by ensuring their more equitable distribution and providing practical and continuous professional development. It can also be applied to providing teachers' professional development by utilising and supporting outstanding teachers and school leaders to facilitate professional learning communities. It can be applied to the use of technology in education, which does not have to be advanced to be effective but can be as simple and common as a humble radio. The principle can also be applied to data and evidence.

Make better use of data and evidence

Regardless of the sub-sector or the thematic area, nearly all education interventions and guidance call for more and better data and for plans and decision-making to be anchored in evidence. However, much data and evidence already exist within the education systems of Africa, this information is often underutilised or used poorly. Better use of data and evidence can be achieved by having a clear strategic vision of the end users and end uses of data; that which has no planned use should not be collected. The effective use can also be encouraged by ensuring that it is relevant, accessible and understandable to its intended audiences. Linked to this, end users need to be supported in their utilisation through related capacity building and have the appropriate organisational authority to act upon it. The potential use of already existing data can be greatly enhanced by connecting and integrating separate databases and data collection systems.

Involve local communities more, including decentralisation

Related to the principle of making better use of what exists is enhancing the role of communities, including through decentralisation. Educators, parents, and local actors have crucial roles to play in ensuring that education systems more effectively consider local realities and needs. Communities represent one of the most powerful resources within an education system, and it is not surprising that their involvement in programmes is regularly identified as a key driver of success. Promising solutions relating to topics as diverse as school infrastructure, accelerated learning, comprehensive reproduction health, adult literacy, and TVET provision all point to the importance of community involvement in their success from the design phase to implementation.

Enhance coordination and collaboration

None of the successful responses and promising solutions discussed in this report resulted from one set of actors working in isolation. In fact, the opposite is true—high levels of coordination and collaboration were frequently pointed to as key drivers of change and success. In many cases, it was a defining feature of the particular intervention, for example, multi-sectoral approaches to supporting learners' enrolment and retention, peer-learning and communities of practice among teachers and school leaders, results-based financing of TVET education involving public and private providers and representative of employers and the private sector, and regional centres of excellence in Higher Education. The need for effective collaboration is a consequence of the complex and multifaceted reality of education systems in Africa and a recognition of the fact that achieving SDG 4 is an extremely complicated goal with many interconnected challenges. This principle is an overarching one which is ultimately necessary to i) make better use of what already exists, ii) make better use of data and evidence, and iii) involve local communities more, and it is consistent with the most effective paths to scaling.

Scaling and the broader environment

For a promising education intervention to be taken up and implemented at scale, it is not enough for it to be an effective education solution in isolation. It must be effective and fit the particulars of multiple, specific contexts; it must align with the local actors', policy makers' and political leaders' priorities; it must be feasible in terms of human and financial resources, and it must have a promising scaling strategy in place that can succeed. If it relies on significant donor input and support, it must simultaneously satisfy the donor and local priorities and needs. Effectively scaling successful interventions such as those highlighted in this report will require working simultaneously and efficiently at all levels of the education

system. It will require more effective collaboration, from the classroom to institutional and community levels, to the broader national environment, and finally, the broader global and regional environment, including through efforts such as CESA and the SDGs.

Section 1

Equitable access, retention and learning environment

1.1 Equal access: schooling coverage, access to school and completion

1.1.1 Introduction

Ensuring equitable access to quality education, as outlined in SDG 4, is a fundamental human right and a strategic priority for achieving sustainable development more broadly. Education is universally recognised as a key tool for reducing poverty. The World Bank reports that each additional year of schooling increases earnings by 10 per cent and that social returns to investment in education are generally high and highest in low-income countries.[6] UNESCO highlights that universal secondary education for girls could greatly reduce child marriage and poverty.[7] Ensuring equitable access to inclusive quality education for all, as outlined in SDG 4, is both a fundamental human right and a strategic priority for achieving sustainable development, reducing inequalities (SDG 10), promoting gender equality (SDG 5), and fostering peace and justice (SDG 16). Without access to inclusive quality education, marginalised populations remain trapped in poverty, exacerbating inequality, unemployment, and poor health. This cycle of disadvantage undermines social cohesion, fuelling instability and hindering national and global progress.

Recent high-level commitments to transforming education to reach out-of-school children and improve foundational learning and skills development are timely, as the number of out-of-school children in Africa is over 100 million and rising.[8] Over 240 million children worldwide are out of school,[9] including over 100 million in Africa, where the numbers of out-of-school children continue to rise, in part due to population growth and the impact of conflict and climate disasters. An estimated 80 million African children are currently affected by conflict, representing one in three children on the continent.[10] Over the past decade, 42 million school-aged children in Sub-Saharan Africa alone have faced climate shocks amplified by climate change. The increase in out-of-school children is occurring within the context of commitments made two years ago at the Transforming Education Summit (TES), where African Heads of State and Governments pledged to allocate more funding to effectively reach out-of-school children and focus on foundational learning and skills development. This led to education being declared the African Union's 2024 theme, centred on "Educate an African fit for the 21st Century—Building resilient education systems for increased access to inclusive, lifelong, quality, and relevant learning in Africa", and more recent commitments at the 2024 Africa Foundational Learning Exchange and the 2024 Continental Education Conference.

Despite an increase of over 75 million children enrolled in school in Africa by 2024 compared to 2015, the number of out-of-school children has risen by 13.2 million since 2015, and the rate of progress has been five times slower than between 2000 and 2010.[11] An additional 75 million children are enrolled in school in Africa in 2024 compared to 2015. There has been a slight decrease in the out-of-school rate for primary and secondary school-age children from 27.9 per cent to 25.5 per cent. This decrease has been slower than the population increase; as a result, the number of out-of-school children has risen by 13.2 million since

6 Psacharopoulos, G, and Patrinos, H.A. (2018). *Returns to investment in education: A decennial review of the global literature.* Policy Research Working Paper No. 8402. Washington, DC: World Bank. Available at: https://hdl.handle.net/10986/29672.

7 UNESCO. (2014). *Teaching and learning: Achieving quality for all. Education for all Global Monitoring Report 2013/4. Paris: UNESCO Publishing.*

8 Global Education Monitoring Report. (2024). *GEMR Database.* UNESCO. Available at: https://www.education-progress.org (Accessed: 20 August 2024).

9 Global Education Monitoring Report. (2024). *GEMR Database.* UNESCO. Available at: https://www.education-progress.org (Accessed: 20 August 2024).

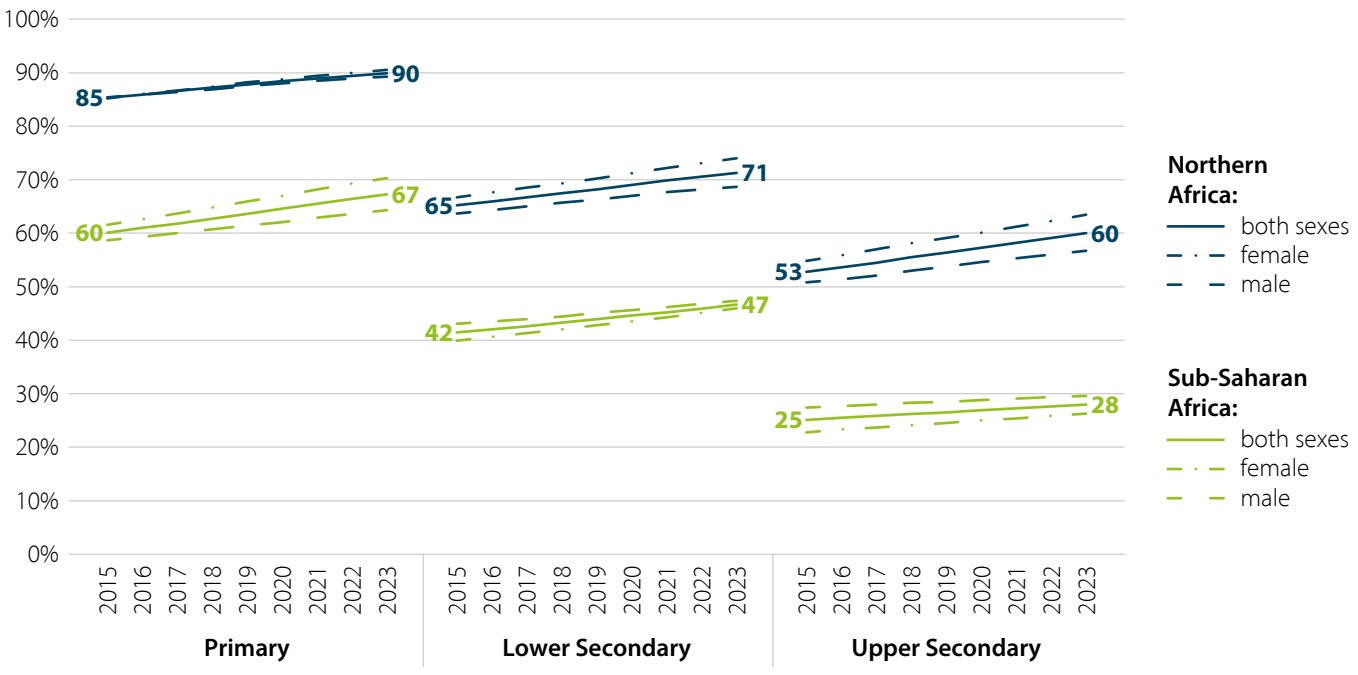
10 African Union. (2024a). *Armed conflict emerges as a major barrier to education access in Africa: Continental conference reveals.* Available at: https://au.int/sites/default/files/pressreleases/44320-pr-Press_Release_-_Armed_Conflict_Emerges_as_a_Major_Barrier_to_Education_Access_in_Africa_Continental_Conference_Reveals.pdf.

11 Author's calculations based on GEMR OOS rates and UIS school-age population (Accessed: 20 August 2024).

2015. The pace of reduction over this decade has been five times slower than the progress made in the 2000-2010 period, which saw a decrease of 12.5 per cent. Northern Africa stands out with the lowest out-of-school rate at 4 per cent, thanks to significant improvements in recent years. Western and Eastern Africa have the highest rates, with more than 3 out of every 10 children not attending school. Central Africa follows closely at approximately 1 in 4, highlighting the stark disparities in educational access across regions. At the country level, four countries from Western and Eastern Africa have more than 60 per cent of children out of school, unlike Egypt, Namibia, and Seychelles, where barely 2 per cent of children are out of school.[12]

Within countries, children face unequal access to education based on location, wealth and gender. Location and wealth are the most significant factors driving inequitable access. However, the relative size and the direction of the gender gap vary significantly. While nearly 9 out of 10 children from the wealthiest families attend school, only 6 out of 10 children from the poorest families do, and less than 7 out of 10 from rural areas attend school. These disparities begin at very early ages, reiterating the importance of ensuring that learning starts at the earliest stages of life to maximise its potential.[13] More than 4 out of 10 children one year before the official primary entry age are not attending school, and while there is gender equity at this level, children from the poorest households are more than twice as likely to miss out on pre-primary education compared to those from the wealthiest families.[14] Notably, only six African countries, Ethiopia, Malawi, Mauritania, Namibia, Rwanda, and the United Republic of Tanzania, have achieved gender equity in access to education. Of the remaining 41 with available data, 29 show a disadvantage for girls, and 12 a disadvantage for boys. Although generally urban children are more likely to be in school in a limited number of countries, for example, Eswatini, Kenya, Namibia, São Tomé and Príncipe, and South Africa, urban children are more likely to be out of school than rural children.[15]

Figure 1: [SDG 4.1.2] Completion rate (%), by region, education level and sex, 2015-2023



Data source: UIS September 2024 data release. Note: Data labels refer to both sexes. Annual data by sex is provided in the Annex 2.

[12] Author's calculations based on GEMR OOS rates and UIS school-age population (Accessed: 20 August 2024).

[13] UNICEF. (2019a). *A World ready to learn: Advocacy brief.* Available at: https://www.unicef.org/media/57926/file/A-world-ready-to-learn-advocacy-brief-2019.pdf and World Bank. (2018b). *World Development Report 2018: Learning to realise education's promise. Available at:* https://www.worldbank.org/en/publication/wdr2018.

[14] Author's calculations based on UIS OOS rates and school age population (Accessed: 20 August 2024)

[15] Author's calculations based on UIS OOS rates and school age population (Accessed: 20 August 2024)

Completion rates at primary, lower and upper secondary are increasing, very slowly, at less than one per cent a year in both Northern and Sub-Saharan Africa. Figure 1 illustrates the female, male and total completion rates for primary, lower-secondary, and upper-secondary education in Northern and Sub-Saharan Africa. The figure shows progress is being made, and completion rates are increasing. However, they are generally increasing very slowly at less than 10 per cent in 10 years. For some indicators, progress is less than five per cent in 10 years. The figure presents more positive news in addressing gender gaps affecting the lower and upper secondary completion rates of girls in Sub-Saharan Africa as they are slowly closing. In contrast, gender gaps negatively affecting boys are widening; boys are increasingly less likely than girls to complete primary school in Sub-Saharan Africa and complete lower and upper secondary school in Northern Africa. However, such regional averages mask significant variation across Africa, as illustrated in Figure 2. The figure shows that some countries have near-universal primary completion, for example, Algeria, Egypt, and Tunisia, while in many others, less than half of children complete the primary cycle. Similar levels of variation across countries are also found at higher levels of education, with some countries having more than 9 out of 10 children complete lower secondary while in others it is less than 2 out of 10. Data on pre-primary education are more limited but suggest that in Northern Africa, 1 in 3 pre-primary-aged children are enrolled in pre-primary school, and only 1 in 5 in Sub-Saharan Africa.[16]

Figure 2: [SDG 4.1.2] Completion rate (%), by country and education level, most recent year available (2021-2024)

Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

Inequities in access to primary and secondary education can contribute to later inequities in access to education and literacy rates among adults. Currently, only 8 per cent of secondary education students are enrolled in TVET programmes, with participation ranging from just 3 per cent in West Africa to 17 per cent in Central Africa. The low values in West Africa may be due to the limited availability of TVET institutions, cultural preferences for general education, or economic factors, while the relatively high rates of participation in Central Africa may, in part, be due to more developed TVET infrastructure or policies that promote vocational training as a viable educational pathway. Disparities extend into tertiary education, where just 13.6 per cent of youth are enrolled, with enrolment varying greatly across countries, from as low as 1.5 per cent in Burkina Faso to 23.2 per cent in Nigeria. Urban youth are three times more likely to attend tertiary institutions than rural youth, and boys slightly outnumber girls in tertiary education enrolment. These gaps in educational access and participation contribute to persistently high illiteracy rates among adults. One-third of adults across the region are illiterate, with stark regional disparities: 57 per cent literacy in Western Africa compared to 76 per cent in Southern Africa. Gender and rural-urban divides further exacerbate these disparities, with literacy rates among women at 60 per cent, compared to 74 per cent for men, and rural literacy at 59 per cent, compared to 83 per cent in urban areas. It is likely that even greater disparities exist affecting the most vulnerable populations, for whom disaggregated data is often lacking, for example, those with disabilities, refugees and internally displaced persons, ethnic and racial minorities, etc.

[16] UIS September 2024 data release.

1.1.2 Challenges and responses

1.1.2.1 Overview

Achieving universal access to quality education across all African contexts requires holistic and multifaceted approaches that address the diverse barriers preventing children and adolescents—particularly the most disadvantaged—from enrolling, attending, and completing their education. Building on successful practices and aligning with international educational goals such as Sustainable Development Goal 4 (SDG 4), several key strategies have been identified by various African countries to tackle these challenges. These strategies are designed to strengthen formal education systems while also providing alternative pathways for those out of school or at risk of dropping out. By integrating policy reforms, capacity building, multi-sectoral collaborations, and innovative learning models, countries can create inclusive, resilient, and adaptable education systems that cater to the needs of all learners, including essential and fundamental needs relating to health, nutrition and protection. There is a clear need for holistic approaches to improving educational access, quality and equity, including policy reforms, capacity building, and innovative learning models.[17] As highlighted in the vision of the United Nations Secretary-General, "Education systems must embrace the concept of lifelong learning, with more flexible pathways and financial policy incentives to allow people to re-engage with education systems several times throughout their lives. Different avenues should be made available, including non-formal routes, catch-up and bridging programmes, accelerated learning, and the use of digital platforms".[18]

1.1.2.2 Inclusive education policies

Developing and implementing inclusive education policies is fundamental to expanding equal access across the huge variety of contexts in Africa. This involves abolishing school fees to eliminate financial barriers for low-income families while recognising the need to maintain education quality and address continuing financial barriers affecting the poorest populations.[19] Supporting both formal and non-formal education systems is also crucial; policies should recognise and integrate alternative learning pathways to accommodate the diverse needs of learners. Additionally, enacting and implementing inclusive education legislation that promotes gender equality, supports students with disabilities, and protects the rights of marginalised groups helps create a more equitable educational environment.

The implementation of a policy to abolish primary school fees in the Democratic Republic of the Congo led to 2.5 million more children enrolled, reducing the gender gap in primary education. In 2019, the Democratic Republic of the Congo[20] implemented a policy to abolish school fees for primary education nationwide. This ambitious initiative aimed to remove tuition fees and reduce indirect costs to make education free at the primary level, increase government funding to cover teacher salaries and school operational expenses, rebuild and repair schools damaged by conflict, and hire and train more teachers to accommodate the anticipated influx of students. Thanks to this policy, supported by international donors and organisations with technical and financial assistance, an estimated 2.5 million additional children were enrolled in primary school during the first year, of whom more girls enrolled, narrowing the gender gap in primary education. This sudden increase in students led to overcrowding, prompting the government to prioritise classroom construction and teacher shortages as the demand outpaced the supply. This emphasises the need to proactively plan for maintaining quality when rapidly expanding access to education.

[17] UNESCO. (2013). *Education for All Global Monitoring Report 2013/4,* available at: https://unesdoc.unesco.org/ark:/48223/pf0000235003.locale=en and UNICEF (2015) *The Investment Case for Education and Equity,* available at: https://www.unicef.org/media/50936/file/Investment_Case_for_Education_and_Equity-ENG.pdf.

[18] Guterres, A. (2022). *Transforming Education Summit Address, 19 September.* United Nations. Available at: https://www.un.org/en/transforming-education-summit.

[19] Oketch, M. and Rolleston, C. (2007). 'Policies on free primary and secondary education in East Africa: Retrospect and prospect', *Review of Research in Education,* 31, pp. 131-158. Available at: http://www.jstor.org/stable/20185104.

[20] World Bank. (2021a). *Snapshot of Basic Education Service Delivery in the Time of COVID-19 and Free Schooling: DRC Primary School Director Surveys*. Available at: http://documents.worldbank.org/curated/en/788551626108364553.

Sierra Leone has successfully introduced a radical inclusion policy to address longstanding inequalities made worse by conflict and pandemics, leading to the return of thousands of girls and marginalised children to mainstream education. Sierra Leone has faced several challenges in its education system, worsened by a long civil war (1991-2002) and the Ebola outbreak (2014–2016). These crises led to widespread damage to infrastructure, significant dropout rates, and stark inequalities, especially for girls, children with disabilities, and those in rural areas. The cultural practice of early marriage, gender discrimination, and teenage pregnancy further compounded the barriers to education, with pregnant girls previously banned from mainstream schools. In March 2021, the Government of Sierra Leone introduced the Policy on Radical Inclusion in Schools and, in 2024, launched the related National Guidelines on Accelerated Education for Out-of-School Children and Youth.[21] The Policy on Radical Inclusion aims to ensure that all children, regardless of gender, pregnancy status, disability, or socio-economic background, have equal access to quality education. Key measures include lifting the ban on pregnant girls attending school and providing support for children with disabilities through teacher training and accessible infrastructure. The National Guidelines on Accelerated Education provide a framework for accelerated learning programmes to help out-of-school children and youth reintegrate into the formal school system, with flexible schedules and condensed curricula tailored to over-age learners. The guidelines are an excellent example of evidence-informed policymaking based on evidence synthesis that identifies key characteristics of Accelerated Education Programmes.[22] As a result of the radical inclusion policy, thousands of pregnant girls and marginalised children have returned to school, narrowing disparities in education. The Accelerated Education Programmes have also enabled over-age children to re-enter the formal education system. However, ongoing efforts are needed to address the stigma associated with re-entry and ensure sufficient resources are available to fully implement these progressive policies.[23]

Morocco's strategic combination of extending compulsory education, expanding a conditional cash transfer programme, and integrating inclusion and decentralisation of education governance to local levels resulted in increases in enrolment and reductions in regional disparities. In 2015, Morocco adopted the Strategic Vision for Reform 2015-2030,[24] a comprehensive policy to improve access, equity, and quality in education. The government extended compulsory education from age 15 to 16 to reduce dropout rates, particularly in lower secondary education. The reform included expanding the *"Tayssir Conditional Cash Transfer Programme"*, which provides financial incentives for low-income families to keep their children in school, focusing on rural areas and girls. The strategy also included integrating children with disabilities into mainstream schools through teacher training and adapted infrastructure, as well as decentralising education governance to empower regional authorities and address local disparities. Implementing these reforms led to a significant reduction in dropout rates, particularly among girls in rural areas. School enrolment rates increased across all levels, with notable improvements in girls' enrolment. The conditional cash transfer programme was critical in keeping children in school, particularly in impoverished and remote regions. Morocco's decentralised approach also helped to reduce regional disparities by allowing local authorities to tailor interventions to the specific needs of their areas. However, persistent gaps in infrastructure, such as the need for more classrooms and better facilities in rural areas and a shortage of trained teachers, continue to hinder the full realisation of equitable access to education. Ongoing investments in these areas are necessary to further bridge the disparities between urban and rural education systems.

[21] Government of Sierra Leone. (2021). *Policy on Radical Inclusion in Schools and 2024 National Guidelines on Accelerated Education for Out-of-School Children and Youth*. Available at: https://mbsse.gov.sl/wp-content/uploads/2021/04/Radical-Inclusion-Policy.pdf.

[22] Accelerated Education Working Group. (2022). *Accelerated Education Programme (AEP) Evidence Synthesis.* Available at: https://img1.wsimg.com/blobby/go/104fc727-3bad-4ff5-944f-c281d3ceda7f/20222615_AEP Evidence Synthesis-6468aa1.pdf.

[23] Ministry of Basic and Senior Secondary Education, Sierra Leone. (2024). *National Guidelines on Accelerated Education for Out-Of-School Children and Youth*. Available at: https://mbsse.gov.sl/wp-content/uploads/2024/07/National-Guidelines-on-Accelerated-Education-for-Out-Of-School-Children-and-Youth-June-2024.pdf.

[24] Ministry of National Education, Vocational Training, and Higher Education. (2015). *Strategic Vision for Reform 2015–2030.* Available at: https://www.men.gov.ma/Fr/Documents/Vision_strateg_CSEF16004fr.pdf.

1.1.2.3 Multi-sectoral approaches

Addressing underlying barriers and external root causes of educational inequities requires multi-sectoral approaches. Many external barriers to education in Africa can be overcome through enhanced collaboration and multi-sectoral interventions. Health and nutrition programmes, such as implementing school feeding initiatives and providing health services, including mental health and psychosocial support, improve student well-being and attendance. Social protection measures like conditional cash transfers or scholarships alleviate the financial burdens on families, making education more accessible. However, data from UNICEF and the Hempel Foundation's Foundational Learning Action Tracker (FLAT) finds that out of 36 African countries with data, about a quarter of countries are not implementing such social protection measures, highlighting the urgent need for governments to take action.[25] Additionally, child protection initiatives combat issues like child labour and early marriage through legal frameworks and awareness campaigns. Ensuring that schools have proper Water, Sanitation, and Hygiene (WASH) facilities is also essential, particularly for girls, as it helps overcome socio-cultural factors affecting their attendance and participation.

Lesotho has successfully utilised a multi-sectoral approach to addressing barriers to education that particularly affect learners in rural and mountainous regions. The high rates of poverty and food insecurity in rural and mountain areas of Lesotho make it difficult for families to prioritise education, leading to high dropout rates, especially during times of food shortages. Poor school infrastructure, lack of learning materials, and a limited number of trained teachers further exacerbated the problem. To address these challenges, the government of Lesotho expanded its National School Feeding Programme[26] in 2014 to cover all primary schools, ensuring that students in even the most remote areas received daily meals. The programme aimed to boost attendance and retention by addressing food insecurity among schoolchildren. Additionally, the government-initiated efforts to provide teaching and learning materials to schools, ensuring students had access to the necessary resources to enhance their learning experience. The National School Feeding Programme led to an increase of three per cent in national primary retention rates in three years. Teachers, children and parents all identified school feeding as a major reason behind school attendance.[27] By ensuring that children receive at least one nutritious meal a day, the programme relieved families of the burden of providing school meals, making it easier for them to keep their children in school. Providing learning materials also helped improve the quality of education and engagement in the classroom.

A multi-sectoral approach in Nigeria post-COVID-19 supported vulnerable children to return to school and minimised the disruption to their education. Nigeria continues to face significant educational challenges, particularly in northern regions affected by conflict and insecurity. High dropout rates, especially among girls, and regional disparities persist due to various underlying barriers, including poverty, inadequate healthcare, and limited access to clean water and sanitation facilities. The COVID-19 pandemic exacerbated these issues, leading to increased vulnerability for many children. In response to these challenges, Nigeria implemented the COVID-19 Action Recovery and Economic Stimulus (CARES) Program[28] in 2020, focusing on education and child protection. Key components of this multi-sectoral approach included health and safety measures, including hygiene kits and the establishment of safe learning environments, a school feeding programme, and the distribution of learning materials and access to online education resources, targeting both urban and rural students to reduce educational disparities exacerbated by school closures. The integration of health and safety measures and school feeding made parents more confident in sending their children back to school. Additionally, efforts to provide learning resources helped bridge the gap for students who faced disruptions in their education.

[25] UNICEF and the Hempel Foundation. (2024). *Foundational Learning Action Tracker: Results for Africa*, November. Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

[26] Government of Lesotho. (2015). *National School Feeding Policy.* Available at: http://www.gov.ls.

[27] World Food Programme. (2018). *Global School Feeding Sourcebook: Lessons from 14 counties.* Available at: https://docs.wfp.org/api/documents/WFP-0000073908/download/?_ga=2.223283611.1606132274.1735386347-239504721.1732008174.

[28] World Bank. (2020a). *Nigeria-COVID-19 Action Recovery and Economic Stimulus Program Project. Washington, D.C.: World bank Group. Available at:* https://documents.worldbank.org/en/publication/documents-reports/documentdetail/142411608260520935/nigeria-covid-19-action-recovery-and-economic-stimulus-program-project.

1.1.2.4 Alternative learning pathways

Providing flexible education models and alternative learning pathways caters to out-of-school children and those unable to attend traditional schools. Accelerated learning programmes offer condensed curricula that allow over-age or out-of-school children to catch up with their peers and reintegrate into the formal education system. Second-chance education provides opportunities for individuals who have missed out on formal schooling to re-enter the education system. It is therefore essential that governments retain oversight of accelerated learning programmes to ensure accreditation that is aligned to the formal education system and facilitates students' later reintegration.[29] Distance and online learning leverage technology to reach learners in remote or conflict-affected areas and, during emergencies, can provide accessible education regardless of location. Integrating education into religious and community settings, such as Koranic schools, helps broaden reach and include more children in the learning process.[30] Flexible education models are also particularly important in relation to vocational education, where the transition between education and work should be as seamless as possible.

The Speed School programme is an alternative learning programme developed by the Strømme Foundation and implemented in Burkina Faso, Ethiopia, Mali, and Niger. The Strømme Foundation developed the Speed School programme as a rapid educational response for children aged 9 to 14 who have missed out on formal schooling. The Speed School programme addresses the high number of out-of-school children in several African countries, including Burkina Faso, Ethiopia, Mali, and Niger. The programme includes: i) a condensed curriculum designed to cover four years of primary education in just ten months; ii) flexible class schedules, including in the evenings or on weekends to accommodate children who may have work or family obligations during the day; iii) local communities are involved in the implementation of the program, helping to identify out-of-school children and encourage their enrolment; and iv) a supportive and inclusive learning environment, often utilising local languages and culturally relevant materials.[31]

The programme has seen significant success in learning gains and the reintegration of learners into the formal system. Still, in some contexts, longer-term retention remains a challenge due to existing demand- and supply-side constraints. The Speed School programme has successfully reintegrated thousands of out-of-school children into the formal education system, with 79 per cent of the 115,138 students progressing to traditional primary schools after completing the programme.[32] The initiative has shown positive impacts on enrolment and retention rates, particularly among girls and vulnerable populations. The programme has provided access to out-of-school children (aged 8-12) in the Central Sahel[33] in community temporary spaces where locally recruited and trained facilitators deliver instruction to groups of 25 learners. While the programme has been successful in addressing immediate educational needs, with accelerated programme graduates largely transferring to the formal education system and making significant learning gains in French and Mathematics, a varying share of Speed School graduates (for example, about a quarter in Mali[34]) end up dropping out again one year after reintegrating the education system, due to demand-and supply-side constraints.[35] Promising long-term results have been found in

[29] Education.org. (2023). *Accelerated Education Programmes: An Evidence Synthesis for Policy Leaders.* Available at: https://img1.wsimg.com/blobby/go/104fc727-3bad-4ff5-944f-c281d3ceda7f/20222615_AEP Evidence Synthesis-6468aa1.pdf.

[30] UNICEF Burkina Faso. (2022). 'Catch-up for out-of-school children: Modeling Koranic schools in Burkina Faso'. Available at: https://www.unicef.org/burkinafaso/en/stories/catch-out-school-children-modeling-koranic-schools-burkina-faso.

[31] Kebede, T. (2018). *Speed School Program in Burkina Faso, Mali and Niger*. Fafo Report. Available at: https://www.fafo.no/images/pub/2018/20676.pdf.

[32] hundrED (n.d.) *Speed Schools: an innovative 9-month accelerated education model for Out of School Children* (OOSC). Available at: https://hundred.org/en/innovations/speed-schools-an-innovative-9-month-accelerated-education-model-for-out-of-school-children-oosc.

[33] Kebede, T. (2018). *Speed School Program in Burkina Faso, Mali and Niger*. Fafo Report. Available at: https://www.fafo.no/images/pub/2018/20676.pdf.

[34] Innovation for Poverty Action. (2014). *Speed School for Out-of-School Children in Mali.* Available at: https://poverty-action.org/study/speed-school-out-school-children-mali.

[35] Kebede, T. (2018). *Speed School Program in Burkina Faso, Mali and Niger*. Fafo Report. Available at: https://www.fafo.no/images/pub/2018/20676.pdf.

Ethiopia, where a contextualised version of the Speed School model has been implemented since 2011, partly due to the quality of the Speed School pedagogy and the use of the local language in instruction.[36]

Uganda has successfully implemented a similar accelerated learning programme, leading to the reintegration and retention of thousands of out-of-school children and youth into the formal education system. Uganda has a high number of out-of-school children, particularly among over-age learners and those affected by conflict or displacement. Many children miss out on formal education due to economic hardships, family responsibilities, or conflict-related disruptions, which leads to significant educational inequalities. In response to these challenges, Uganda implemented the Accelerated Learning Program (ALP), designed to provide flexible educational opportunities for over-age children and youth who have missed formal schooling. Similar to the Speed Schools of Ethiopia, Burkina Faso, Mali and Niger, the ALP in Uganda is characterised by: *i)* condensed curricula, *ii)* flexible scheduling, and *iii)* community involvement where local communities are engaged in identifying out-of-school children and facilitating their enrolment in the ALP. The Accelerated Learning Program has successfully reintegrated thousands of out-of-school children and youth into the formal education system, with many achieving equivalent grades in a shorter period. The programme has also improved retention rates, particularly among girls and vulnerable populations, by providing a supportive learning environment that acknowledges their unique circumstances.

An accelerated learning programme in Liberia has demonstrated impressive learning outcomes in supporting out-of-school children in the programme to catch up to the learning levels of children in government schools. The Luminos programme in Liberia is an accelerated learning programme for out-of-school children which aims to cover the first three grades of primary school in a 10-month period. The programme teaches basic reading and numeracy skills and supports socio-emotional development to help out-of-school children catch up to grade level and enrol in formal primary schools. The programme supports children who have never been to school, those who have dropped out and those who live in eligible communities. An eligible community is one with support for the programme from leaders and parents within the community, has at least 30 out-of-school children, has a government primary school, is located a maximum of three hours from a tarred road and has an available physical space to run the programme. A randomised control trial of the programme found impressive learning outcomes. Although the baseline levels of learning were lower compared with similarly-aged children enrolled in nearby government schools, by the end of the 10-month programme, learners had surpassed their government school peers in reading and nearly caught up in numeracy. The programme involves a relatively intense seven-hour-a-day, five-days-a-week approach utilising structured and play-based lessons adapted to individual learning levels and delivered in children's mother tongue. It also involves substantial community and parental mobilisation and support through brochures, positive anecdotes from other communities and data on previous programme effectiveness.[37]

By offering flexible options and additional support, a programme in South Africa has increased retention rates and provided a pathway for learners to pursue further education or vocational training. South Africa faces significant challenges with educational access and retention of marginalised groups, including those in rural areas. High dropout rates and the lack of flexible educational options have hindered many young people from gaining essential skills. In 2016, South Africa introduced the Second Chance Matric Programme, which provided opportunities for students who did not complete their secondary education to obtain their National Senior Certificate. The programme features *i)* supplementary classes, *ii)* online resources and materials for those in remote areas, and *iii)* supportive services that provide guidance and counselling to help students navigate their educational pathways. The programme has successfully allowed thousands of students to complete their secondary education and improve their employability.

[36] Luminos Fund. (2018). *Sussex Evaluation of the Luminos Fund's Speed School Program.* Available at: https://luminosfund.org/wp-content/uploads/2018/11/Sussex-Evaluation-Full.pdf.

[37] Mcmanus, J., Rudasingwa, M., Nijhof, E., Mokobi, K., Deme, s. f., Kiawoin, J., … Pignon, C. (2024). *Improving learning outcomes for out-of-school children: evidence from a randomized evaluation of an accelerated learning program in Liberia.* Available at: https://www.tandfonline.com/doi/full/10.1080/09645292.2024.2410773#abstract.

The Community Schools programme in Egypt, with active community involvement, has successfully provided flexible education benefiting girls and other marginalised groups. Egypt has a significant number of out-of-school children, particularly in rural areas, where socio-economic factors and cultural norms have prevented them from successfully completing formal education. In recent years, Egypt has implemented the Community Schools programme, providing flexible learning opportunities to children unable to attend formal schools. The programme established community schools that offer flexible schedules and curricula tailored to the needs of local children, including literacy and numeracy courses, while actively engaging parents and community members in the management and support of the schools. The Community Schools programme has successfully enrolled thousands of out-of-school children, providing them access to education in a supportive and flexible environment. The programme has particularly benefited girls and marginalised groups by offering alternative pathways that align with their unique circumstances and needs.

1.1.2.5 Cross-cutting

Improving the quality and capacity of resilient education systems encourages the enrolment, retention and learning of students. By enhancing the quality of the education offered and the capacity of the system to provide it to greater populations, levels of access, completion, and learning can be improved. Effective interventions include resilient and climate-adaptive infrastructure development, such as building schools and upgrading facilities to create safe and accessible learning environments. Providing quality learning materials like textbooks, lesson plans, and educational resources enhances the learning experience and supports student engagement. Investing in continuous teacher professional development is equally important, as well-trained educators are better equipped to deliver quality instruction and foster positive learning outcomes. Engaging communities by involving parents and local stakeholders in school management can also foster more supportive and accountable educational environments that value and promote learning.[38] Examples of interventions affecting the quality and capacity of education provision are discussed in more detail in Sections 1.3, 2.2 and 2.3. Given the scale of the negative impact manufactured and natural hazards can have on education in Africa, it is crucial that education systems be resilient to all forms of crises.[39]

A cross-cutting strategy and one that informs and enhances the effectiveness of all strategies and interventions is better use of data and evidence for decision making. Employing data-driven approaches ensures that resources are targeted effectively and interventions are impactful based on learning assessment data. Mapping out-of-school children helps identify who they are and their location, allowing for tailored interventions. Monitoring and evaluation of programmes assess their effectiveness and inform necessary policy adjustments. Conducting research on the specific barriers to education faced by different populations deepens understanding and guides strategy development and implementation, for example, pro-equity allocation of required resources to where they are most needed. Transparent reporting and data sharing with stakeholders promote accountability and collaboration, fostering a collective effort toward improving educational outcomes.

[38] Global Education Evidence Advisory Panel. (2023). *Cost-Effective Approaches to Improve Global Learning: What Does Recent Evidence Tell Us Are Smart Buys for Improving Learning in Low and Middle-Income Countries?* Available at: https://www.globalpartnership.org/node/document/download?file=document/file/2024-02-educate-africans-21st-century-seizing-moment-rev2.pdf.

[39] Ibid.

1.1.3 Conclusion

Ensuring equitable access to quality education in Africa is a pressing challenge that demands a comprehensive and multifaceted approach. Education is universally recognised as a fundamental human right and a critical tool for reducing poverty and inequality. Despite significant efforts to expand educational access, millions of African children remain out of school, particularly those from marginalised backgrounds. The disparities in access and quality of education highlight the urgent need for targeted and multifaceted interventions that address the unique barriers different communities face.

Compelling evidence of the effectiveness of targeted interventions does exist across a range of contexts. The solutions outlined above, which include strengthening education policies, enhancing school capacity, addressing underlying barriers through multi-sectoral initiatives, and offering alternative learning pathways, highlight the diverse methods employed by various countries to tackle the complexities of educational inequity. The examples illustrate that, with the right policies and active community involvement, significant strides can be made in increasing enrolment and retention rates, particularly among marginalised groups.

While the path to equitable education in Africa is complex, it is also filled with opportunities for transformative change in education systems to provide equitable access to quality education. It is crucial to recognise that educational inequities are often deeply rooted in broader socio-economic and political contexts. As countries continue implementing innovative solutions and sharing best practices, the commitment to achieving sustainable development goals becomes increasingly attainable. Continuous investment in educational infrastructure, quality teachers and teaching, and community engagement is necessary to increase rates of progress and adapt to the evolving needs of learners. By prioritising inclusive practices and recognising the diverse needs of each community, stakeholders can work collaboratively to create education systems that serve all children.

Empowering the next generation through education is a fundamental human right and a strategic necessity for fostering sustainable development, peace and socio-economic equity across the continent. The number of reports and recommendations provided valuable frameworks for action, emphasising the importance of aligning national policies with global educational goals like SDG 4. By leveraging these insights, African countries can develop robust strategies that address both immediate educational needs and long-term developmental objectives.

The integration of technology and innovative learning models presents a significant opportunity to bridge educational gaps. Digital platforms, remote learning solutions, and mobile education initiatives can extend the reach of quality education to remote and underserved areas. These tools, when combined with traditional educational methods, can create a more inclusive and adaptable learning environment.

Achieving equitable access to education in Africa requires a sustained and collaborative effort from all stakeholders, including governments, communities, international organisations, and the private sector. By embracing a holistic approach that addresses the diverse barriers to education, Africa can make significant strides towards ensuring that every child has the opportunity to learn and thrive. This collective endeavour will not only transform individual lives but also contribute to the broader goals of social equity and sustainable development across the continent.

1.2 Protection and well-being

1.2.1 Introduction

Achieving SDG 4 for inclusive and equitable quality education is inextricably linked with the health and well-being of learners. Inclusive and transformative education cannot be delivered if students are not safe, well-nourished, healthy, and free from violence and discrimination. While education and health outcomes have been improving steadily across the African continent, many risk factors and determinants affect the health and well-being of children and young people, influence their ability to fulfil their potential and hinder progress towards SDG and CESA goals. Considering the intimate relationship between health and education, the second strategic objective of CESA explicitly targets the provision of a "healthy and conducive learning environment", and one of its six guiding principles for African decision-makers is that "A healthy mind in a healthy body—physically and socio-psychologically—fit and well-fed learners".[40]

Nearly 1 in 4 Africans are between the ages of 10-19, but the demographic dividend they represent cannot be fully realised if their health and well-being are not protected. The African population has been increasing in recent years and is anticipated to reach nearly 2.5 billion by 2050, with 60 per cent of the population under the age of 35.[41] As of 2018, adolescents (ages 10-19) represented 23 per cent of the African population.[42] Adolescents and young people in Africa, as they age into their working years, thus represent a major force for the continent as it strives to harness the demographic dividend for growth and poverty reduction.[43] However, adolescents and young people in Africa face many intersecting barriers to achieving positive health and well-being outcomes, which presents a major challenge for the region.

African adolescents have the highest mortality rates globally, driven by infectious diseases, injuries and non-communicable diseases. Globally, the highest rates of mortality for adolescents occur in Africa. In 2022, there were 15 deaths per 1,000 children and adolescents aged 10-19 in Sub-Saharan Africa—double the global average and higher than in any other region.[44] Major causes of death and loss of Disability-Adjusted Life Years (DALYs)[45] among children and adolescents in Africa include infectious diseases (such as HIV, malaria, respiratory and diarrheal diseases), injuries (particularly road injury, drowning and interpersonal violence, as well as self-harm) and non-communicable diseases (including depression and anxiety).[46] Figure 3 captures the key factors negatively affecting the health and well-being of children aged 5-14 in Africa. High rates of adolescent pregnancy and related maternal health risks are particularly relevant for Africa, with Sub-Saharan Africa alone accounting for around 70 per cent of the world's maternal deaths.[47]

40 African Union. (2016). *The Continental Education Strategy for Africa (CESA 16-25).*

41 United Nations Population Division. (2024). *World Population Prospects 2024.* Available at: https://population.un.org/wpp/. Last accessed 29-11-2024.

42 Ibid.

43 UNESCO-IIEP. (2022). *Education in Africa: 5 priorities: Demographics, financing, inclusion, quality, employment.*

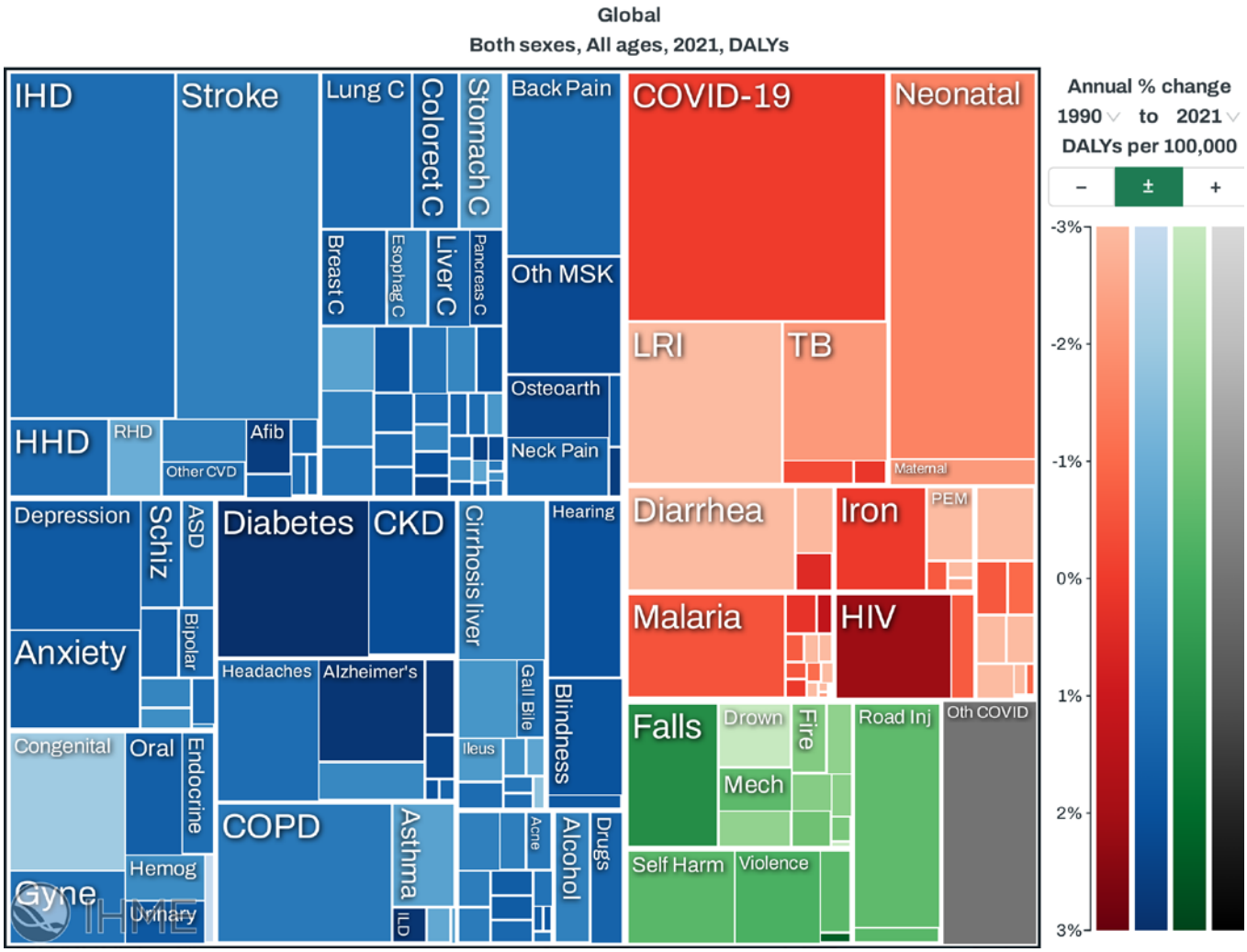
44 UNICEF. (2024a). *Adolescent Data Portal.* Available at: https://data.unicef.org/adp/, accessed 29-11-2024.

45 DALYs for a disease or health condition are the sum of the years of life lost to due to premature mortality (YLLs) and the years lived with a disability (YLDs) due to prevalent cases of the disease or health condition in a population.

46 Institute for Health Metrics and Evaluation. (2021). *Global Burden of Disease (GBD) Compare Tool.* Available at: https://vizhub.healthdata.org/gbd-compare/. Accessed on 29-11-2024.

47 WHO. (2024b). *Maternal Mortality Fact Sheet.* Available at: https://www.who.int/news-room/fact-sheets/detail/maternal-mortality.

Figure 3: Disability-Adjusted Life Years, 5-14 years, both sexes, African Union, by cause, 2021

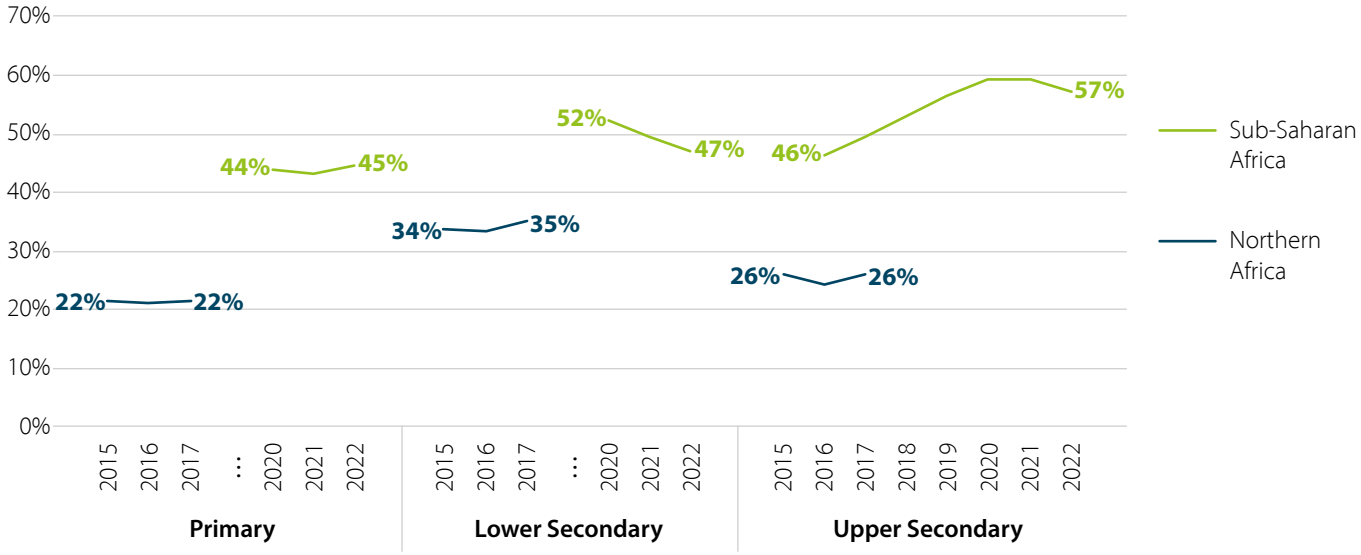


Source: Institute for Health Metrics and Evaluation (IHME), GBD 2021, University of Washington. https://vizhub.healthdata.org/gbd-compare/ Accessed on 29-11-2024. Availaible under CC BY-NC-ND 4.0.

The Global Burden of Disease (GBD) in adolescents has evolved from 1990 to 2019, with DALYs for non-communicable diseases increasing and injuries and infectious diseases decreasing. Variations in gender-specific trends must also be taken into consideration. In 2021, injuries represented 22.6 per cent of total Disability-Adjusted Life Years (DALYs) for boys 10-24 in Africa, of which 8.7 per cent were attributed to self-harm and interpersonal violence, compared to 10 per cent and 2.8 per cent respectively of total DALYs for girls of the same age.[48] This high percentage underscores the significant impact of violence and mental health issues on young males in the region. In contrast, for girls of the same age group, injuries represented 10 per cent of total DALYs, with 2.8 per cent attributed to self-harm and interpersonal violence. These figures highlight the gender disparities in the types and impacts of injuries, with boys experiencing a higher burden from violence-related injuries compared to girls.

[48] Ibid.

Figure 4: [SDG 4.7.2] Percentage of schools providing life skills-based HIV and reproductive health education (%), by region and education level, 2015-2023



Data source: UIS September 2024 data release.

Despite the documented importance of providing life skills-based HIV and reproductive health education and the commitments made through SDG 4 to enhance it, progress is limited. The importance of providing life skills-based HIV and comprehensive reproductive health education[49] for the achievement of SDG 4 is illustrated by its dedicated indicator 4.7.2. However, Figure 4 suggests that little or no progress has been made in reaching its targets. Recent data is lacking for Northern Africa, but the existing data indicate stagnation across all three levels of education. In contrast, in Sub-Saharan Africa, recent data is available but presents a mixed picture, with a sharp recent decline in the percentage of lower secondary schools providing life skills-based HIV and reproductive health education while at upper secondary, a recent slight decline after several years of notable progress. As ever, regional overviews mask many variations across countries, and here it is quite extreme, with some countries reporting 100 per cent of schools providing life skills-based HIV and reproductive health education, for example, Eritrea, Malawi, Rwanda and many other countries reporting 0 per cent of schools providing this much-needed education Algeria, Djibouti, Mauritania, Mauritius.[50]

[49] See the AU Continental Strategy on Education for Health and Well-being of Young People. Available at: https://healtheducationresources.unesco.org/library/documents/au-continental-strategy-education-health-and-well-being-young-people.

[50] UIS September 2024 data release.

Figure 5: [SDG 4.7.2] Percentage of schools providing life skills-based HIV and reproductive health (%), by country and education level, most recent year available (2021-2024)

Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

1.2.2 Challenges and responses

1.2.2.1 Factors negatively affecting health and well-being of African adolescents

The main factors affecting the health and well-being of African adolescents and young people are varied, as is their relative impact due to gender, location, levels of education, etc.

HIV: HIV remains a significant risk factor for young people across the region, constituting the second cause of mortality among adolescents and the third cause of DALYs among adolescents (10-19 years) in Africa in 2021.[51] Some young people face more significant vulnerabilities than others, including adolescent girls and women (aged 15-49 years), who, for instance, represented 43 per cent of new HIV infections in Western and Central Africa in 2022 but continue to face legal and societal barriers, such as age-of-consent limitations for access to HIV testing. In Eastern and Southern Africa, despite HIV incidence among women and girls having reduced by 65 per cent between 2010 and 2022, women aged 15 years and over still accounted for 61 per cent of all people living with HIV in the region in 2022, with adolescent girls and young women aged 15-24 years at inordinate risk of HIV infection.[52] According to UNAIDS, the continuing high incidence of HIV among adolescent girls and young women in parts of Sub-Saharan Africa shows that prevention programmes and efforts to reduce gender inequalities, violence against women and address harmful gender norms and sociocultural barriers are not yet having a big enough impact.[53]

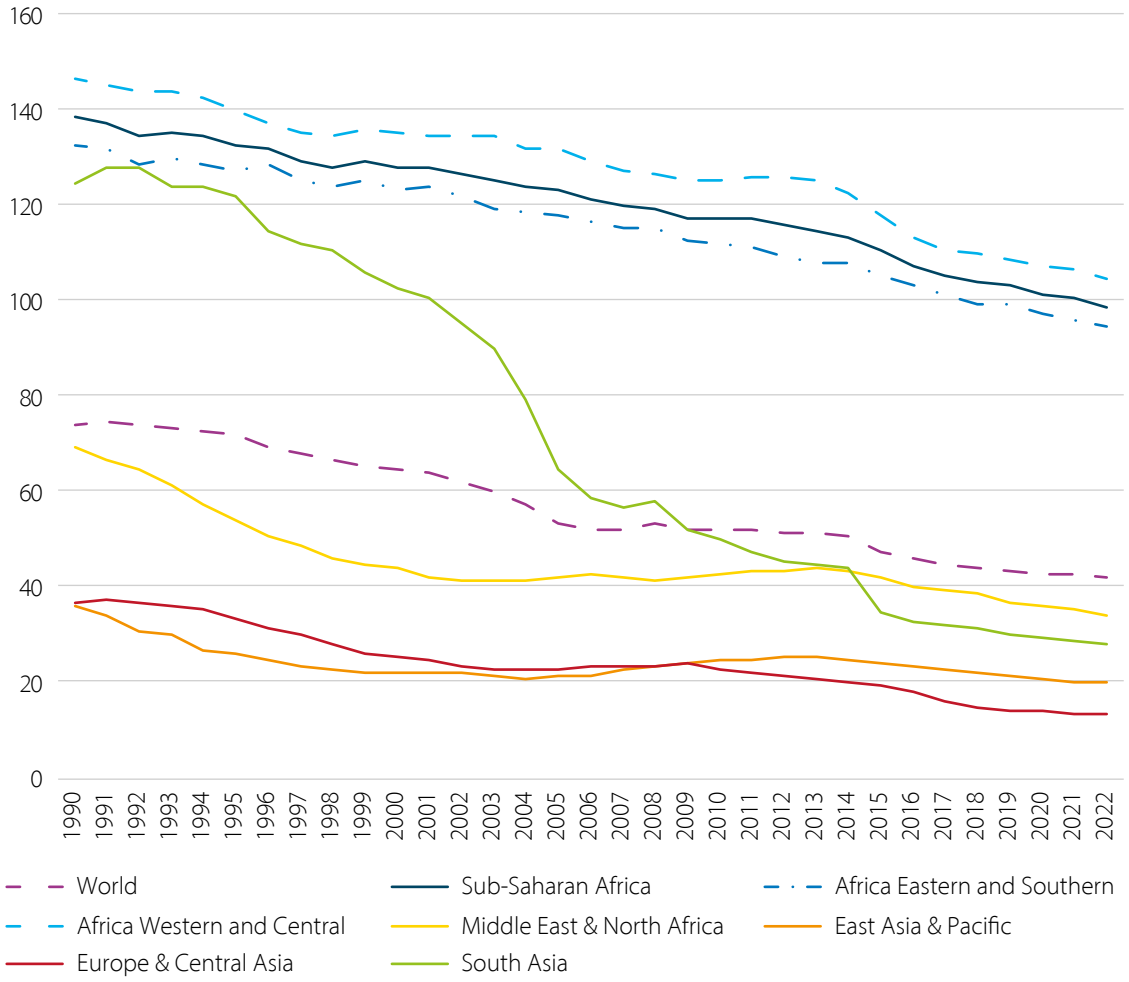
[51] Institute for Health Metrics and Evaluation. (2021). *Global Burden of Disease (GBD) Compare Tool.* Available at: https://vizhub.healthdata.org/gbd-compare/. Accessed on 29-11-2024. Available under CC BY-NC-ND 4.0.

[52] UNAIDS. (2023). *Global AIDS Data Book 2023.* Available at: https://www.unaids.org/sites/default/files/media_asset/data-book-2023_en.pdf.

[53] UNAIDS. (2024). *The Urgency of Now: AIDS at a Crossroads.* Available at: https://www.unaids.org/sites/default/files/media_asset/2024-unaids-global-aids-update_en.pdf.

Adolescent pregnancy: Sub-Saharan Africa continues to reflect the highest rates of teenage fertility among all regions in the world, and while rates have been decreasing since 1990, this downward trend is markedly less prominent in the region than in other parts of the world. In 2022, there were 99 births per 1,000 adolescent girls aged 15-19 years old in sub-Saharan Africa, compared with the global average of 42 per 1,000 15–19-year-old girls (Figure 6). Adolescent pregnancy is associated with school drop-out and poor academic achievement, and in many contexts across the continent, young mothers face challenges in continuing and completing their education – although many countries have removed regulatory barriers to young mothers' school enrolment in practice cultural perception, stigma, financial and logistical obstacles continue to impede the attendance of pregnant learners and young mothers.

Figure 6: Adolescent fertility rate (births per 1,000 women ages 15-19), by region, 1990-2022



Data source: United Nations Population Division, World Population Prospects, accessed from data.worldbank.org on 29-11-2024. Avaliable under CC BY-4.0.

Child, early, and forced marriage (CEFM): CEFM is prevalent across Africa and is recognised as a significant violation of human rights to life, health, education, safety, and security—more often affecting girls, but sometimes affecting boys as well. CEFM is associated with school drop-out and is a significant barrier to educational achievement. Fourteen out of the 15 countries with the highest rates of child marriage globally—where the rate of girls married in childhood surpasses 30 per cent—are in Sub-Saharan Africa (including nine in West and Central Africa[54]).

[54] UNICEF. (2019). The State of the World's Children 2019 Statistical Tables. Available at: https://data.unicef.org/resources/dataset/sowc-2019-statistical-tables/.

Female genital mutilation/cutting (FGM/C): FGM/C constitutes a violation of girls' and women's rights, with negative consequences affecting physical and mental health, and reproductive health and childbirth in particular. While there has been substantial progress toward eliminating FGM/C as a harmful practice, it remains a threat to young women in many countries. In East Africa, the prevalence of FGM/C among children 0-14 years old decreased from 71.4 per cent in 1995 to 8.0 per cent in 2016; in North Africa, it decreased from 57.7 per cent in 1990 to 14.1 per cent in 2015; and in West Africa, from 73.6 per cent in 1996 to 25.4 per cent in 2017. Thus, the decline has been faster in East Africa and slower in North Africa, with rates remaining problematically high across Africa despite the decreases.[55]

Violence, including gender-based and sexual violence: Violence is a critical issue for the education sector, as the experience of violence affects both mental and physical health and, in turn, affects participation, attendance and attainment in education and the overall well-being of learners. Students who experience violence are more likely to score lower on tests, experience fear and anxiety related to school participation, and have lower rates of school attendance and completion.[56] Patterns of bullying and other aggressive behaviour are common across the continent, and online bullying and harassment are expanding as internet access increases.[57] According to Global School-based Student Health Survey data, 42.7 per cent and 48.2 per cent of learners reported bullying in North Africa and Sub-Saharan Africa, respectively, as well as high rates of physical violence at 46.3 per cent and 36.9 per cent.[58] The estimated lifetime prevalence of physical or sexual intimate partner violence against ever-partnered adolescent girls aged 15–19 years was highest in Oceania (47 per cent), followed by central Sub-Saharan Africa (40 per cent) and eastern Sub-Saharan Africa (31 per cent).[59] Notably, countries with higher rates of female secondary school enrolment had a lower prevalence of intimate partner violence against adolescent girls. Lower-income countries and societies with a high prevalence of child marriage had a higher prevalence of physical or sexual intimate partner violence against adolescent girls. Sexual misconduct and violence committed by teachers is often underreported or silenced, but the limited existing evidence suggests that it is commonplace.[60]

Nutrition & Non-Communicable Diseases (NCDs): Africa faces a wide range of nutritional challenges affecting learners' education, health outcomes, and overall well-being. Evidence shows that children aged 5–19 years are affected by multiple forms of malnutrition.[61] Undernutrition makes children much more vulnerable to diseases and death, contributing to 45 per cent of deaths among children under five years of age globally.[62] At the same time, steadily increasing urbanisation and more sedentary lifestyles are affecting learners' nutritional needs and levels of physical activity, contributing to rising obesity rates in some country contexts. Many NCDs emerge due to patterns of behaviour established during adolescence that can have life-long consequences. Although nutritional services can promote the well-being of children who lack access to healthy food and encourage them to stay in school, survey data across 36

[55] Kandala N-B, Ezejimofor MC, Uthman OA et al. (2018). *Secular trends in the prevalence of female genital mutilation/cutting among girls: a systematic analysis.* BMJ Glob Health 2018; 3: e000549. Available at: https://doi.org/10.1136/bmjgh-2017-000549.

[56] USAID. (2018). *Research for Effective Education Programming – Africa (REEP) Education Data Brief. Global Prevalence of School-Related Gender-based Violence (SRGBV), and* UNESCO. (2018b). *School Violence and Bullying. Global Status and trends, drivers and consequences.*

[57] GSM Association. (2019). The Mobile Economy West Africa 2019. Available at: https://www.telepin.com/gsma-report-the-mobile-economy-west-africa-2019/ and Plan International. (2020). *Free to be online? Girls' and young women's experiences of online harassment.* Available at: https://plan-international.org/publications/freetobeonline.

[58] UNESCO. (2019). *Behind the numbers: Ending school violence and bullying.*

[59] Sardinha, L. et al. (2024). *Intimate partner violence against adolescent girls: regional and national prevalence estimates and associated country-level factors.* The Lancet Child & Adolescent Health, 8: 636-46. Available at: https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(24)00145-7/fulltext.

[60] Mcmanus, J., Rudasingwa, M., Nijhof, E., Mokobi, K., Deme, s. f., Kiawoin, J., … Pignon, C. (2024). *Improving learning outcomes for out-of-school children: evidence from a randomized evaluation of an accelerated learning program in Liberia.* Available at: https://www.tandfonline.com/doi/full/10.1080/03050068.2022.2133861?src=recsys#abstract.

[61] UNESCO. (2023h). *Ready to learn and thrive: School health and nutrition around the world.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000384421.

[62] WHO. (2024). *Maternity Mortality Fact Sheet.* Available at: https://www.who.int/news-room/fact-sheets/detail/infant-and-young-child-feeding. Accessed on 29-11-2024.

African countries finds that just under a fifth of countries have taken action to strengthen school nutrition services nationwide.[63]

Substance abuse: Substance abuse among young people is a growing health concern in Africa. About 68.5 per cent of people who sought treatment for drug use disorders on the continent were aged 15 to 34 years, according to the African Union's Pan-African Epidemiology Network on Drug Use Report.[64] This alarming statistic underscores the urgent need for targeted interventions to address substance use among adolescents and young adults. The prevalence of substance use varies across different regions and substances. For instance, alcohol use is the most common, followed by khat, stimulants, and tobacco. The high rates of substance use are influenced by various socioeconomic and cultural factors, including poverty, unemployment, peer pressure, and the availability of substances. Additionally, the lack of adequate mental health services and support systems exacerbates the problem, as many young people turn to substances as a coping mechanism for stress and trauma.[65]

Efforts to combat substance abuse in Africa must be multifaceted, involving community-based prevention programmes, improved access to treatment and rehabilitation services, and policies aimed at reducing the availability of harmful substances. Education and awareness campaigns are also crucial in changing attitudes towards substance use and promoting healthier lifestyles among young people. By addressing the root causes and providing comprehensive support, it is possible to reduce the prevalence of substance abuse and improve the overall health and well-being of Africa's youth.

Mental health: Anxiety and depressive disorders are common among 10-19-year-olds worldwide, and self-harm is the third contributor to mortality among older adolescents and young adults (15–29 years).[66] While needs for psychosocial support are recognised, critical gaps exist, and mental health is a neglected priority overall. Despite the high demand for support, median expenditures on mental health by governments globally represent only 2.1 per cent of health spending, with spending in lower- and middle-income countries focused primarily on mental illness.[67] In Sub-Saharan Africa, a systematic review of 37 studies spanning 97,616 adolescents found prevalences of 26.9 per cent for depression, 29.8 per cent for anxiety disorders, 40.8 per cent for emotional and behavioural problems, 21.5 per cent for Post-Traumatic Stress Disorder (PTSD), and 20.8 per cent for suicidal ideation.[68] The review found that particular risks for teenagers in the region included being affected by HIV and AIDS, exposure to violence and trauma, poverty, orphanhood, being 'out of school', socioeconomic disadvantages and high levels of deprivation. Additionally, survey data finds that government action on Mental Health and Psychosocial Support (MHPSS) services in schools remains limited: across 36 African countries with data, about 2 in 5 countries are not acting on school-based MHPSS. Moreover, fewer than a fifth of African countries are investing in qualified professionals to provide MHPSS or utilising remote MHPSS interventions nationwide (Figure 7).[69]

[63] UNICEF and the Hempel Foundation. (2024). *Foundational Learning Action Tracker: Results for Africa.* Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

[64] African Union (AU) (n.d.) *PAENDU Report.* Available at: https://au.int/sites/default/files/documents/43890-doc-PAENDU_REPORT_-_English.pdf.

[65] Frontiers in Psychiatry. (2024). *Substance use among young people in sub-Saharan Africa: a systemic review and meta-analysis.* Available at: https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2024.1328318/full.

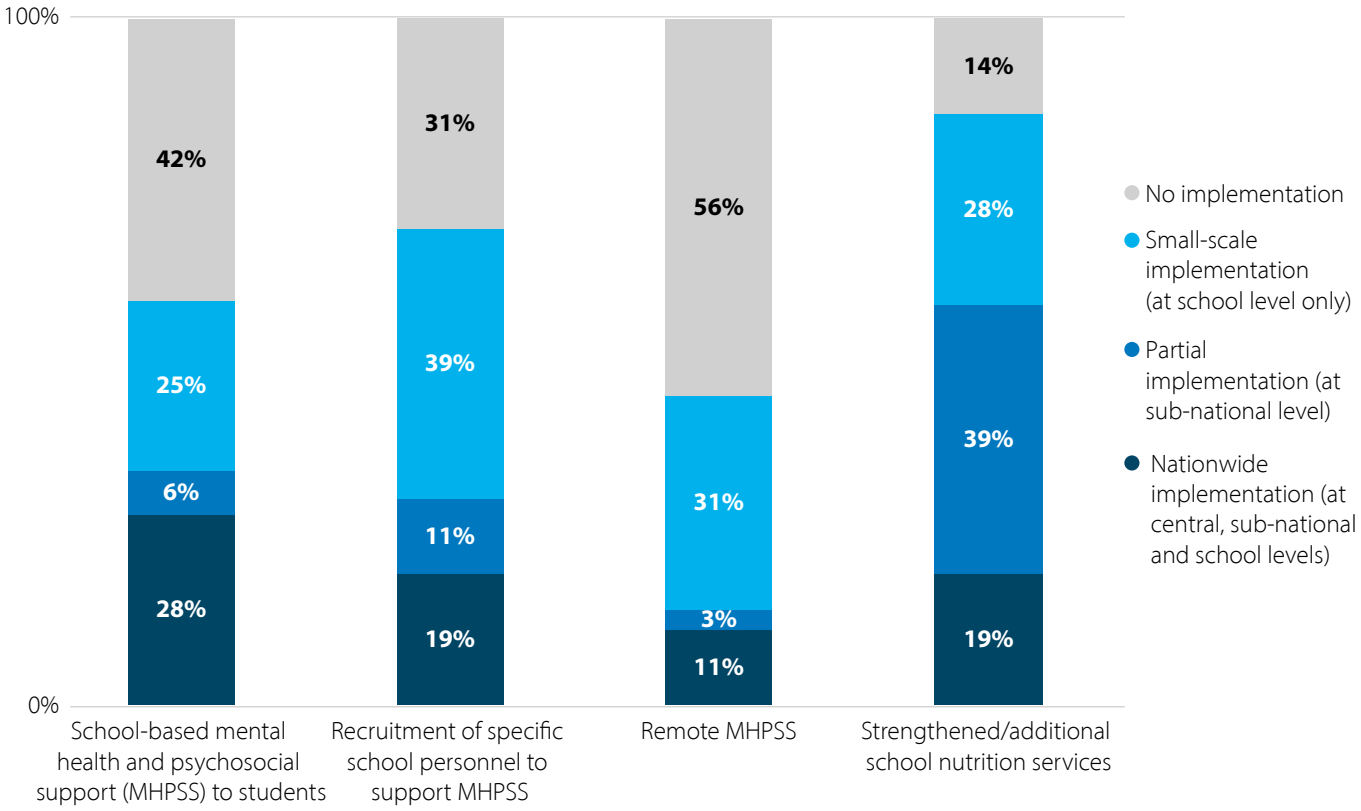
[66] WHO. (2024a). *Adolescent mental health.* Available at: https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health. Accessed 29-11-2019.

[67] United Nations Children's Fund. (2021). *The State of the World's Children 2021: On My Mind – Promoting, protecting and caring for children's mental health*, UNICEF, New York, October 2021.

[68] Jörns-Presentati A., Napp, A.K., Dessauvagie, A.S., Stein, D.J., Jonker, D., et al. (2021). *The prevalence of mental health problems in sub-Saharan adolescents: A systematic review.* PLOS ONE 16 (5). Available at: https://doi.org/10.1371/journal.pone.0251689.

[69] UNICEF and the Hempel Foundation. (2024). *Foundational Learning Action Tracker: Results for Africa.* Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

Figure 7: Share of African countries (N=36) implementing policy actions to develop psychosocial health and well-being, 2024



Source: UNICEF and the Hempel Foundation, 2024.

Limited data and information: Many African countries have a limited information base to draw on for analysis and planning.[70] Survey instruments have been developed that can improve understanding of the health and well-being of school-age children and adolescents and the extent to which their home and school environments promote better health. For example, the Global School-Based Student Health Survey measures and assesses the behavioural risk factors and protective factors related to the leading causes of morbidity and mortality among students. In contrast, the Violence Against Children and Youth Survey measures physical, emotional, and sexual violence against children and youth up to age 24, both in and outside of school. Facility-based surveys include the Global School Health Policies and Practices Survey, which asks head teachers about health services, the physical environment, food and nutrition, health education, physical education, governance and leadership, and school policies and resources. Many countries currently enhance their existing routine data collection as part of their Education Management Information System (EMIS) to monitor data on health education programmes and track progress against targets set in regional commitments. Rigorous collection, analysis and application of data on learners' health and well-being can reap enormous benefits throughout the entire lifespan of education sector planning, including education sector analysis, joint sector reviews, prioritisation and consultation exercises, programme design and implementation planning, costing and budgeting, and monitoring and evaluation.

[70] Africa Union. (2023). *Continental Strategy for Education, Health and Well-Being of Young People.* Available at: https://healtheducationresources.unesco.org/library/documents/au-continental-strategy-education-health-and-well-being-young-people.

1.2.2.2 Education for health and well-being

The promotion of education, health and well-being across the continent has been supported by the development of frameworks, policies and strategies in recent years. The AU has made significant strides towards promoting education, health, and well-being on the continent by adopting normative frameworks, policies, and continental strategies. Key among these is the African Charter on Human and Peoples' Rights (ACHPR), the African Charter on the Rights and Welfare of the Child (ACRWC), and the African Youth Charter (AYC), which provide access to inclusive, accessible, quality access to health, education, and protection as a fundamental human right. From 2000 to 2015, Sub-Saharan Africa also saw a notable rise in health and nutrition interventions within education sector plans.[71] The adoption of the CESA 2016-2025 is an important further milestone, setting out the education sector's vital role in achieving the goals and aspirations of the AU Road Map on Harnessing the Demographic Dividend through Investments in Youth and the AU Agenda 2063: The Africa We Want. Notable at the sub-regional level are the Eastern and Southern Africa *Ministerial Commitment: Fulfilling our promise to education, health and well-being for adolescents and young people*[72] and West and Central Africa's *Commitment for educated, healthy and thriving adolescents and young people.*[73]

Recognising the important interrelated nature of education and health, the AU has developed an AU Continental Strategy on Education for Health and Well-Being. To address the challenges facing African children, adolescents and youth, the African Union Education Cluster developed the AU Continental Strategy on Education for Health and Well-Being (AU EHW).[74] The goal of the AU EHW Strategy is to foster improved reproductive, mental, and physical health of children and young people while contributing to the achievement of education goals. Recognising that there are often many overlapping health priorities competing for teaching and learning time, the strategy aims to provide a cohesive framework for African nations to ensure that young people develop the knowledge, life skills, values, attitudes, and sense of agency needed for better health, well-being and learning. The strategy serves as a blueprint for the regional economic communities and member states to drive forward a collective body of health promotion work that can be operationalised at the regional and school levels to benefit learners across the continent. The AU EHW strategy outlines four pillars to support young people's developmental needs and address the common threats that disrupt their education and their lives: 1) Promoting Healthy Lifestyle; 2) Disease Prevention; 3) Safe, inclusive, and non-violent learning environments for all; and 4) Skills-based reproductive health education.

The most effective education for health and well-being starts early and builds progressively as learners mature, and this can be supported by recently developed guidance. Primary school Foundational Education for Health and Well-being (FEHW) programmes, tailored to learners' developmental stages and diverse needs, are critical to laying the groundwork for children and very young adolescents to experience healthy, fulfilling lives. Foundational education for health and well-being (FEHW) refers to the building blocks of knowledge, attitudes and skills that enable younger learners to navigate their current and future health and well-being needs. This is an umbrella term that covers a variety of existing education programmes promoting health and well-being at primary schools. Such programmes include life-skills education, social and emotional learning, comprehensive reproductive health education, violence prevention education, physical education and nutrition education. FEHW does not seek to replace the terms used for existing health and well-being education programmes. Instead, the intention is to highlight

[71] Sarr, B., Fernandes, M., McMahon, B., Peel, F., and Drake, L. (2017). The Evolution of School Health and Nutrition in the Education Sector 2000–2015 in sub-Saharan Africa. *Frontiers in Public Health*, January 30. Available at: https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2016.00271/full.

[72] UNESCO. (2021d). *Eastern and Southern Africa Ministerial Commitment: Fulfilling Our Promise to education, health and well-being for adolescents and young people.* Available at: https://healtheducationresources.unesco.org/library/documents/eastern-and-southern-africa-ministerial-commitment-fulfilling-our-promise.

[73] Commit4YoungPeople. (2013). *Engagement de l'AOC.* Available at: https://commit4youngpeople.org/sites/default/files/2023-04/EN Engagement de l'AOC 2023-06-04.pdf.

[74] UNESCO. (2023a). *AU Continental Strategy for Education, Health and Well-Being of Young People.* Available at: https://healtheducationresources.unesco.org/library/documents/au-continental-strategy-education-health-and-well-being-young-people.

common goals and objectives across various primary school health and well-being education programmes, aiming to promote a more holistic and coordinated approach. A recently published set of technical briefs offers guidance on curriculum design and whole-school approaches to implementing FEHW.[75]

1.2.2.3 Addressing violence in schools

An essential part of protection and well-being through education is preventing and addressing violence in all its forms. This includes ensuring that schools are safe, health-promoting, and inclusive environments free from bullying, harassment, discrimination or corporal punishment among learners of all sexes. All types of violence in education significantly affect learning and academic performance. For instance, substantial evidence shows that corporal punishment impairs child development, including brain and cognitive development, worsens children's behaviour, increases aggression, reduces their ability to concentrate and is overall associated with reduced academic achievement; it also undermines the quality of teacher-learner relationships, makes children fear and dislike school, and is associated with school dropout. Gender-Based Violence (GBV), committed by both teachers and students, is a significant form of harm to learners that is prevalent in the education systems of many countries. However, School Related Gender-Based Violence (SRGBV) can be tackled successfully in schools, as the case study below illustrates.

Box 1

School-based approach to addressing SRGBV in three African countries

Connect with Respect is a school-based approach to directly addressing and preventing school-related gender-based violence. Since 2018, UNESCO has implemented the Connect with Respect (CWR) tool, a curriculum resource for preventing SRGBV. The toolkit seeks to foster safer learning environments by challenging harmful gender norms and reducing violence in schools. It aims to improve peer and teacher-student relationships, promote peer support and help-seeking, increase awareness of gender equality, and reduce the risk of HIV by addressing social drivers of HIV. It targets both teachers and learners and is used by teachers to address complex issues of school violence in the classroom and the broader school environment.[76]

The toolkit addresses the root causes of SRGBV and utilises a multi-sectoral approach to provide adolescents with support beyond the education system. The Connect with Respect toolkit addresses the root causes of SRGBV by integrating gender equality and violence prevention into education. The toolkit empowers adolescents with the knowledge and skills needed to foster respectful relationships and reduce violence, which is a known risk factor for HIV. The CWR curriculum promotes critical thinking about gender norms, for example, how gender norms can lead to harmful practices that can ultimately contribute to violence or allow violence to remain silenced. It also helps learners to build skills for seeking help and support when faced with violence. By equipping learners with the tools to challenge harmful behaviours and promoting safe learning environments, the toolkit directly contributes to reducing gender-based violence and improving health outcomes. Additionally, the toolkit strengthens the collaboration between education and other sectors to provide adolescents with integrated support, including access to GBV and HIV services. This multi-sectoral approach not only addresses the medical aspects of HIV but also tackles social and structural drivers of HIV, such as power imbalances, rigid notions of masculinity and gender-based violence.

[75] UNESCO. (2024a). *Building strong foundations: what a foundational education for health and well-being?* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000389751.

[76] UNESCO. (2022a). *Analysis of experience and outcomes of Connect with Respect violence prevention programme: a five-country study.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000380634.

A pilot of the programme, including three African countries, increased knowledge of gender concepts, improved relationships, and shifts in attitudes towards gender equality and violence prevention within the schools. A pilot of the CWR programme was conducted in eastern and southern Africa and the Asia Pacific region, including Zambia, the United Republic of Tanzania, Eswatini, Thailand, and Timor-Leste, between 2019 and 2020. The pilot sought to establish the impacts of the programme on peer relationships as well as teacher-learner relationships, students' experiences of safety, fair treatment and violence, their knowledge and skills in seeking help, as well as teacher and student perceptions about the usefulness of the CWR programme. Analysis[77] of the outcomes showed increased knowledge of gender concepts, improved relationships, and shifts in attitudes towards gender equality and violence prevention.

- A significant majority of students (91 per cent) indicated that schools should teach about gender-based violence prevention.
- Over three-quarters (77 per cent) of students reported improved relationship skills following the programme, showcasing the effectiveness of integrating respectful relationship education.
- There was more than a 20 per cent reduction in the proportion of students who found it acceptable for a man to beat his wife in Timor-Leste and the United Republic of Tanzania.
- Reports of daily or frequent incidents of boys making inappropriate or offensive comments about girls decreased, indicating an improvement in the school environment.
- Positive shifts in attitudes towards gender equality were observed, with an increased number of students agreeing that men and women should share household responsibilities equally.
- Enhanced school safety policies and increased student confidence in accessing Sexual and Reproductive Health and Rights SRHR services were also recorded.

The programme can be a cost-effective approach to addressing SRGBV and promoting HIV prevention, and tools adapted to the African context are available. The Connect with Respect programme is a promising resource for addressing social and structural drivers of HIV, including harmful social and gender norms. Proper integration of CWR activities into the existing curriculum, especially in Comprehensive Sexuality Education (CSE), will ensure effective implementation of the programme. If well-integrated, the CWR is a cost-effective resource that can not only support violence prevention but also become a good entry point for broader conversations on HIV prevention among adolescents and young people. Teacher guides and classroom activities adapted to African contexts are available.[78]

1.2.2.4 Reproductive health education

Education that covers the cognitive, emotional, physical and social aspects of education for health and well-being can have many different names or terms. More important, however, is that it is effectively and comprehensively implemented. UNESCO defines comprehensive reproductive health education as a curriculum-based process of teaching and learning about the cognitive, emotional, physical and social aspects. It aims to equip children and young people with knowledge, skills, attitudes and values that will empower them to realise their health, well-being and dignity; develop respectful social relationships; consider how their choices affect their own well-being and that of others and understand and protect their rights throughout their lives. Note that governments use different terms to describe education related to health and well-being, reflecting their specific contexts and norms. National stakeholders, in collaboration with development

[77] Ibid.

[78] UNESCO. (2021a). *Connect with respect: preventing gender-based violence in schools; classroom programme for learners in upper primary and early secondary school (ages 12-15); teacher guide & classroom activities.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000380633.

partners, are encouraged to adopt terminology that aligns with local preferences and sensitivities. Examples include Reproductive Health Education, Family Life Education, Life Orientation, and HIV Education.[79]

There is significant evidence of the positive impact of education for health and well-being. Overall, the evidence base for the effectiveness of school-based health and well-being education to grow and strengthen, with many reviews reporting positive results on a range of outcomes, including young people's knowledge and improving their attitudes related to reproductive health and behaviour. Good quality and well-implemented comprehensive reproductive health education programmes with links and access to reproductive health services contribute to increased knowledge levels about education for health and well-being, relationships and HIV; delayed initiation of intimate activity; reduced frequency of unprotected encounters; fewer partners; increased use of protective measures against unintended pregnancy and infections; the empowerment of girls and women; and greater gender equality.

Teachers are critical for the delivery of good quality education for health and well-being. Effective implementation depends on many factors, as illustrated by the case study below. However, the quality of teacher orientation and capacity building is critical as teachers play a central role in delivering good quality comprehensive reproductive health education. Teachers will need to be trained on effective teaching methods that meaningfully involve students in collaborative learning, allowing peer-to-peer interactions which allow them to practise the social and critical thinking skills associated with respectful relationships.[80]

Box 2

Reproductive health in the Democratic Republic of the Congo[81]

Growing up GREAT! is a multi-level intervention aiming to improve reproductive health and gender equity among young adolescents. Save the Children implemented Growing Up GREAT! in Kinshasa, Democratic Republic of the Congo. It is a multi-level intervention to improve reproductive health and gender equity among adolescents aged 10 to 14. The intervention was developed and delivered in partnership with eight local civil society organisations. The multiple levels of intervention corresponded to the spheres of influence that most affect early adolescent lives: individual, family, school and community. The intervention encouraged reflection and dialogue through peer group engagement to build more equitable gender norms supporting teenage development and well-being.[82]

It targeted five different audiences with different messages, materials and approaches. The adolescents aged 10 to 14 were reached using a gender-transformative, age-tailored toolkit that used games, stories and books on puberty to promote reflection and dialogue with peers and parents. The focus was on improving knowledge, attitudes and behaviours around reproductive health. Parents and caregivers were brought together to view and discuss videos demonstrating positive parenting behaviours, for example, treating sons and daughters equally and talking about puberty with their children. Teachers were provided with orientation training and Growing Up GREAT! materials that were used during classroom-based Family Life Education. Local health service providers were also supported in facilitating puberty awareness sessions for the adolescents. Finally, community-level dialogue with community members was facilitated through interactive games to promote dialogue around gender-equitable expectations for adolescents. Going beyond school-level actors and utilising other community structures and actors was particularly important to reach out-of-school adolescents.

[79] UNICEF. (2024c). *What is Foundational Education for Health and Well-being?* Available at: https://www.unicef.org/media/158026/file/BSF1. What is Foundational Education for Health and Well-being.pdf.

[80] UNESCO. (2018a). *International technical guidance on sexuality education: an evidence-informed approach.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000260770.

[81] UNESCO. (2024). *Building strong foundations: what a foundational education for health and well-being?* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000389751.

[82] Ibid.

An evaluation of the intervention demonstrated promising results in increasing knowledge and awareness, improved communication and relationships, decreased teasing and bullying, and reduced inequalities. The intervention increased essential components of reproductive health knowledge, including understanding of pregnancy risk and awareness of where to access condoms and other forms of contraception. Relationships and communication with caregivers were improved, especially among out-of-school adolescents and those aged 10-12, contributing to greater reproductive health preparedness, including menstruation, relationships and contraception. Greater gender equality in households and decreased levels of teasing and bullying were also reported. Finally, by including out-of-school adolescents, the intervention managed to reduce inequalities in knowledge levels with their in-school peers.

1.2.3 Conclusion

Despite the well-established and significant positive relationship between health, well-being and education levels, implementing existing policies and frameworks remains limited and inconsistent. Children and adolescents who receive quality education are more likely to be healthy. Likewise, children and adolescents who are healthy are better able to learn. Investing in school health systems is a smart way for countries to improve the health and education prospects of today's learners and tomorrow's leaders. However, a review of the extent to which existing educational planning guidelines and tools address health and well-being reveals a significant underrepresentation of health, well-being, and related themes in existing educational planning frameworks in Africa and globally.[83] Recent tools and frameworks have been developed to support a more holistic approach to education and health and well-being; one such example is the RAPID Framework developed by the Global Coalition for Foundational Learning, which outlines key actions needed to accelerate learning, including implementing measures to develop psychosocial health and overall well-being.[84] However, such frameworks have not yet been widely adopted in standard education sector planning processes. The implementation of such approaches remains inconsistent, with significant barriers including limited cross-sectoral collaboration, lack of capacity, and insufficient funding, among others.

Effective and comprehensive reproductive health education remains particularly challenging, often due to limited teaching capacity, time and resources. While the continent has made significant progress in securing political support for adolescent health and well-being, more remains to be done, for example, to support country endorsement and implementation of the ministerial commitments in Eastern and Southern Africa (ESA)[85] and West and Central Africa (WCA).[86] Further work is also needed to improve the status of national legal frameworks for securing the educational rights of girls and women in Sub-Saharan Africa. The quality of delivery of reproductive health education in most countries remains a challenge due to several factors, which include inadequate resources (such as teaching aids and learning support materials), insufficient number of trained teachers, inadequate teacher capacity, limited supervision, and lacking time allocation. Learners with disability face more severe barriers in terms of quality of teaching and access to learner support materials.[87] This underscores the urgent need to focus on delivering quality education for health and well-being by well-trained and confident educators.

[83] Abduvahobov, P., Cameron, S.J., Ibraheem, A., Herat, J. and Castle, C. (2024). *The need for stronger international support to integrate health and well-being and transform education: a perspective on developing countries, Frontiers in Public Health*. Available at: https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2024.1415992/full.

[84] UNICEF. (2024b). *RAPID: A framework to accelerate foundational learning.* Available at: https://www.unicef.org/media/154671/file/RAPID Framework.pdf.

[85] UNESCO. (2021d). *Eastern and Southern Africa Ministerial Commitment: Fulfilling our promise to education, health and well-being for adolescents and young people.* Available at: https://healtheducationresources.unesco.org/library/documents/eastern-and-southern-africa-ministerial-commitment-fulfilling-our-promise.

[86] Commit4YoungPeople. (2013). *Engagement de l'AOC.* Available at: https://commit4youngpeople.org/sites/default/files/2023-04/EN Engagement de l'AOC 2023-06-04.pdf.

[87] UNESCO. (2021c). *Current state of comprehensive sexual education for young people with disabilities in the East and Southern African region: needs assessment*. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000380376?locale=en.

An evidence-informed, multisectoral approach, which creates and supports safe and inclusive learning environments, is required to achieve the vision where all children can fulfil their potential. Addressing the identified gaps requires improved evidence-informed guidance, technical support, and a multisectoral approach to education planning that includes health, nutrition, and well-being as fundamental components of foundational learning, supported by political commitment, capacity, and adequate financing. To achieve a vision where all learners can fulfil their potential, countries and their development partners will need to create and support school systems and communities that promote physical and mental health, empower learners with good quality education for health and well-being that includes HIV, life skills, family and rights, and nurture safe and inclusive learning environments that are free from all forms of violence, bullying, stigma and discrimination.

The integration of health and well-being into education planning is not merely an add-on but a fundamental component of creating resilient and effective education systems. By prioritising these elements, countries can ensure that their education systems are not only places of learning but also environments that support the holistic development of every child. This approach is essential for fostering a generation of healthy, educated, and empowered individuals who can contribute positively to their communities and the broader society.

1.3 Facilities and services

1.3.1 Introduction

The importance of education infrastructure and related services to expanding access to quality education is recognised in SDG 4 and CESA, and commitments have been made to support and improve their provision. Through SDG 4.a, governments commit to 'build and upgrade education facilities that are child, disability and gender-sensitive, and provide safe, non-violent, inclusive and effective learning environments for all'.[88] Similarly, CESA identifies education facilities as one of its strategic objectives, that is, to 'build, rehabilitate, preserve education infrastructure and develop policies that ensure a permanent, healthy and conducive learning environment in all sub-sectors and for all, to expand access to quality education'. The action areas under Strategic Objective 2 address several issues pertinent to the continent, including the state of facilities in rural areas and challenges with preserving school infrastructure. They also emphasise the broader role schools often play in their communities through providing health and nutrition services. CESA's third strategic objective also relates to education infrastructure. It aims to 'harness the capacity of Information and Communication Technology (ICT) to improve access, quality and management of education and training systems', which covers education facilities and infrastructure. The action areas under Strategic Objective 3 emphasise the importance of ensuring accessibility to all students regardless of their circumstances.

The positive relationship between the presence of basic school infrastructure and educational outcomes is well established. Longer distances between students' homes and schools negatively affect access and correlate with poorer educational outcomes, especially for girls. This difference is often more pronounced in rural areas.[89] When a school does exist, access to adequate seating and desk space also positively impacts learning outcomes, comparable in magnitude to the benefits of reducing travel distance to school. Access to electricity, WASH facilities, libraries, and canteens is also commonly associated with improved learning outcomes. These facilities contribute to safer, more engaging learning environments, encourage students to spend more time at school, and help attract qualified teachers,

[88] United Nations. (2015b). *Transforming Our World: The 2030 Agenda for Sustainable Development.* Available at: http://www.un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

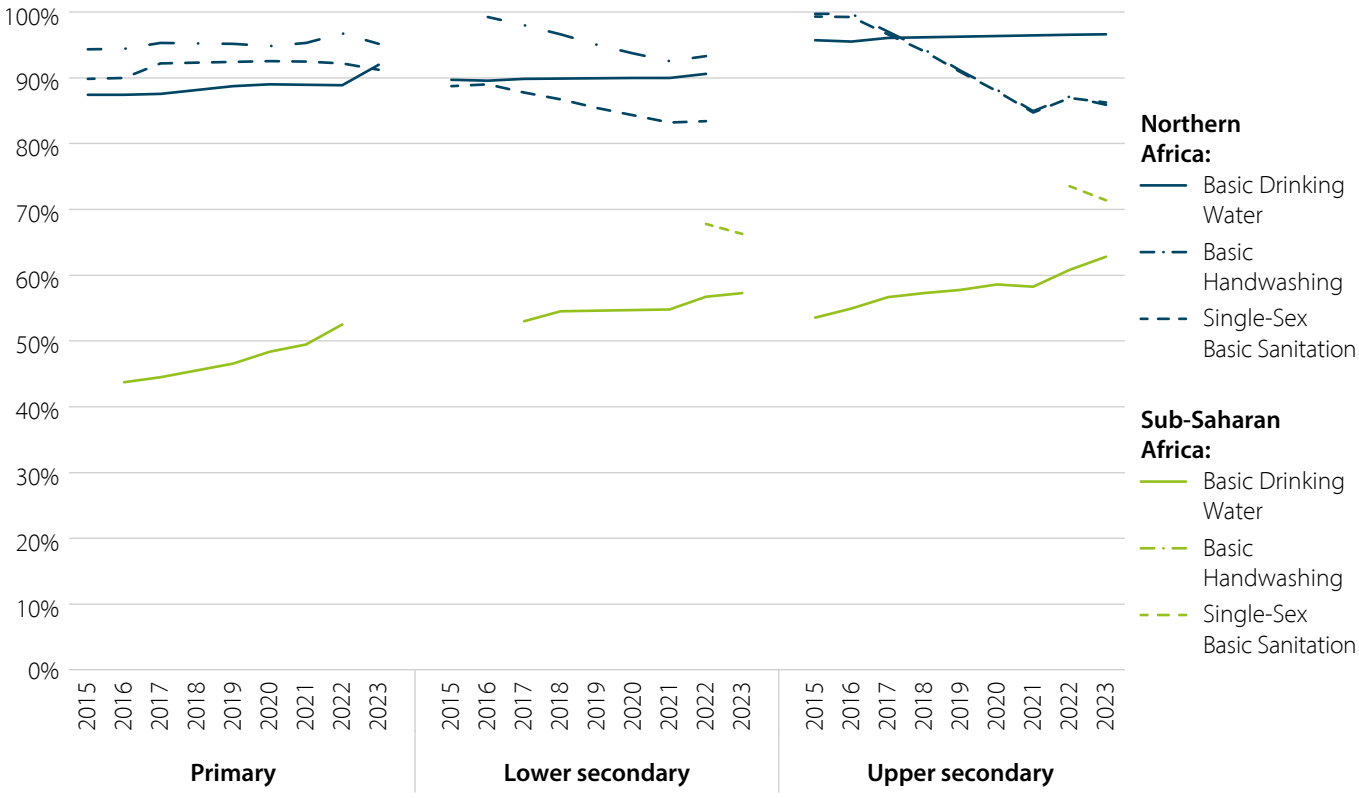
[89] UNICEF Innocenti –Inform: Using available data to optimize education investments in Africa.

thereby enhancing the overall quality of education.[90] However, it is their impact on and their facilitation of improving learning outcomes, not the material inputs themselves, that should remain the focus of education policies.[91]

The integration of Information and Communication Technology (ICT) in education infrastructure is crucial for modernising education systems and making them more accessible. ICT can bridge the gap between urban and rural education by providing digital learning resources, enabling remote learning, and facilitating teacher training. This technological integration supports interactive and personalised learning experiences, which can significantly improve student engagement and achievement.

Investing in education infrastructure and related services is about building schools and creating environments that support the comprehensive development of students. This includes ensuring that schools are safe, inclusive, and equipped with the necessary resources to provide a high-quality education. By prioritising these investments, countries can make significant strides towards achieving equitable access to education and improving learning outcomes for all students. The commitment to enhancing education infrastructure and related services is critical to achieving the Sustainable Development Goals and the objectives outlined in CESA. By addressing the diverse needs of students and creating supportive learning environments, countries can ensure that every child has the opportunity to succeed academically and develop the skills necessary for their future. This holistic approach to education is essential for fostering sustainable development and social equity across the continent.

Figure 8: [SDG 4.a.1] Percentage of schools with access to basic drinking water and with basic handwashing and single-sex basic sanitation facilities (%), by region and education level, 2015-2023



Data source: UIS September 2024 data release.

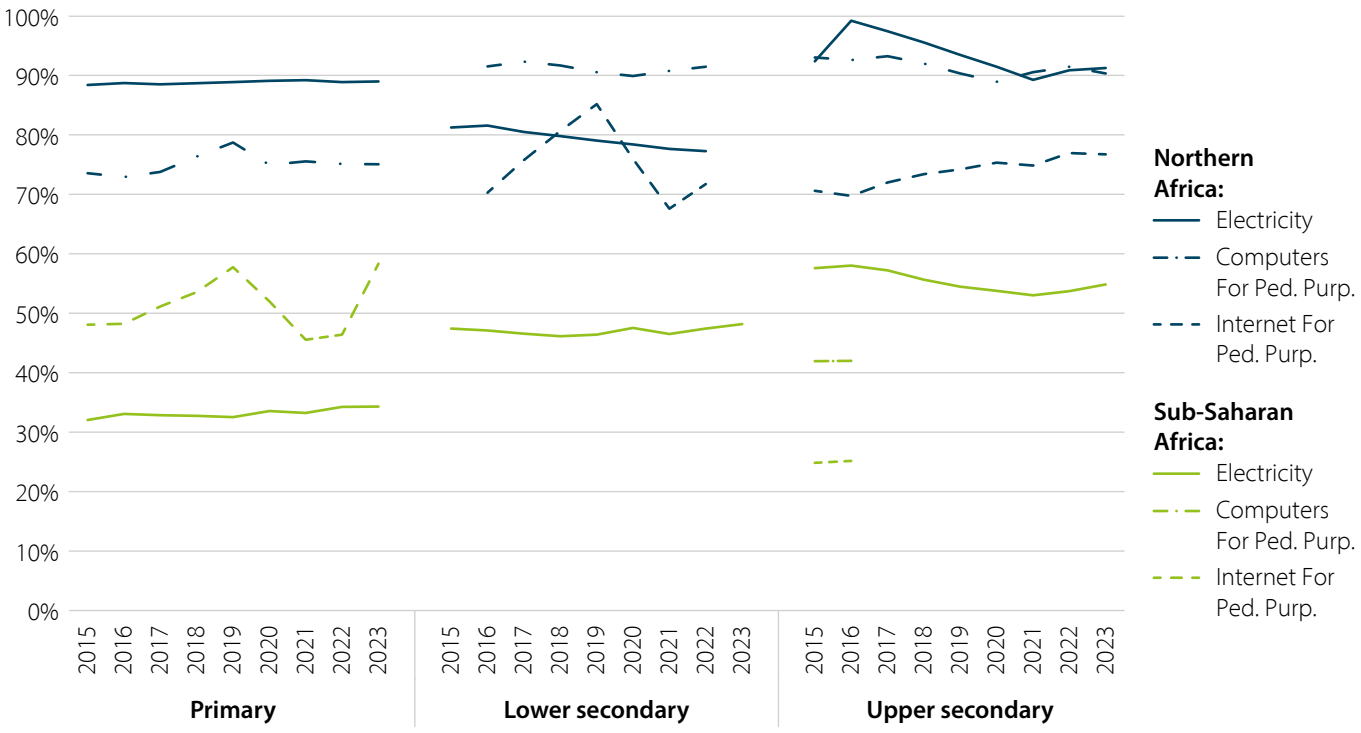
[90] UNICEF Innocenti –Inform: Using available data to optimize education investments in Africa.

[91] Hanushek, E.A. (2013). *"The Failure of Input-Based Schooling Policies," Economic Journal, Royal Economic Society, vol. 113(485).* Available at: https://ideas.repec.org/a/ecj/econjl/v113y2003i485pf64-f98.html.

There has been limited progress in improving the percentage of schools with basic facilities or ICT infrastructure. Despite the implementation of SDG 4 and CESA, the percentage of schools with basic drinking water in Sub-Saharan Africa has only improved by 5 to 10 per cent across primary, lower secondary, and upper secondary levels. There has been no significant improvement in Northern Africa, but levels there are approximately 40 per cent higher than in Sub-Saharan Africa. Data on basic handwashing and single-sex sanitation are much more limited but suggest a worsening situation, especially in lower and upper secondary schools. A similar picture emerges concerning levels of access to electricity, computers and the internet (Figure 9). Approximately 3 out of 10 primary schools, 5 out of 10 lower secondary schools, and 6 out of 10 upper secondary schools in Sub-Saharan Africa have access to electricity. In Northern Africa, levels are much higher at 9, 8, and 9 out of 10, respectively. Data on levels of access to computers and the internet are much more limited and of questionable quality as the percentage of primary schools reporting access to the internet for pedogeological purposes is higher than the percentage of primary schools with electricity. Similarly, in Northern Africa, having computers for pedogeological purposes is more common than having electricity in lower secondary schools.

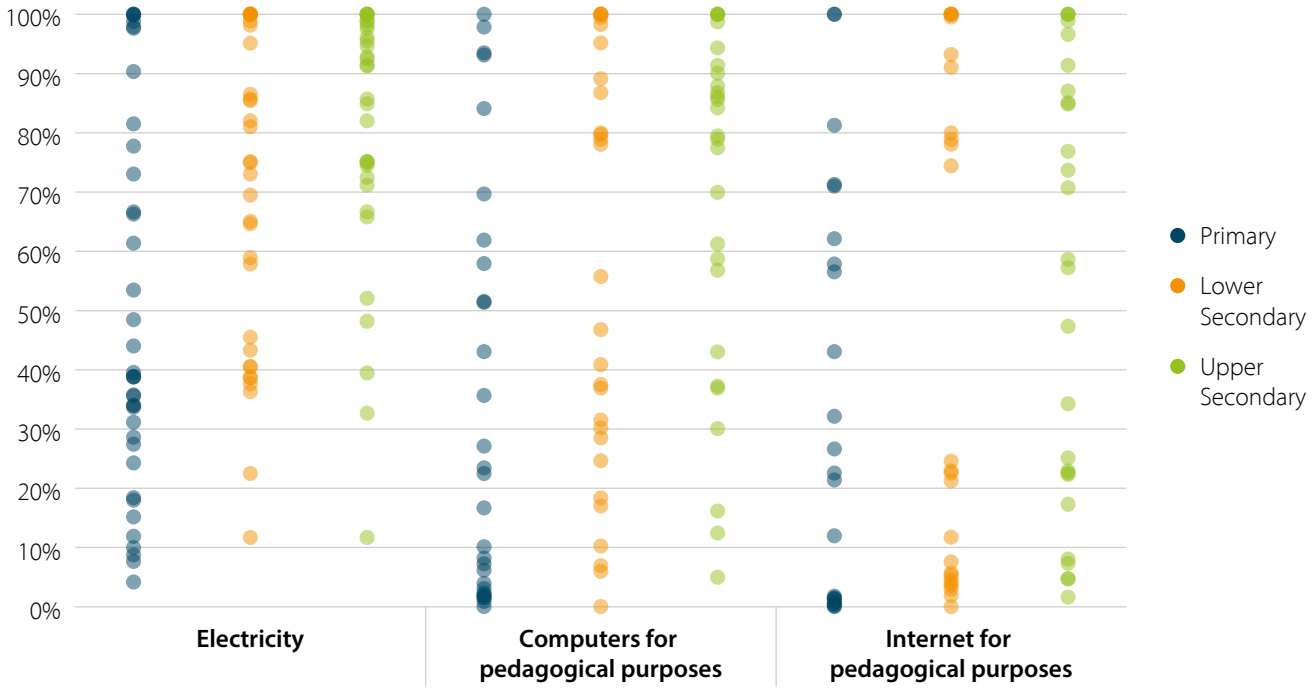
This infrastructure gap not only affects the quality of education but also limits the ability of schools to integrate modern teaching methods and technologies. The disparities in infrastructure and ICT access have profound implications for educational outcomes. Schools without basic facilities and modern technologies are less likely to provide a conducive learning environment, negatively impacting student performance and retention rates. Moreover, the lack of reliable data on these critical aspects makes it difficult to design and implement effective policies and interventions. To address these challenges, it is essential to prioritise investments in school infrastructure and ICT. Governments and development partners must work together to ensure all schools have access to basic facilities such as drinking water, sanitation, and electricity. Additionally, efforts should be made to improve the accuracy and reliability of data on school infrastructure to better inform policy decisions.

Figure 9: [SDG 4.a.1] Percentage of schools with access to electricity and to computers and internet for pedagogical purposes (%), by region and education level, 2015-2023



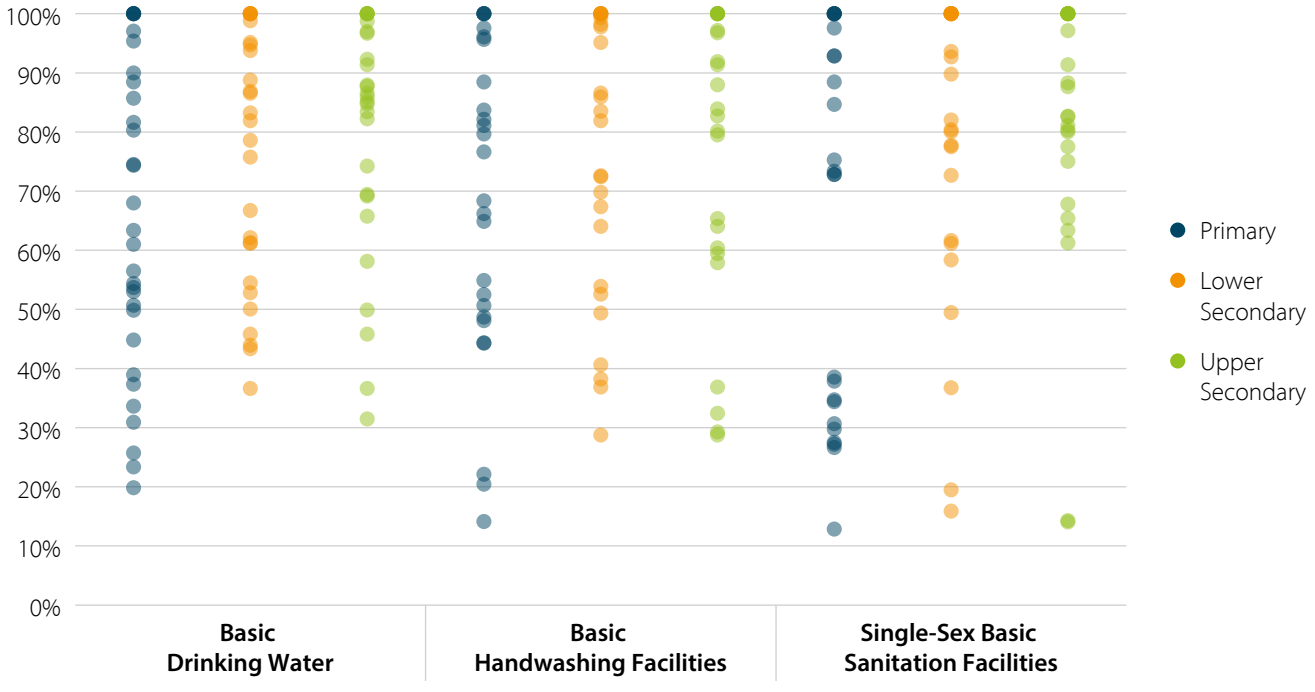
Data source: UIS September 2024 data release.

Figure 10: [SDG 4.a.1] Percentage of schools with access to electricity and to computers and internet for pedagogical purposes (%), by country and education level, most recent year available (2021-2024)



Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

Figure 11: [SDG 4.a.1] Percentage of schools with access to basic drinking water and to basic handwashing and single-sex basic sanitation facilities (%), by country and education level, most recent year available (2021-2024)



Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

1.3.2 Challenges and responses

1.3.2.1 Physical infrastructure

Starting by repairing what already exists and focusing on small-scale projects through collaboration with communities may be the most cost-effective and sustainable means of improving levels of school infrastructure in Africa. In Malawi, school communities collaborated with a global engineering firm to design and build four low-cost prototype schools. The schools are built with local construction techniques and materials, such as timber and stabilised soil blocks and are designed to function without electricity. Instead, they harness natural daylight and ventilation, meaning they are typically three degrees cooler than existing schools.[92] Although only a pilot, the community-centred approach is consistent with longstanding guidance on school construction in Africa.[93] It is also consistent with the World Bank's 2023 guidance on sustainable school infrastructure, which recommends community involvement and small-scale construction works for greater value for money and sustainability.[94] This may be particularly relevant in Africa, where many Ministries of Education struggle with accurate and efficient large-scale capital budgeting and expenditure. It is also consistent with findings from UNICEF[95] and recommendations from the World Bank[96] that levels of essential school infrastructure in Africa can most cost-effectively be improved by first focusing on renovating and repairing what already exists. Such an approach is often used in emergencies, for example, UNICEF working with local communities and materials to transform 64 semi-permanent schools into permanent school buildings for over 21,000 children in Democratic Republic of the Congo.[97] Practices like this, from emergencies, can inform larger-scale construction programmes to help address the learning crises, that is, by focusing on the minimum infrastructure required for effective learning rather than aspirational and unaffordable ideal infrastructure packages.[98] Enhanced community involvement and ownership also increase the likelihood that resulting infrastructure and facilities can be suitably maintained, an aspect large-scale construction programmes often omit, leading to facilities falling into disrepair over time.[99]

Problems relating to poor and insufficient school infrastructure in rural Kenya were somewhat alleviated by the construction and renovation of thousands of classrooms and sanitation facilities. However, challenges remain to keep pace with increasing enrolments. Kenya has made significant progress in expanding access to education, but challenges remain, particularly in underserved rural and semi-arid regions. In these areas, schools have suffered from poor infrastructure, insufficient classrooms, and a lack of qualified teachers, leading to overcrowded classrooms, poor learning environments, and high dropout rates. This has made it difficult for many students, especially girls, to complete their primary and secondary education. In 2017, the Kenyan government launched the National School Infrastructure Program[100] to improve school capacity by building additional classrooms and upgrading existing facilities, particularly in rural areas. The programme also included teacher deployment policies, which focused on sending more teachers to underserved areas. In addition, the initiative included the construction of sanitation facilities and the provision of clean water to schools, which was particularly important for increasing girls' attendance and retention. The National School Infrastructure Program resulted in constructing and renovating of thousands of classrooms across the country, significantly improving the learning environment. The programme contributed to reducing class sizes and enhancing the quality

92 Arup. (2023). Low-cost prototype could be the model for 17,000 new schools.
93 Theunynck, S. (2009). *School construction strategies for universal primary education in Africa: Should communities be empowered to build their schools?* Washington, DC: World Bank.
94 World Bank. (2023c). *Going Beyond the Infrastructure Funding Gap - South African Perspective.*
95 UNICEF Innocenti –Inform: Using available data to optimize education investments in Africa
96 World Bank. (2023c). *Going Beyond the Infrastructure Funding Gap - South African Perspective.*
97 See a UNICEF article on reimagining school construction for scalability and sustainability. Available at: https://www.unicef.org/supply/stories/reimagining-school-construction-scalability-and-sustainability.
98 World Bank. (2023c). *Going Beyond the Infrastructure Funding Gap - South African Perspective.*
99 Theunynck, S. (2009). *School construction strategies for universal primary education in Africa: Should communities be empowered to build their schools?* Washington, DC: World Bank.
100 Republic of Kenya. (2017). *National School Infrastructure Program.* Available at: https://www.education.go.ke.

of education, especially in rural areas. Additionally, the teacher deployment policy helped address the teacher shortage in underserved regions, improving student-teacher ratios and reducing dropout rates. However, challenges remain in ensuring that schools in remote areas receive adequate resources, particularly as enrolment numbers grow.

Tunisia reduced dropout rates in marginalised regions by improving school infrastructure and transportation. However, the sustainability of gains is threatened by uncertainty over maintenance budgets. Tunisia has faced challenges in retaining students in school, particularly at the secondary level. Dropout rates are highest in rural areas and among low-income families, with many students leaving school due to economic hardship, lack of transportation, and inadequate school infrastructure. Many rural schools lacked basic amenities like sanitation facilities and proper classrooms, contributing to high absenteeism and low retention rates. In 2016, the Tunisian government launched a nationwide programme to improve school infrastructure and reduce drop-out rates,[101] particularly in disadvantaged regions. The programme focused on i) Renovating schools in rural and underserved areas, ensuring that schools were equipped with proper classrooms, sanitation facilities, and clean water; ii) Transportation initiatives to address the issue of long distances to schools, especially in rural areas; iii) Improving learning environments by reducing class sizes and providing additional learning resources, such as textbooks and technology. The programme significantly improved school infrastructure and transport, leading to reduced dropout rates, particularly in rural areas. While the programme has positively impacted retention rates, challenges remain, particularly in securing sustained funding for maintenance and continued improvements in rural schools.

1.3.2.2 Technology

Access to connectivity or infrastructure does not automatically translate into effective use, especially educational technology. Despite the improved availability of digital infrastructure, there is a significant gap between access and actual usage. In Sub-Saharan Africa, 84 per cent of people lived in areas with 3G coverage by the end of 2021, but only 22 per cent were using mobile internet services. Moreover, 61 per cent of people in Sub-Saharan Africa lived within the broadband range but did not use it.[102] This indicates that access to connectivity or infrastructure does not automatically translate into actual use due to barriers such as data costs and limited digital literacy. This is especially true for educational technology. Simply providing digital tools or connectivity does not inherently improve learning. Effective digital learning requires a well-defined plan that includes training and coaching for teachers on how to integrate technology into their teaching practices. The focus must be on learning outcomes, not digital outputs, as the technology itself does not need to be advanced to be effective.[103]

[101] Ministry of Education, Tunisia. (2016). *National Strategy for the Improvement of School Infrastructure and Student Retention.* Available at: http://www.education.gov.tn.

[102] World Bank. (2024a). *Digital Transformation Drives Development in Africa*. Available at: https://www.worldbank.org/en/results/2024/01/18/digital-transformation-drives-development-in-afe-afw-africa.

[103] UNESCO. (2023d). *Global Education Monitoring Report 2023: Technology in education – A tool on whose terms?* Paris, UNESCO.

Box 3

The ongoing case for radio

Radio has been used in education for over a hundred years, and it still represents one of the most widely used and most cost-effective and sustainable education technologies. Radio has been used in education since the 1920s, and recent data suggests that almost 40 countries still use radio instruction to deliver education. Its longevity means that in at least 25 countries, robust evidence demonstrates significant improvements in student achievement.[104] Often, it is only turned to or garners significant attention in moments of emergencies, for example, Ebola and COVID-19 pandemic.[105] However, interactive radio instruction has repeatedly been demonstrated to be an effective complement to and replacement for more formal education instruction, especially for learners who are hard to reach. In Africa, its relatively low entry barrier and portability have helped it bring education to nomadic pastoralist children in Nigeria and over 1 million out-of-school children and orphans in community learning centres in Zambia over 10 years. It has also been used in Democratic Republic of the Congo to improve the reading performance of 1.2 million students.[106]

Radio-based education was used to reach out-of-school children aged 5-17 in Cameroon in regions with widespread school closures due to insecurity. Due to its flexibility and wide portability, it is often used in contexts where no other forms of education are possible. A UNICEF programme in Northwest and Southwest Cameroon used radio-based education to reach out-of-school children, where 3,502 schools out of 6,515 were closed due to insecurity.[107] The programme targeted a wide range of children; for those under 5, materials were developed for parents and caregivers focusing on early learning and development and child protection. For children aged 6 to 17, ability-appropriate literacy and numeracy scripts were developed, and teachers and some parents in the target communities were trained to guide the learners through the radio lessons. Considering the specific context needs, teachers and parents were also trained in providing trauma-impacted children with mental health and psychosocial support.

The programme provided foundational learning skills to approximately 55,000 children who otherwise would have been out of school, including supporting them to pass national examinations and continue their education in the formal secondary school system. The programme reached nearly 55,000 children, approximately half of whom were girls and developed the capacities of 817 teachers and 272 parents to provide mental health and psychosocial support and facilitate emotional well-being and care for children. Not only did the radio-based programme manage to provide key foundational learning skills to children who otherwise would be out of school, but it also provided an effective bridge back into the formal school system. All 104 children from the programme who sat the national Common Entrance Examination in 2022 passed and went on to attend secondary school. In addition, one of the students of the radio education programme was the top candidate in the 2021/2022 First School examination in the Northwest region. This demonstrates the great resiliency and potential of learners and communities and what can be achieved, even in the most difficult of contexts, with a little additional support.

Key to the programme's success was the degree of community involvement and support for the approach, which was encouraged by collaborative design and implementation and by demonstrating the benefits of effective radio education for their children. Community engagement and support for the programme and for sending their children to the learning spaces was greatly enhanced when learning was evident, especially after learners' success in examinations. The involvement and capacity building of parents and communities were crucial, and their enthusiasm and ideas led to the development of a training package in the local language on childcare and development and

[104] UNESCO. (2023d). *Global Education Monitoring Report 2023: Technology in education – A tool on whose terms?* Paris, UNESCO.
[105] R. Zelezny-Green and H. Metcalfe Paper commissioned for the 2023 Global Education Monitoring Report, Technology in education.
[106] UNESCO. (2023d). *Global Education Monitoring Report 2023: Technology in education – A tool on whose terms?* Paris, UNESCO.
[107] UNICEF. (2023b). *Learning where it is difficult to learn: Radio programmes help keep children learning in Cameroon.*

protection messages for parents and community members. Having a clear and obvious bridge between non-formal and formal education was an important motivation for learners and their families, and it should be supported further in future, for example, by adapting programme content to include lessons by grade level using the national curriculum. Further plans for development include expanding it to other communities currently outside of the formal system and integrating the programme into the formal schools and teacher training.

The most comprehensive global review of technology in education, Global Education Monitoring Report 2023,[108] highlighted several issues and implementation challenges associated with utilising modern digital technologies. Such issues do not affect radio-based education to the same degree; it often offers a solution to them. It is worth analysing them one by one.

Table 1: Comparison of modern digital technologies and radio

Modern digital technologies	Radio
Good, impartial evidence on the impact of education technology is in short supply, and it predominantly comes from the richest countries and those trying to sell it.	Multiple rigorous, independent evaluations across a wide range of contexts from decades of implementation.
Technology offers an education lifeline for millions but excludes many more.	Radio can reliably and cheaply reach almost all corners of the continent.
The fast pace of change in technology is putting strain on education systems to adapt.	The central technology, the radio, is over a century old, meaning education systems can focus more on content and utilisation.
Online content has grown without enough regulation of quality control or diversity, predominantly from richer countries and comes with data and paywall concerns.	Local content can be created relatively cheaply and easily, and once created, it can be freely distributed and replayed indefinitely, with no user data concerns.
Technology is often bought to plug a gap, with no view to the long-term costs for national budgets, children's well-being, or the planet.	Costs associated with the technology are relatively small and vanish over time, for example, a radio from 20 years ago could still function today with no data privacy concerns and a relatively small environmental impact.

Source: Global Education Monitoring Report 2023 and authors.

The resilience and effectiveness of radio-based education have been well documented and evaluated, and it is regularly turned to in times of education system crisis, for example, Ebola and COVID-19. However, in 2024, education in Africa is in a prolonged state of crisis. The ambitious goals and targets of CESA and SDG 4, that is, large-scale and multi-level expansion while simultaneously improving quality in a context of rapid population and growth and reducing financial commitments, have resulted in stagnating (and, in some cases, worsening) levels of basic infrastructure and services.

[108] UNESCO. (2023d). *Global Education Monitoring Report 2023: Technology in education – A tool on whose terms?* Paris, UNESCO.

1.3.2.3 School health and nutrition

The important, self-reinforcing relationship between health and education outcomes is well established, except most African countries currently approach it in a fragmented and uncoordinated manner. Education is a critical determinant of good health, and the health of learners is crucial to achieving education outcomes.[109] Countries in Africa have long recognised the close and self-reinforcing relationship between education and health, and Ministries of education across the continent often have a wide range of health and education interventions. These can range from curriculum content, for example, reproductive health or life skills education, to delivery of health services, for example, deworming and vaccination, to improving levels of access to fundamental services, for example, water, sanitation and hygiene and menstrual hygiene management. However, such efforts are often uncoordinated and fragmented due to the variety of managing and implementing agents.[110] In light of the current situation and the utmost importance of health for the education outcomes in Africa, and vice versa, the African Union has launched a dedicated strategy aiming to support countries to deliver a unified package of health promotion activities with supportive learning environments and whole-school approaches.[111]

Rwanda successfully increased attendance and retention rates in marginalised areas, especially among girls, through enhancing school health and nutrition services. However, long-term financial sustainability is a concern, particularly in rural areas. Poor student health, hunger, and inadequate access to water and sanitation facilities have been identified as major contributors to absenteeism and dropout rates, especially for girls during menstruation. The lack of basic amenities in schools also led to poor learning outcomes and disengagement among students. In response, the government of Rwanda, in collaboration with development partners, introduced a comprehensive Health and Nutrition Program[112] integrated with schools. This included constructing sanitation and hygiene (WASH) facilities, providing clean water, and regular health screenings for students. In 2016, Rwanda also expanded its school feeding programme to provide meals to students in food-insecure areas. The combination of health services and nutritional support aimed to improve student well-being and boost attendance. The expansion of the WASH and health services in schools significantly improved student attendance and retention rates, especially for girls, as access to sanitation facilities during menstruation improved their ability to stay in school. The school feeding programme also contributed to reducing dropout rates by ensuring that students received regular meals, alleviating the impact of food insecurity on education. However, maintaining these services in the most remote regions remains a challenge, and continued investment is needed to ensure sustainability and further reduce dropout rates.

School feeding is one of the most effective interventions for educational outcomes. Despite increased funding and coverage, many children, often those who would benefit most, do not have access. Approximately 65.4 million children across 51 African countries benefit from school feeding, nearly 30 million more than a decade ago.[113] In Southern and Northern Africa, school feeding budgets are largely funded by domestic sources, while school feeding in West and East Africa is mostly supported by international donors. Domestic financing has increased dramatically since 2013, doubling and quadrupling. Despite the increasing levels of funding and access, many children, often those who would benefit most, still lack access. Across Africa, 55 per cent of students in upper-middle-income countries and only 15 per cent of children in low-income countries receive school meals.[114] In part due to the multi-sectoral returns, the long-term return on investment of school feeding programmes is huge for low- and middle-income countries ranging between 7 and 35.[115] The education and equity benefits are well documented, with

[109] UNESCO. (2023h). *Ready to learn and thrive: school health and nutrition around the world.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000384421.

[110] AU CONTINENTAL STRATEGY ON EDUCATION FOR HEALTH AND WELLBEING OF YOUNG PEOPLE IN AFRICA

[111] Ibid.

[112] Ministry of Education, Rwanda. (2016). *National School Health Policy*. Available at: https://www.mineduc.gov.rw.

[113] African Union Commission and African Union Development Agency - NEPAD. (2022). *AUDA-NEPAD Guidelines for the Design and Implementation of Home-Grown School Feeding Programmes in Africa. AUDA-NEPAD, Midrand, South Africa.*

[114] FAO and WFP. (2018). *Home-Grown School Feeding: Resource Framework Synopsis.* Available at: https://www.wfp.org/stories/comment-africa-day-school-feeding-reminds-us-why-scaling-school-meals-so-important.

[115] 14 LMICs including Botswana, Cabo Verde, Côte d'Ivoire, Ghana, Kenya, Mali, Namibia, Nigeria, and South Africa. Available at: https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2020.587046/full.

school feeding improving levels of access and learning outcomes, with the most marginalised children, for example, those from poorer families, regions, girls and children in emergencies[116] [117] particularly benefitting.

Box 4

Home-Grown School Feeding in Malawi

Home-Grown School Feeding (HGSF) is a promising approach to sustainable school feeding that has seen significant growth in Africa in recent years. HGSF occurs when school feeding is sourced from local, smallholder farmers to increase food production and diversification while providing local communities with economic benefits.[118] Considering the importance of school feeding as a tool to achieve the CESA and the potential additional benefits of HGSF, the African Union launched the Home-Grown School Feeding Cluster in 2017.[119] The cluster supports HGSF efforts by bringing together key stakeholders and promoting learning and sharing of best practices. Since 2017, large-scale HGSF programmes have been developed across the continent. In West Africa alone, Benin, Côte d'Ivoire, the Gambia, Liberia, and Senegal have HGSF jointly implemented by the Government and WFP, while Nigeria, Ghana, and Togo have nationally owned HGSF programmes, and Burkina Faso has nationally owned HGSF programmes at the pilot phase.[120]

Tsogolo la Thanzi is a comprehensive HGSF and health practices programme in Malawi that reached over 300,000 primary school children between 2020 and 2023. Tsogolo la Thanzi (TSOLATA) – Healthy Future is a European Union (EU) funded three-year programme implemented by WFP with the Ministry of Education in coordination with the Ministry of Agriculture and Department of Nutrition, HIV and AIDS (DNHA), Ministry of Health in Malawi. Phase I of the programme was implemented in four vulnerable districts of Malawi between 2020 and 2023. It reached over 300,000 learners in 216 primary schools and approximately 20,000 smallholder farmers. The activities of the programme went beyond simply the provision of additional meals. Learners and households were also supported to apply better nutrition, hygiene, and sanitation practices. In contrast, smallholder farmers were supported in producing and selling more diversified crops, and government staff received capacity building in relation to the design and implementation of school feeding programmes.

The programme improved dietary intake and increased enrolment and retention while costing less than the traditional, centralised model. The programme achieved impressive results within a very short time frame. It was found to have significantly improved dietary intake and diversity, reduced hunger among the beneficiaries, and increased awareness of nutrition, hygiene, and sanitation practices in the targeted schools and communities. The smallholder farmers experienced an increase in crop production, with most cultivating two or more crops per season, and the vast majority, over 90 per cent, actively engaged in the school feeding programme across the four districts. The programme also improved key education indicators, with enrolment, attendance, and retention all being significantly higher. Qualitative data collected from parents and teachers suggested that the programme has also positively impacted learning as children attend more regularly, perform well, and are able to concentrate more easily during class. The HGSF was also found to be more cost-efficient than the centralised school meal distribution model, with the cost of the centralised model 19 per cent higher.[121] The programme will be scaled up as part of phase two, with WFP expecting to reach nearly 1.5 million children through HGSF in Malawi between 2024 and 2028.[122]

[116] Mundy, K. and Proulx, K. (2019). *Making Evaluation Work for the Achievement of SDG 4 Target 5: Equality and Inclusion in Education.* UNESCO, NORAD, World Bank Group, UNICEF.

[117] UNESCO. (2022b). Ready to learn and thrive: school health and nutrition around the world; highlights. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000381965.

[118] FAO and WFP. (2018). *Home-Grown School Feeding. Resource Framework Synopsis.* Available at: https://www.wfp.org/stories/comment-africa-day-school-feeding-reminds-us-why-scaling-school-meals-so-important.

[119] African Union. (2021). *African Union Biennial Report on Home-Grown School Feeding (2019-2020).* Addis Ababa, African Union.

[120] WFP, ECOWAS, CERFAM, the Research Consortium for School Health and Nutrition. (2024). *Home-Grown School Feeding in West Africa: A Landscape Analysis.*

[121] World Food Programme. (2024a). *Evaluation of Tsogolo la Thanzi - Healthy Future Home-Grown School Feeding Project from 2020 to 2023.*

[122] World Food Programme. (2024b). *Malawi country strategic plan (2024–2028).*

Key drivers of the success of the programme were community involvement, utilisation of existing structures, national ownership, and multi-sectoral partnerships. The programme's successes were attributed to several design features and implementation approaches. The target communities were heavily involved from the inception stage, including intervention selection, implementation and monitoring. This sense of ownership and adaptation of the programme to local contexts increased the willingness to adopt health practices the programme promoted and improved the efficacity of efforts to increase school enrolments. Similarly, the pro-equity approach to community involvement, specifically targeting and supporting women's involvement in farmer's organisations, food committees, etc. was identified as a key factor of success. The programme's utilisation of already existing structures at district, community and school level improved efficiency and long-term sustainability. The high levels of local ownership were mirrored at the national level with close collaboration across a range of Government ministries and the establishment of multi-sectoral partnerships to implement interventions and build the capacity of the smallholder farmers.

The programme also encountered significant challenges, for example, disaster preparedness and data management and utilisation, that it and other similar programmes should address for effective scale-up. While one of the assumed benefits of HGSF is increased sustainability and resilience as communities are not dependent on outside actors/benefactors, the programme was negatively affected by cyclones in 2022 and 2023 and other unpredictable weather events affecting yields. This emphasised the need for the programme, and others like it, to ensure the existence of robust disaster preparedness plans and climate-smart activities with sufficient capacity among programme staff and community actors. The programme also encountered challenges in programme design and accurate monitoring due to discrepancies in the data being collected. It highlighted the need for investment in better programme management and information systems to facilitate evidence-based decision-making.

1.3.3 Conclusion

Despite the variety of school-based infrastructure and services discussed in this section, their associated best evidence and guidance lead to consistent recommendations on how to better approach their quality, provision and sustainability.

Establish and implement the minimum package of acceptable infrastructure and services with prioritisation given to the most disadvantaged, for example, learners with disabilities, refugees, etc. Although aspirational goals and targets can be beneficial in inspiring and guiding long-term progress, in constrained resources, perfection is often the enemy of the good. Across all types of infrastructure and services, there are pockets of outstanding examples, with small numbers of learners benefitting and, consequently, large numbers failing to receive the minimum. As observed in school health and nutrition, the coverage of essential components remains low and fragmented,[123] and access to digital learning is even more unequal in most contexts. Therefore, education policymakers should prioritise a "minimum" package of facilities and services that are resilient and climate-adaptive over "optimum" or "ideal" as described in the World Bank's recommendations on sustainable infrastructure in education in South Africa.[124] Furthermore, to be most effective, any investments in infrastructure and services should be targeted first towards the most disadvantaged as per the African Union's guidelines on HGSF[125] and Global Education Monitoring Report on technology in education, for example, learners with disabilities, refugees, etc.

[123] UNESCO. (2023h). *Ready to learn and thrive: School health and nutrition around the world.* Available at: https://www.unesco.org/en/articles/ready-learn-and-thrive-school-health-and-nutrition-around-world.

[124] World Bank. (2023). *Going Beyond the Infrastructure Funding Gap - South African Perspective.*

[125] African Union Commission and African Union Development Agency - NEPAD. (2022). *AUDA-NEPAD Guidelines for the Design and Implementation of Home-Grown School Feeding Programmes in Africa.*

Working with what already exists is more cost-effective and sustainable. The philosophy of HGSF is based on the idea of making the most of what already exists. This can be applied to other infrastructures and services. Renovating and repairing existing infrastructure can be much more cost-effective than constructing new schools, classrooms, and toilets from scratch.[126] Smaller infrastructure projects tend to be more cost-effective and can more easily be carried out by local contractors, significantly decreasing project timelines. Using existing infrastructure in different ways can also address infrastructure and services gaps, for example, using classroom libraries rather than separate and dedicated library rooms[127] and using informal learning spaces where schools do not exist, for example, the Cameroon case study above. Working with what already exists also refers to enhancing coordination and collaboration between different stakeholders working on infrastructure and service provision management, such as the AU's strategies on Digital Education and Education for Health and Well-being of Young People in Africa.

The provision of education infrastructure and related services is most effective and sustainable when done with the involvement and support of the local community. Communities often play a crucial role in supporting service provision or constructing or repairing necessary infrastructure. For example, school communities' ability to weather-proof their infrastructure was found to be one of the key distinguishing factors between positive deviant and average schools in Togo, even among schools in similar contexts with similar resources.[128] This echoes the World Banks' finding that community engagement in school infrastructure leads to better value for money.[129] It is also consistent with the African Union's guidance on HGSF, where programmes that promote strong community ownership, participation, and accountability are stronger and more likely to transition to national ownership successfully.[130]

The services and infrastructure provided must be context-specific and flexible to evolving needs. The global guidance on school health and nutrition emphasises the need for policies and programmes to be reviewed and adapted regularly to ensure they are meeting the needs of learners and are based on available resources and capacities. This is consistent with the AU Digital Education Strategy[131] and its Continental Strategy on Education for Health and Well-being, both of which stress the importance of context-specific interventions. The rationale for this is well established, as the Global Education Monitoring Report on Technology in Education emphasises in its findings and recommendations that technology does not need to be advanced to be effective; it does need to be relevant to the specific context. Being context-specific must include elements of disaster preparedness and resilience, which can be supported through meaningful community involvement.

Data on infrastructure and service provision is required for effective planning, decision-making, and implementation, but it can start with better use of existing data. For interventions and initiatives supporting school infrastructure and providing complementary services to be context-specific and to build upon what already exists, data and information on the contexts are required. Nearly all evidence and guidance on effective infrastructure and service provision points to the fundamental importance of data and the need to improve its availability and use.[132] Data for situation analysis, problem and underlying cause identification, and data for targeted implementation and effective monitoring and evaluation. Much like the second overall common recommendation of "working with what exists" before additional data systems and processes are built, better use of the existing data can and should already take place.

[126] UNICEF Innocenti –Inform: Using available data to optimize education investments in Africa.

[127] World Bank. (2023). *Going Beyond the Infrastructure Funding Gap - South African Perspective.*

[128] UNICEF. (2023d). *Unpacking Factors Influencing School Performance in Togo.* Available at: https://www.unicef.org/innocenti/media/5706/file/UNICEF-DMS-Togo-Report-2023.pdf.

[129] World Bank. (2023). *Going Beyond the Infrastructure Funding Gap - South African Perspective.*

[130] African Union Commission and African Union Development Agency - NEPAD. (2022). *AUDA-NEPAD Guidelines for the Design and Implementation of Home-Grown School Feeding Programmes in Africa.*

[131] African Union. (2022). Digital Education Strategy and Implementation Plan. Available at: https://au.int/sites/default/files/documents/42416-doc-1._DES_EN_-_2022_09_14.pdf.

[132] For example, 2023 UNESCO Ready to Thrive, World Bank. (2023). Going Beyond the Infrastructure Funding Gap - South African Perspective, UNESCO. (2023d). Global Education Monitoring Report 2023: Technology in education – A tool on whose terms?

Section 2

Quality teaching and learning and skills development

2.1 Curricula and teaching materials

2.1.1 Introduction

Curricula, teaching and learning materials are fundamentally important to achieving all SDG 4 targets and CESA objectives. However, related data collection and monitoring have not been prioritised. Quality learning outcomes and ending Learning Poverty can only be obtained with quality educational inputs and processes. The fundamental importance of teaching and learning materials to achieving SDG 4 and CESA objectives is underlined by the specific and wide sweeping action areas under the first two strategic objectives of CESA, namely "Develop quality and relevant teaching and learning materials" and "Ensure free access to textbooks and teaching tools". This fundamental importance, especially for Africa, has been further emphasised by the recent *Learning Counts* report by UNESCO, the African Union, and the Association for the Development of Education in Africa and its number one recommendation for improving learning in Africa, simply: Give all children a textbook—and all teachers a guide.[133] Despite their central importance to achieving quality education for all, SDG 4 and CESA have not prioritised learning materials or textbooks within their results frameworks. As a result, global and regional data on their status or related trends are unavailable. In response to the limited data availability, UNICEF and the Hempel Foundation's Foundational Learning Action Tracker (FLAT) have collected evidence to provide insight into the status of textbooks in Africa: in a survey with 36 African countries, only about a fifth of countries reported that early grade textbooks are provided to every student, while in almost another fifth of countries, more than five students share a textbook.[134]

Textbooks may embody the curriculum to the learner, and in addition to teachers' explanations—textbooks are the primary means through which learners experience the curriculum. Learning support materials—textbooks and other materials—are the axis between, on the one hand, the curriculum framework and subject syllabus and, on the other hand, learning in the classroom and other learning settings. Ideally, textbooks and other curriculum support materials should provide teachers with the resources and strategies to translate the curriculum into interesting, engaging, effective, relevant and inclusive teaching (lesson) plans and learning activities. In most contexts in Africa, textbooks (in print format) still play a critical role in learning, and, in many countries, textbooks are the main (and only) teaching and learning support material, which poses limitations to learning, particularly in contexts where teachers are insufficiently or untrained (contract teachers) or without teaching experience. In such situations, carefully developed textbooks are crucial for enhancing consistency, equity and quality in school-based learning until teachers are adequately trained and have gained relevant professional experience and autonomy.[135] The textbook is often the only source of information about the curriculum for the teacher, the only book available at home for the young learners, as well as the primary source of reading for learners to practice their reading skills.

The integration of digital learning materials is becoming increasingly important in the modern educational landscape. Digital resources can complement traditional textbooks, offering interactive and multimedia content to enhance the learning experience. However, the transition to digital learning materials presents its own set of challenges, particularly in regions with limited access to technology and the internet. Ensuring equitable access to digital resources is crucial to prevent further widening the educational divide. Policymakers must prioritise investments in digital infrastructure and training for educators to effectively utilise these tools, thereby maximising their potential to improve learning

[133] UNESCO. (2013). *Education in Africa: Placing Equity at the Heart of Policies.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000389481.

[134] UNICEF and the Hempel Foundation (2024). *Foundational Learning Action Tracker: Results for Africa.* Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

[135] Expert Group for Aid Studies. (2016). *Education in Developing Countries: A Summary of Evaluations and Research 2010–2015.* Available at: https://eba.se/wp-content/uploads/2016/05/Rapport-201602-Education-in-developing-coutries.pdf.

outcomes. The development and distribution of culturally relevant teaching and learning materials are essential for fostering an inclusive education system. Materials that reflect the diverse cultural backgrounds of students can enhance engagement and make learning more relatable. This is particularly important in Africa, where there is a rich tapestry of languages and cultures. By incorporating local contexts and examples into educational materials, educators can create a more inclusive and effective learning environment. This approach not only supports the achievement of SDG 4 and CESA objectives but also promotes a sense of identity and belonging among students, which is vital for their overall development and success.[136]

The lack of prioritisation in data collection and monitoring of teaching and learning materials has significant implications. Without accurate data, it is challenging to assess the availability and quality of these materials, identify gaps, and allocate resources effectively. This gap in data collection means that policymakers and educators may not have a clear understanding of the current state of teaching and learning materials, which can hinder efforts to improve educational outcomes.[137]

2.1.2 Challenges and responses

2.1.2.1 Alignment

The absence of alignment or consistency between the curricula, teacher training, and learning materials can lead to uncertainty, confusion and poor learning organisation and achievements for learners. The UNESCO-IBE systemic vision on curriculum emphasises the alignment of curriculum reforms with teacher development, curriculum and pedagogy transformations, and teacher training. Teacher training that is context-sensitive enables and prepares teachers to draw on the local environment to create lesson plans and teaching aids beyond textbooks to make learning captivating, more relevant and meaningful to each learner. For example, the local natural environment in the African context can provide a range of materials to support the teaching of biological science, chemistry, and geography. A recent study in Mauritania highlighted the need to provide teachers with adequate support and materials even in contexts where they are very aware of and utilise the curriculum.[138] Additionally, to address the severe learning crisis in Africa, it is critical that curricula are focused on teaching the fundamentals, namely, foundational literacy, numeracy and socio-emotional skills. Encouragingly, survey data finds that out of 36 African respondent countries, almost 80 per cent have clearly defined learning outcomes and/or benchmarks for foundational literacy and numeracy nationwide in the early grade curriculum/policy. However, the same survey finds that fewer than half of African countries have integrated social-emotional learning into the national curriculum, despite the important role of social-emotional skills in further learning and skills development (Figure 12).[139]

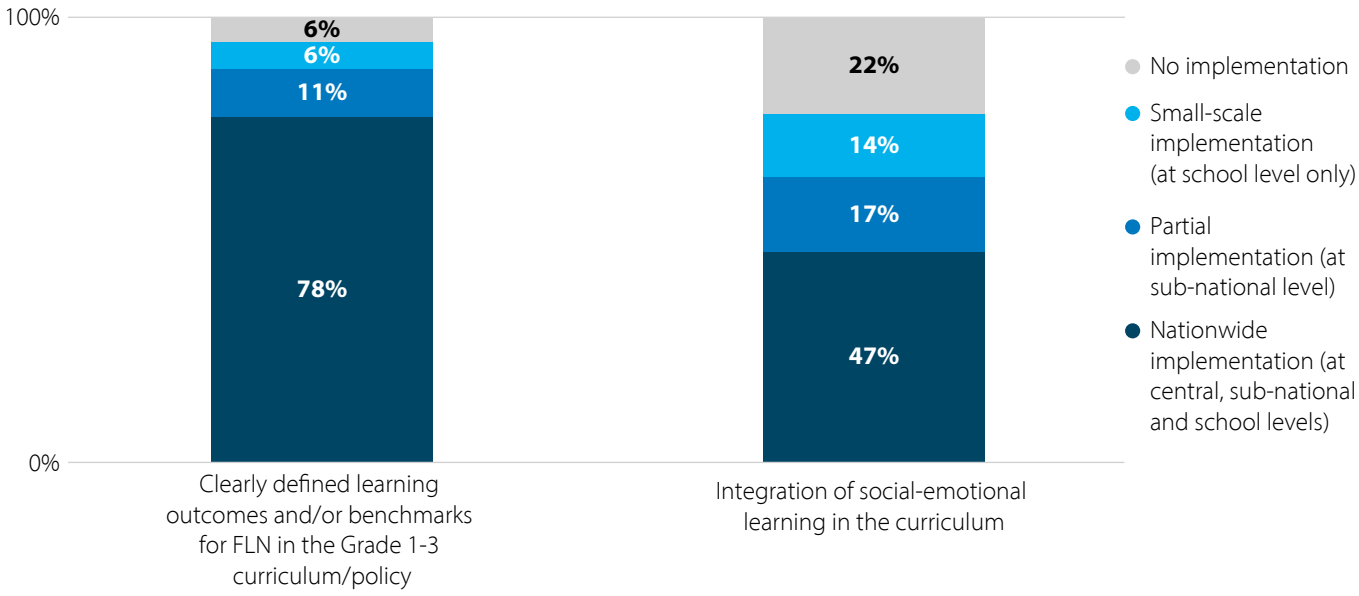
[136] UNESCO. (2021b). *Continental Overview: Bridging CESA and SDG 4 in Africa.* Available at: https://uis.unesco.org/sites/default/files/documents/bridging_cesa_and_sdg4_in_africa-final.pdf.

[137] Global Campaign for Education. (2023). *Continental vs Global Education Benchmarks: Bridging CESA 16-25 and SDG 4.* Available at: research-brief-1-continental-vs-global-education-benchmarksbridging-cesa-1625-and-sdg-finalenglish-.pdf.

[138] UNESCO. (2024g). Spotlight on basic education completion and foundational learning: Mauritania. Available at: https://www.unesco.org/gem-report/en/spotlight-africa-mauritania.

[139] UNICEF and the Hempel Foundation. (2024). Foundational Learning Action Tracker: Results for Africa. Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

Figure 12: Share of African countries (N=36) implementing policy actions to prioritise teaching the fundamentals, 2024



Source: UNICEF and the Hempel Foundation, 2024.

Despite their importance and multiple roles, textbooks and learning materials are products, rather than the drivers, of curriculum reforms. Textbooks are excellent tools that help students understand the nature of the hidden curriculum also implemented in the school, hence the emphasis on the importance of curriculum alignment, that is, alignment of the prescribed, the taught, the experienced by learners and the assessed curriculum. Textbooks may also communicate data and values, thereby contributing to creating and shaping attitudes and ways of behaving in young learners. Nevertheless, textbooks and learning materials are not drivers of curriculum reforms. Instead, their development must be based on the curricula, guided by the national curriculum framework that operationalises the vision of education and defines the profiles of the teachers required to implement the curricula, the pedagogical approaches, the assessment strategies and the profiles of learners.

2.1.2.2 Equity

For equitable educational outcomes, there must also be equity in educational inputs, both in terms of levels of access and inclusivity of content. Equity in education from curriculum perspectives also refers to inclusivity and access to core and supplementary teaching and learning materials, which are major contributors to quality learning and, as such, key policy targets for quality education. Because of this, monitoring the present and future trends in the evolution of policies and processes of textbooks and other learning materials development, production, and distribution is crucial. Regional and national analyses and responsive plans are limited by the current lack of information on the quantity and quality of learning materials, especially from an equity perspective. Curriculum developers and specialists should be at the forefront of these processes. They must anticipate the challenges and obstacles that authors, publishers in Ministries of Education or private actors encounter in providing and distributing high-quality, easily accessible and inclusive teaching and learning materials.

Condensed curricula are often required for learners who cannot access or complete the regular education system. Such curricula and their learning materials need to be specifically planned for and developed. Across Africa, there are students who experience difficulties in attending school regularly for different reasons, for example, interrupted schooling/drop-out, social disruption by conflict or pandemics, disability, gender biases, and sparsely populated areas where schools are over far away from learners' homes. In these situations, the regular curriculum, teaching and learning materials, and teaching

according to planned lessons in face-to-face classes in school buildings with periodical attendance might be unsustainable and effective learning unachievable. Curriculum condensation for accelerated learning may be seen as a strategy to enable students to attain expected learning outcomes in a shorter time or through alternative pathways than those students regularly attending a brick-and-mortar school. These conditions demand rethinking of the management, preparation, production and distribution of textbooks and other teaching-learning materials to suit the learning support needs of students in diversified learning pathways.

Language is one of Africa's most common and pervasive barriers to equity in education; curricula and learning materials must be designed to address and overcome it. Regarding bi- and multilingual teaching and learning, the unequal status of local/national languages vis-à-vis dominant languages in education systems is a curriculum challenge experienced in the choice of curriculum language and medium of instruction and instructional materials Africa-wide. To improve education quality, the challenge is to promote multilingual education models that value indigenous and local languages as curricula languages. To promote evidence-based multilinguist teaching and learning materials requires competent language educators, professional linguists and language standards frameworks to guide learning materials development. The evidence for mother tongue instruction, especially in foundational years, is long-standing and continues to be compelling, even when developing proficiency in a second language is an important policy objective.[140]

2.1.2.3 Technology

Technology-based teaching and learning materials may provide learners with materials that supplement textbooks and enrich the learning environment. However, the impact of learning is limited to date, even in resource-rich contexts. UNESCO-IBE has documented how ICT can help learners and teachers to teach more effectively. Nevertheless, the evidence is clear that simply providing ICT equipment to schools or teachers will not necessarily make a difference; what makes the difference is the way this equipment and other resources are used. Arguably, the widespread roll-out of ICT into schools has, for the most part, had minimal impact in terms of transforming educational thinking or practice, indicating that the pedagogic-didactic capacities of teachers should be strengthened by changing beliefs and attitudes regarding the use of ICTs so that they benefit students.

Projects in Africa have demonstrated the potential benefits of e-learning and the significant and varied implementation concerns and challenges. The experiences from implementing the project "Imagine Ecole" in West Africa (coordinated by UNESCO/Dakar) demonstrated how e-learning enables synchronous and asynchronous learning through the sharing of learning materials and learners' experiences and opinions, interactive communication, media, empowered multimedia, including broadband; mobile phones; televisions that work as monitors; and multimedia integration. It creates a new type of in-class (room) learning environment, enabling learning and connecting globally. Furthermore, through the Hybrid Education, Learning and Assessment (HELA) programme, UNESCO-IBE supported the capacity development of curriculum developers, teacher educators and teachers in several countries and published the HELA reader to support these innovative approaches to increasing access and provision of quality learning support.[141]

[140] Center for Global Development. (2023). *Reading Skills Transfer Best from Home Language to a Second Language: Policy Lessons from Two Field Experiments in South Africa.* Available at: https://www.cgdev.org/sites/default/files/reading-skills-transfer-best-home-language-second-language-policy-lessons.pdf, African Journal of Education and Practice. (2024). *Effectiveness of Mother Tongue Instructions on Literacy rates in Primary Education in Kenya, Examining the Transition from Indigenous Languages to English in Urban and Rural Settings.* Available at: https://www.researchgate.net/publication/385266463_Effectiveness_of_Mother_Tongue_Instruction_on_Literacy_Rates_in_Primary_Education_in_Kenya_Examining_the_Transition_from_Indigenous_Languages_to_English_in_Urban_and_Rural_Settings and UNESCO. (2007). Mother tongue matters: local language as a key to effective learning. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000161121.

[141] UNESCO. (2023e). *Hybrid Education, Learning and Assessment: A Reader.* Available at: https://www.ibe.unesco.org/en/articles/hybrid-education-learning-and-assessment-reader.

Effective use of ICT in education will require a shift from the practices and approaches of traditional learning materials. The tendency to use high-tech information and communication technologies (ICTs) like traditional (paper-based) technologies is a challenge to the curricula and pedagogical innovation. There are efforts in countries across the continent towards increased use of technology to transform curricula, pedagogy, and teacher training and to innovate teaching and assessment practices. In many countries, as curriculum developers and teachers explore the most effective ways to integrate ICT into the curriculum and teaching, pedagogical innovations are gradually changing. Nevertheless, sustainability remains a challenge due to the relative expense of ICT equipment. For example, when students learn to access open educational resources (global sources of information) using ICT tools, they no longer rely only on information from textbooks or texts suggested by their teachers and become more responsible for their learning. The practice is also transforming the traditional role of the teacher towards the role of support, guidance, and facilitation of learning by constructively searching for and organising information (Imagine Ecole project in West Africa). Access to basic infrastructure and related ICT resources remains the largest challenge to effective and equitable use of technology in education in Africa.

2.1.2.4 Textbooks and learning materials

Textbook development and revision should follow the curriculum and involve all major stakeholders, including publishers. Textbooks provided to schools should be developed based on the curricula, be accurate, and contain up-to-date information. A range of planning and policy issues should be examined in detail before committing to new textbooks to ensure that resources are efficiently used and to guarantee the highest-quality product possible. Textbook revision should be part of the curriculum process and should support the introduction of new and updated (learning) content and methodology. Consideration should also be given to ensure that suitable textbooks and related learning materials are available to support the teaching of all children, including children with disabilities. Therefore, in a context where production is ensured by private publishers, the revision should be part of a planned cycle so that textbook publishers are encouraged to invest in supporting curriculum diagnostic studies whose findings inform the curriculum reform and transformation.

Textbook publishing may involve a large number of actors, including financiers and publishers. In such contexts, close collaboration and coordination are paramount. In the case of external donor-funded initiatives of textbook development, the production of the textbook or core learning materials may be done in another country. The risk of channelling the corresponding funds out of the recipient country may undermine the project. Public-private partnership, cooperation and co-publishing may consolidate and enhance the transition to sustainable competitive production core and other learning materials. Cooperation may follow different models: a joint venture between a local publishing house and a well-established international publisher in a developed country, involving the transfer of publishing knowledge, experiences and skills, as well as capital.

The balance between public and private control of publishing varies from country to country, and one size does not fit all. However, in all contexts, potential risks should be identified and mitigated. In some countries, Ministries of Education house their own textbook publishing units responsible for producing all textbooks with little or no reference to local or private publishers. This may be cost-effective and useful in countries where private publishers are not interested in textbook publishing or the copyright is with the Ministry of Education. In this case, the Ministry of Education needs to ensure the quality of textbooks and other materials, as well as the processes of publication, approval, and distribution, ensuring that they are cost-efficient and timely. In recent years, there has been a shift towards private, market-driven models of textbook publishing. In some countries, the role of developing, producing and distributing textbooks is already a private enterprise that bases its books on the curriculum syllabuses for each subject. Such privatisation can have benefits and potential risks, as the case study below demonstrates.

It is important to independently test and evaluate new textbooks and learning materials before widespread introduction. In the context of multiple textbook titles and suppliers, consideration must be given to the potential drawbacks of excessive choice and change in materials. Ministries of Education usually recognise the need to establish independent evaluation boards to objectively assess

textbooks. These boards are more objective and accountable than internal committees, which may simply be extensions of the ministries' own curriculum departments. Some countries maintain rigorous evaluation and testing processes before materials can be used in schools. In this model, publishers are required to pilot an entire textbook, or sections of the textbooks, in selected schools before production. The standard textbook approach is one in which several publishers produce textbooks and seek the approval of the Ministry of Education or allow market preferences to determine the best book. In this model, there is no monopoly of the Ministry and no government control over textbook development. Local school principals or teachers are empowered to select the textbooks that best facilitate curriculum implementation. This model needs to be carefully planned and introduced to ensure that local actors have the required capacity to fulfil this role and that there is an adequate supply of textbooks at the local level.

Box 5

Cameroon's textbook revolution[142]

Cameroon significantly increased the availability of textbooks in primary schools nationwide while simultaneously reducing the cost of textbooks by over 50 per cent. In Cameroon, as in many countries in Africa, gains in enrolment and access to education have not been mirrored in improving learning outcomes, and levels of learning remain very low, with more than 70 per cent of 10-year-olds unable to read and understand a short, age-appropriate text. One of the principal factors affecting learning outcomes has been the longstanding issue of limited textbook availability in schools, especially in disadvantaged areas. Before the recent reforms, Cameroon had among the highest student-to-textbook ratios in Sub-Saharan Africa, with 12 primary students per textbook nationwide and 30 students per textbook in some deprived areas. By 2023, however, huge progress had been made in the development, procurement and distribution of textbooks. This meant that there was a package of three essential textbooks for every two students in primary schools, and the total number of textbooks in public schools quadrupled since 2020. In addition, the cost of textbooks was dramatically reduced by more than 50 per cent from an average of 6.25 US dollars to 2.90 US dollars.

Results were achieved through comprehensive policy reform supported and informed by high-level and wide-ranging consultations. The first step in overcoming the critical textbook issues in Cameroon was to better understand the root causes limiting the availability and affordability of textbooks. Consultations between the government, non-governmental organisations, and civil society analysed the key challenges and identified actions to address them. With support from the World Bank, the Global Partnership for Education (GPE) and high-level leadership from the offices of the President and Prime Minister, a National Textbook Policy and a transformative law governing the Organization and Promotion of the Book Sector in Cameroon were finalised in 2021. The previous textbook policy allowed for multiple titles per subject and textbooks that changed every year. However, the new reforms mandate a single book per subject for all schools, a minimum three-year lifespan for textbooks and instituted an independent technical committee to select materials and oversee reforms.

Important equity considerations and provisions, targeting especially marginalised learners, were included in the national-level reforms. Textbook distribution particularly targeted councils hosting large numbers of refugees and internally displaced children, meaning nearly 100,000 of these most vulnerable learners benefitted from new textbooks. In addition to significantly reducing the average costs of textbooks, the reforms included establishing specific budget allocations for textbooks, which targeted "education priority zones". Equity concerns also inform the future planning for the initiative to achieve the target of one textbook per essential subject per child. They include improving the multi-year planning and budgeting, refining targeting mechanisms for priority areas and further reducing the costs of books.

[142] World Bank. (2024d). *Turning Pages, Transforming Lives: Cameroon's Textbook Revolution.* Available at: https://www.worldbank.org/en/results/2024/02/01/turning-pages-transforming-lives-cameroon-textbook-revolution.

2.1.3 Conclusion

Appropriate, user-friendly, stimulating, and attractive learning materials and curricula are necessary to maximise learning opportunities and effectiveness for all learners. Curricula, teaching and learning materials are intrinsically linked and must be guided by policy and standards to ensure consistency, inclusivity and relevance. Ensuring that materials are appropriate, user-friendly, stimulating, attractive and accessible is important to maximise learning opportunities and effectiveness for all learners. Teaching-learning materials, including textbooks and supplementary readers, must cover the learning content defined in the curricula as detailed in the syllabi, intended depth and scope, convey ideas, and philosophies, factual/scientific pertinent information, while stimulating curiosity, critical thinking and questions and promoting creativity and research for answers to questions and information.

Learning materials, teacher training and curricula should be consistent and well-aligned to ensure effective learning outcomes and achievement of the overall curriculum vision. Ensuring consistency between the curriculum framework, teacher training, and learning materials is essential so that the curriculum is a clear and coherent product, which is essential and is one of the characteristics of a quality curriculum. The lack of coherence can lead to confusion, conflicts, and poor learning outcomes. A good curriculum should be based not on textbooks or assessments but on the vision defined in the main curriculum reference documents, such as curriculum frameworks, and should be implemented by committed, competent, and professional teachers, supported where appropriate by guidance and materials, whether textbooks or other learning and assessment materials.

Textbooks play a crucial role in learning in all contexts, especially where teachers are not adequately and/or sufficiently trained and have little teaching experience. Ideally, textbooks and other support materials for teaching should provide teachers with the resources and guidance they require to interpret and translate the curricula into relevant, interesting, effective learning experiences. Textbooks, alongside other materials, continue to play a dominant role in supporting learning. In many countries, textbooks constitute the primary support material, especially in contexts where teachers are not adequately and/or sufficiently trained and have little teaching experience. In such contexts, particular attention must be given to textbook development, ensuring alignment with the curricula, equity in distribution, and grade appropriateness and quality in content and language. Teachers who have received adequate initial training and sufficient teaching experience are able to enrich the textbook with locally derived materials and may not entirely depend on textbooks for their teaching.

The potential impact of textbooks on learners goes well beyond the classroom and can positively influence their values and attitudes. Textbooks and other teaching-learning materials and supplementary readers are strategic pedagogical resources; as such, they must not only provide necessary information but also propose learning activities that challenge learners to go beyond the proposed activities and research questions and make their own discoveries. They guide students not only in class but also in their daily lives. Textbooks are an excellent tool for understanding the differences between the prescribed and hidden curriculum implemented in schools. While providing content/subject-specific data, they also transmit values and contribute to creating and shaping students' attitudes and construction of reference values.

Give all children a textbook—and all teachers a guide. Equitable access to quality education and training is a key policy goal for all countries. In this context, inclusive, diversified, quality teaching and learning materials should be available to all students. Transformative hybrid education, curricula, learning and assessment that effectively draw on technology for quality inclusive education that incorporates e-learning can support enhanced inclusivity. However, they require sustained capacity development for teachers and resource investment at the school level. Ultimately, the number one recommendation for improving learning in Africa of UNESCO, the African Union, and the Association for the Development of Education in Africa is overwhelmingly relevant: Give all children a textbook—and all teachers a guide.[143]

[143] UNESCO. (2013). *Education in Africa: Placing Equity at the Heart of Policies.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000389481.

The role of continuous professional development for teachers cannot be overstated. Teachers need ongoing training and support to effectively utilise textbooks and other learning materials. This professional development should focus on content knowledge and pedagogical skills, including how to integrate new technologies and innovative teaching strategies. By equipping teachers with the necessary skills and knowledge, we can ensure that they are able to create engaging and effective learning environments that maximise the potential of the provided materials. This holistic approach to teacher development is essential for achieving the broader educational goals outlined in SDG 4 and CESA.[144]

The involvement of various stakeholders, including policymakers, educators, parents, and communities, is crucial in developing and implementing curricula and learning materials. Collaborative efforts can help ensure that the materials are relevant, culturally appropriate, and aligned with the needs of the learners. Stakeholder engagement also fosters a sense of ownership and accountability, which can drive the successful adoption and use of these resources. By working together, we can create a more inclusive and effective education system that supports the diverse needs of all learners and contributes to the overall goal of quality education for all.[145]

2.2 Teachers and teaching

2.2.1 Introduction

Teachers are at the heart of the education process and, therefore, also at the heart of the SDG 4 and CESA commitments and objectives. The Education 2030 Framework for Action emphasises the central role of teachers and teaching in order to achieve quality education and learning for all. This is consistent with the current best evidence that identifies supporting teachers and improving teaching practices as among the most cost-effective means of improving learning.[146] SDG Target 4.c explicitly addresses the need and the commitment to substantially increase the supply of qualified teachers. Education 2030 outlines the wide-ranging and necessary policies and shifts required for quality teaching, including teacher empowerment, recruitment and deployment, pre-service and continuous training, professional qualifications, remuneration and career development, and school leadership and system management.[147] Within the CESA 2016-2025, the central role of the teacher is even more obvious as "Revitalise the teaching profession to ensure quality and relevance at all levels of education" is the strategy's first strategic objective. Similar to the Education 2030 Framework for Action, CESA also outlines a number of related areas that require action, for example, teacher recruitment, training and deployment, including continuous professional development, improving their working and living conditions and overall status in society, and identifying and rewarding the outstanding teachers.[148]

[144] UNESCO. (2021b). *Continental Overview: Bridging CESA and SDG 4 in Africa.* Available at: bridging_cesa_and_sdg4_in_africa-final.pdf.

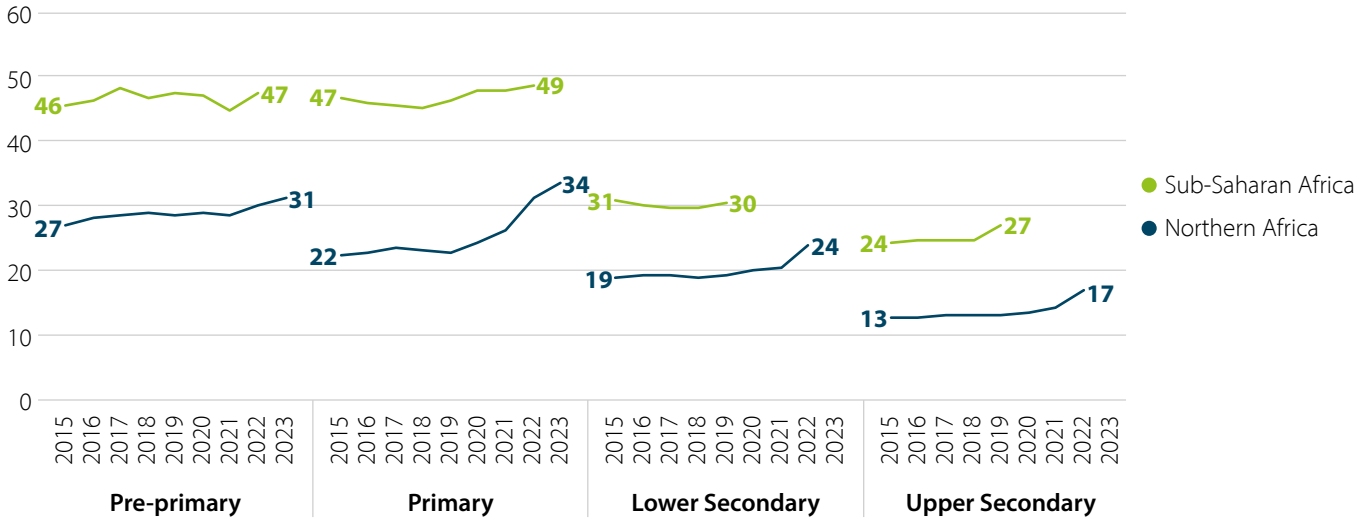
[145] Global Campaign for Education. (2023). *Continental vs Global Education Benchmarks: Bridging CESA 16-25 and SDG 4.* Available at: research-brief-1-continental-vs-global-education-benchmarksbridging-cesa-1625-and-sdg-finalenglish-.pdf.

[146] Global Education Evidence Advisory Panel. (2023). *Cost-Effective Approaches to Improve Global Learning: What Does Recent Evidence Tell Us Are Smart Buys for Improving Learning in Low and Middle-Income Countries?* Available at: https://www.globalpartnership.org/node/document/download?file=document/file/2024-02-educate-africans-21st-century-seizing-moment-rev2.pdf.

[147] UNESCO. (2015). *'Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4'.*

[148] African Union. (2016). *The Continental Education Strategy for Africa (CESA 16-25).*

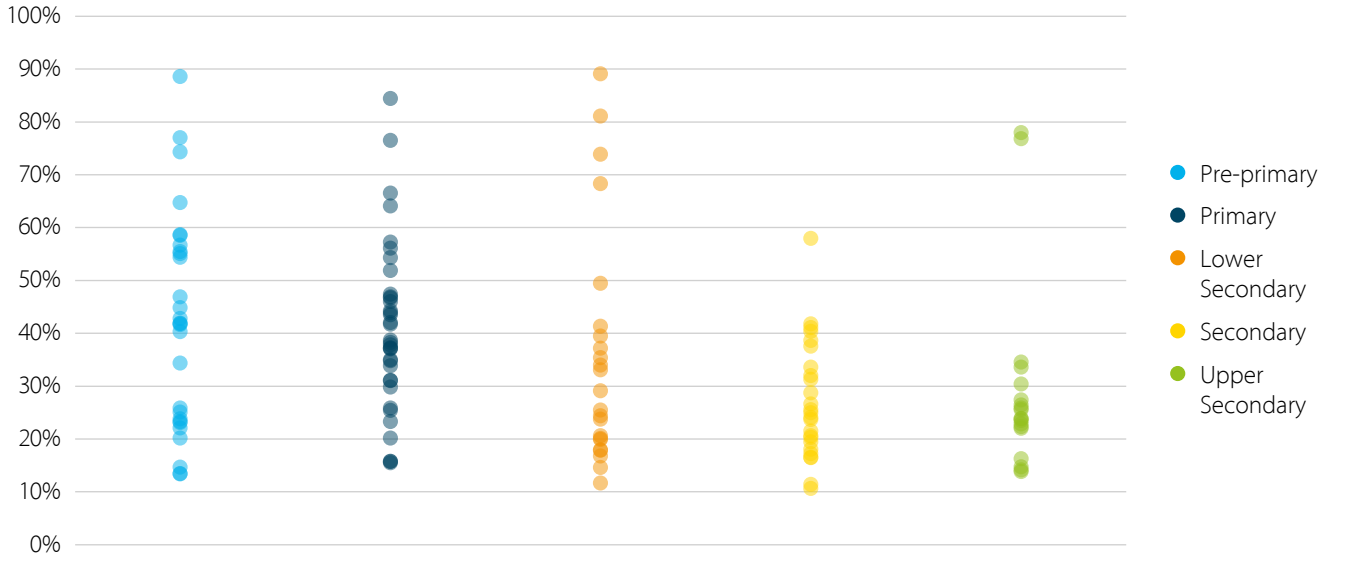
Figure 13: [SDG 4.c.4] Pupil-Qualified Teacher Ratio, by region and education level, 2013-2023



Data source: UIS September 2024 data release.

Despite the commitments, the supply of qualified teachers is not significantly improving and is worsening in several sub-sectors and regions. Figure 13 displays the Pupil-Qualified Teacher Ratio (PQTR) by region and education level. In this representation, an increasing value is not desirable as it equates to more pupils to teacher, that is, larger class sizes and a reduction in the relative supply of qualified teachers. The figure shows broadly a story of stagnation and lack of progress. The visible progress, for example, in primary and secondary levels in Sub-Saharan Africa, is relatively minor and much smaller than the increases and worsening situations observed elsewhere. At the primary level, the PQTR in Sub-Saharan Africa improved from 51 to 49, but in Northern Africa, it has increased from 24 to 34, with most of that increase occurring recently. Figure 14 displays how the supply of qualified teachers varies across the continent. In many countries the PQTRs are below 30, but in contrast, there are also several cases where PQTRs are above 70. It should be emphasised that these are the national averages, which means many schools in these countries have PQTRs well above 70.

Figure 14: [SDG 4.c.4] Pupil-Qualified Teacher Ratio, by country and education level, most recent year available (2021-2023)



Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

2.2.2 Challenges and responses

2.2.2.1 Teacher supply and distribution

Given the considerable budgetary implications, it is crucial that teacher shortages and deployment issues are well understood. As identified by the International Task Force on Teachers for Education 2030,[149] the first step in implementing effective approaches to address teacher shortages or inequitable deployment is to understand the nature and scale of the problem. Conducting initial diagnostics is highly encouraged, as teacher pay represents the majority of education expenditure and increases in teacher pay and benefits generally have major budget implications. Similarly, any reductions in inefficiencies or wastage in teacher utilisation can lead to significant savings, which can be reinvested elsewhere. For these analyses, adequate data and analytical tools are crucial. However, teacher data systems are often weak with fragmented data sources, making it difficult to manage teacher placements effectively. This can leave the system vulnerable to the preferences of teachers and political interests, making it more difficult to target teachers to the regions or schools needing them most.[150] EMIS and Human Resource (HR) payroll data are the most common sources of teacher data. However, countries are increasingly investing in Human Resource Management Information Systems (HRMIS) and Teacher Management Information Systems (TMIS) to better understand and manage teacher and school needs.

The status of the teaching profession can significantly impact the number and quality of entrants into the profession. In Africa, stakeholders believe the profession is not sufficiently attractive. Although many factors influence teacher shortages, the attractiveness of a teaching career in a given context is a fundamental issue that can be addressed in a number of ways. To recruit new teachers and empower and retain current teachers, governments need to ensure that the profession is attractive enough, which is not the case today in many countries, including in terms of wages, benefits and working conditions. In addition, there is a need to find ways to increase the prestige of the profession. In many African countries, the profession may no longer have the respect it once commanded. In a survey of Ministry and Teacher Council officials, questions were asked about perceptions of the teaching profession. On a scale from one to five, respondents rated the social status of teachers at three or below. In a question in the CESA online survey on teacher policies about factors that may not be conducive to quality teaching and learning in school, the factor that got the highest rating was the lack of approaches and incentives (including salaries) to motivate teachers, followed by the perception that the teaching profession may not be attractive enough to attract the best.

Teachers are often underpaid compared to similarly qualified professionals, which affects the status and attractiveness of the profession. This can be overcome to some degree with wage increases. In many countries, teaching is seen as having low prestige, often due to the relatively low pay. Globally, in 60 per cent of countries, primary school teachers are paid less than professionals with similar qualifications. In low-income countries, especially in Sub-Saharan Africa, teachers have salaries that are too low to meet basic family needs.[151] Although evidence exists suggesting that raising salaries does lead to an improvement in the status of teachers and increasing applicants into the profession, they are not a silver bullet for fixing shortages or motivation. Salary increases only improve motivation to a certain point, after which other factors become more important, for example, collaborative working opportunities and

[149] International Task Force on Teachers for Education 2030. (2013). *Effective approaches to attract and retain teachers and ensure equitable deployment: A contribution from the Teacher Task Force to the discussions of the High-Level Panel on the Teaching Profession.* Available at: https://teachertaskforce.org/sites/default/files/2023-07/effective-approaches-attract-retain-teachers_0.pdf.

[150] Asim, S., Chimombo, J., Chugunov, D. and Gera, R. (2019). Moving teachers to Malawi's remote communities: A data-driven approach to teacher deployment. *International Journal of Educational Development,* 65, pp.26-43. Available at: https://doi.org/10.1016/j.ijedudev.2018.12.002.

[151] International Task Force on Teachers for Education 2030. (2013). *Effective approaches to attract and retain teachers and ensure equitable deployment: A contribution from the Teacher Task Force to the discussions of the High-Level Panel on the Teaching Profession.* Available at: https://teachertaskforce.org/sites/default/files/2023-07/effective-approaches-attract-retain-teachers_0.pdf.

working conditions.[152] Implementing Teacher Awards schemes can be a cost-effective way to motivate teachers and signal to teachers and to society at large the value of the profession.[153]

Working conditions that directly affect teacher supply are varied and very context-specific. However, there are examples of how they can be improved to increase teacher supply. The link between poor working conditions, lower teacher motivation and the overall attractiveness of the profession is well established. What is considered poor working conditions is very context-specific and can vary significantly. In fragile and emergency situations, it may refer to a lack of safety or security. In low-income contexts, it might refer to basic services and infrastructure like water and sanitation. It could also refer to the lack of educational necessities and resources, from essentials such as textbooks and pencils to electricity and the internet. Conditions of work also go beyond physical considerations and can relate to working hours, class sizes, degree of peer interaction, and management style. However, what is consistent is that if teacher concerns and frustrations are not addressed, they can lead to poor performance, absenteeism and, ultimately, resignation. Policymakers can alleviate such issues by effectively utilising EMIS data to better allocate resources, as in Gambia, or streamline teacher transfers to reduce class sizes and ease teacher burdens, as in Senegal. Conducting job satisfaction surveys can help Ministries of Education (MoEs) and Teacher Service Commissions assess the morale of their workforce and what could increase satisfaction and motivation. Beyond issues of salaries and benefits (for example, medical insurance, housing, transport allowance, pensions, etc.), data suggest that many teachers are stressed, and in response, the African Union has developed a draft Mental Health and Psycho-Social Support Strategy for Teachers in Africa encompassing broader enabling environment, teacher training and community sensitisation, school-based interventions, and specialised care and reintegration.

Inequitable teacher deployment is a common challenge in Africa, and several tools and approaches are currently being employed to better understand and address it. Education systems in Africa continue to struggle with equitable deployment of teachers, and national and sub-national Pupil-Tear Rations (PTRs) often mask large variations in PTRs between and within schools. The issue is not simply a quantitative one but also qualitative, as even when countries address teacher imbalances and allocate additional teachers to disadvantaged schools, it is often with less experienced and less qualified teachers. As with many issues facing teacher supply, it is important to understand the nature and causes of the problem before addressing it. Senegal's MIRADOR system, the World Bank's SABER Teachers' Initiative, UNICEF's Teachers for all analytical reports,[154] and the use of spatial analysis tools in Sierra Leone and Malawi are examples of tools and approaches being used to better understand this common challenge.

Financial incentives are often used to entice teachers to underserved areas. However, their success can vary significantly based on their design and implementation. Once identified, the most common response to this problem is to provide an additional incentive for teachers to work in remote or disadvantaged schools. Incentives generally include one or more direct financial incentives (bonus, housing allowance), additional professional development opportunities or fast tracks to promotion.[155] A year after the Gambia introduced a hardship allowance of 30-40 per cent of a teacher's salary to teach in remote schools, 24 per cent of the eligible teachers had requested a transfer to such a post with the longer-term results of increasing the share of qualified teachers by 10 per cent and reducing pupil to qualified teacher ratios by 60 per cent. A similar scheme in Malawi saw minimal impact due to a lack of an objective and data-driven definition of remoteness, meaning 87 per cent of schools were eligible for the

[152] Tournier, B., and Chimier, C. (2019). *Teacher Career Reforms: Learning from Experience*. Paris, IIEP-UNESCO. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000372505.

[153] On teacher awards, see Hungi, N. and Wodon Q. (2024). Criteria to Consider when Implementing Best Teacher Awards, in *Teacher Regulation for Quality and Quantity: Can It Be Done?* Proceedings of the 2024 International Federation of Teaching Regulatory Authorities Conference, Brisbane, Australia: IFTRA.

[154] UNICEF (n.d) Teachers for all project: Finding effective strategies for teacher allocation across sub-Saharan Africa. Available at: https://www.unicef.org/innocenti/projects/teachers-all.

[155] International Task Force on Teachers for Education 2030. (2013). *Effective approaches to attract and retain teachers and ensure equitable deployment: A contribution from the Teacher Task Force to the discussions of the High-Level Panel on the Teaching Profession.* Available at: https://teachertaskforce.org/sites/default/files/2023-07/effective-approaches-attract-retain-teachers_0.pdf.

allowance, which significantly reduced the allowance's value. Taken together, the two examples illustrate that such incentives can be successful, but they need to be based on reliable data and have a significant monetary value above the basic salary, which can create considerable additional expense.[156]

Less cost-intensive approaches, including local recruitment, mandatory rotation, and changes in how vacancies are advertised, have also been successful in attracting teachers to marginalised schools. Other, less cost-intensive approaches exist and have been shown to be effective in addressing inequities in teacher deployment. As teachers tend to stay either close to home or urban environments when accepting job offers, some countries have targeted local recruitment and training teachers from the areas that are normally difficult to staff. Other countries utilise a system of teacher rotation where teachers spend a specified number of years at a location before having to move to another school. There are also recent examples of innovative and low-cost strategies that improve deployment to disadvantaged schools simply by how vacancies are advertised. By listing disadvantaged schools first rather than in alphabetical order, teachers were more likely to apply to disadvantaged schools.[157] Another approach experimented with how vacancies were described. One clarified and emphasised existing financial incentives, and the second appealed to the candidates' altruistic nature. Both approaches proved to be more successful at attracting applicants to disadvantaged schools than the more neutral control approach. The effect was more significant for the altruistic approach among high-performing teachers.[158] This experiment highlights the motivational power of non-financial incentives while also illustrating the need to adequately raise awareness of any existing financial incentives to maximise their effects.

Gender remains a significant factor influencing teaching supply, with female teachers underrepresented at higher levels of education and in leadership positions. This is being addressed by targeting incentives to female teachers and leaders and providing scholarships and specific professional development opportunities. Gender balance in teaching and leadership positions does vary significantly in Africa but is generally a significant variable affecting teacher and leader supply and retention. In Africa, the proportion of female staff is much lower than the global average, with female representation reducing as the level of education increases and is especially low in leadership positions.[159] The latter is of particular concern, as female school leaders may help reduce stereotypes about women's roles in society and serve as mentors for girls. They also tend to be associated with better learning outcomes for boys and girls alike. Yet, in most countries, women account for a small share of school leaders despite staying in the profession longer.[160] There are also significant gender imbalances within countries as it can be difficult to attract female teachers to remote areas due to issues around safety, unwanted sexual conduct and housing or to recruit female teachers in specific subject areas, for example, Science, Technology, Engineering and Mathematics (STEM). Ensuring greater female enrolment and completion of secondary and tertiary education is a necessary long-term strategy to address these gaps. Still, in the short to medium term, it can be complemented by targeting incentives for female teachers and leaders and providing teacher training scholarships and specific professional development opportunities for leadership.[161]

[156] World Bank. (2023a). Addressing Inefficient Distribution of Teachers Between Schools: *The Case of Tanzania With Malawi and the Gambia – Case Studies of Successful reforms to Address the Challenges of Financing Education Systems Effectively.* Available at: https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/099103123163585721/p17813509aefbe0850bf040557752fcb8ca.

[157] Ibid.

[158] IDB. (2020). Altruism or Money?: Reducing Teacher Sorting Using Behavioral Strategies in Peru. Available at: http://dx.doi.org/10.18235/0002625.

[159] UNESCO. (2023j). *Women in teaching: Understanding the gender dimension.* Available at: https://teachertaskforce.org/sites/default/files/2023-03/2023_March_TTF_Fact sheet on female teachers for Women's Day_14March.pdf.

[160] This leads to lower attrition rates which matters especially given current teacher shortages, as discussed in UNESCO and International Teacher Task Force on Teachers for Education 2030, op. cit.

[161] UNESCO. (2023j). *Women in teaching: Understanding the gender dimension.* Available at: https://teachertaskforce.org/sites/default/files/2023-03/2023_March_TTF_Fact sheet on female teachers for Women's Day_14March.pdf.

Box 6

Inefficient distribution of teachers in the United Republic of Tanzania[162]

The deployment of teachers in primary schools in the United Republic of Tanzania was highly inequitable, negatively affecting learning outcomes and representing a significant waste of public expenditure. Following the introduction of free primary education in 2002, rapid increases in enrolment were accompanied by stagnation in learning outcomes, and ten years after its introduction, only 30 per cent of students were passing the examinations at the end of primary school. Although public expenditure on education was in line with the average of Sub-Saharan Africa, severe inefficiencies in utilising this finance were identified, especially in relation to teachers. The national average district primary PTR was 46, which is in line with the Government's acceptable range of 35-50. However, 33 districts had PTRs above this acceptable range, and 20 districts had average PTRs below, suggesting significant imbalances in teacher allocation. PTRs also varied significantly within single districts, and 36 per cent of schools were considered understaffed, while 27 per cent were overstaffed. The problem was exacerbated by inequitable deployments within schools with class sizes of more than 200 students common in the earliest grades. The spending on teachers in comparatively overstaffed schools equated to 13 per cent of spending on education, while in schools with PTRs over 40, learning outcomes were 15 per cent lower. To maximise the impact of the limited available funds, it was imperative to improve the distribution of teachers across districts and schools.

The inequitable and inefficient distribution of teachers was primarily the result of a disconnect between policy intentions and the overall governance and management structure of teacher supply and deployment. The existing policy did recommend that teachers be deployed equitably. However, in practice, the emphasis of policymaking and planning had been on national PTR, that is, the overall supply of teachers, rather than deployment efficiency. When teacher distribution was discussed at the policy level, it tended to focus on longer-term drivers, for example, lack of facilities and amenities in schools, rather than the medium-term issue of supporting and compelling teachers to accept such postings. Coordinated decision-making was made difficult by the fractured governance structure of teacher management where the Ministry of Education oversaw setting standards and policy for teacher management, the President's Office—Regional and Local Government in charge of deployment of new teachers to districts, and districts in charge of deployment of teachers to schools.

A results-based financing approach incentivised national-level decision-makers to improve the equity of teacher deployment to districts and district-level decision-makers to improve the equity of teacher deployment to schools. As part of a multi-donor, multi-year education programme,[163] the Government, with the financial support of development partners, introduced a results-based financing approach to improving teacher distribution. Two of the Disbursement Linked Results (DLRs) rewarded improvements in the share of districts and schools with PTRs in the acceptable range. As teacher management occurred at two levels, national and district, it was important that the DLRs also operated at these same levels. The national government was rewarded for improvements in the share of districts with an average PTR in the acceptable range. Secondly, districts received 5,000 US dollars for each school whose PTR moved down into the acceptable range and 3,000 US dollars for each school whose PTR moved up into the acceptable range. The dual approach was designed to give the strongest incentive for improving PTRs in understaffed schools while also incentivising moving teachers away from overstaffed schools.

[162] World Bank. (2023). *Addressing Inefficient Distribution of Teachers Between Schools: The Case of Tanzania With Malawi and the Gambia – Case Studies of Successful reforms to Address the Challenges of Financing Education. Systems Effectively.* Available at: https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/099103123163585721/p17813509aefbe0850bf040557752fcb8ca.

[163] Big Results Now! In Education, later known as the Education Program for Results (EPforR).

The financial incentives proved effective at both the national and district levels, with district-level deployment continuing to improve even as the national supply of teachers failed to keep up with rapid increases in enrolment. The national-level DLR was achieved completely within the first two years of the programme, in part due to the high levels of awareness among the national-level decision-makers. Progress at the district level was slower, with a DLR of only 20 per cent achieved in the first year (150 schools moving into the acceptable range). However, regional workshops targeting district-level staff led to an achievement of 41 per cent in the second year. The introduction of fee-free basic education in 2015 led to a surge in enrolments in primary and secondary education and put further strain on limited resources. This resulted in national primary PTRs increasing from 44 in 2016 to 58 by 2019, with only 45 per cent of districts having acceptable PTRs. Although the national supply of teachers failed to keep up with enrolment, the incentives at the district level continued to function, and the number of schools with acceptable PTR continued to increase between 2015-2018. However, DLRs were eventually amended in 2020 as districts felt they were unable to make any more significant improvements considering the overall teacher supply issues. The new DLR rewarded the Government for allocating teachers to an agreed list of understaffed schools, regardless of the impact on PTR. Nearly four out of every five teachers deployed in 2020/21 were done so in accordance with this priority list. In addition to improving the learning conditions of Tanzanian learners, the result-based financing approach reduced the estimated annual wastage on surplus teachers by 45 million US dollars.

The successful example illustrates the importance of targeting incentives at all decision-making levels and ensuring that decision-makers are aware of any incentives and have the necessary capacity to act as intended. Many countries in Africa operate a split-level and decentralised decision-making system for the deployment and hiring of teachers. As such, it is important that interventions target all relevant levels to ensure that the entire teacher deployment chain is incentivised. The Tanzanian experience also illustrates the importance of raising awareness and orientation regarding any initiatives and incentive schemes. Despite the substantial financial incentives at the district-level, the initial response was weak. It was only after decision-makers had been sufficiently guided and supported in making the appropriate deployments that the incentives had their desired effects. Although it is natural to focus on understaffed schools as they negatively affect learning, all contexts are resource-constrained. Therefore, any overstaffed schools directly contribute to understaffing elsewhere and negatively affect overall education expenditure efficacy, and thus should also be the focus of any deployment initiatives. By redeploying teachers away from overstaffed schools, the district-level officials in the United Republic of Tanzania could maintain and even increase the share of schools with acceptable PTRs at a time when the national PTR was increasing rapidly. The example also illustrates the importance of designing and adjusting teacher deployment incentives and mechanisms that consider the impact of overall teacher supply.

2.2.2.2 Teacher quality and development[164]

Initial teacher training providers need to collaborate closely with schools to adequately prepare trainees for the practical realities of teaching. Initial teacher education often does not prepare graduates for the reality of teaching, leaving many unprepared to teach in diverse classrooms with students of mixed abilities or multiple languages. A large-scale assessment of learning in 14 African countries found that although teachers had good subject knowledge, they lacked the practical skills to teach that subject knowledge. There is a need for teacher training to go beyond mastery of subject content and place greater emphasis on the teaching of that subject content.[165] Insufficient preparation represents significant wastage, as new teachers with inadequate preparation are two times more likely to stay in the profession compared to those with little or no preparation. The 2024 Global Report on

[164] UNESCO. (2024c). *Global report on Teachers: Addressing teacher shortages and transforming the profession.* Available at: https://teachertaskforce.org/knowledge-hub/global-report-teachers-addressing-teacher-shortages-and-transforming-profession.

[165] PASEC. (2019). *Quality of education systems in French-speaking Sub-Saharan Africa: teaching/learning performance and environment in primary education*.

Teachers recommends that teacher training providers collaborate directly with schools to ensure pre-service training includes practical and relevant real-world training. The 2014 Transforming Teacher Education programme in Ghana successfully supported teacher education colleges in developing such partnerships with schools, providing trainees with invaluable practical instruction. Within three years of the programme, the proportion of beginning teachers demonstrating core competencies in professional development and management rose from 1.6 per cent to 31.8 per cent.

Education systems are moving away from one-off training to developing cultures and systems that support effective, continuous professional development. Many education systems are moving away from one-off training to developing a lifelong learning and continuous professional development approach to effectively improve teachers' capacities and motivation. Successful programmes train teachers in practising new skills, with coaches supporting teachers and monitoring progress. To facilitate this shift to lifelong learning, it is necessary to incorporate all relevant stakeholders in the planning and implementation, including teachers, school leaders, head teachers, teacher education institutions, and ministries of education. It is imperative that teachers have input at the design phase to ensure the relevance of the content. Delivery methods should include a range of approaches, such as active participation, mentoring, and establishing communities of practice. Learning opportunities should occur regularly over long periods of time to ensure their efficacity and foster lifelong learning. It is important that systems allocate that time to teachers on a weekly or even daily basis, as in the example of Rwanda, where since 2021, the Ministry of Education has allocated three periods per week in school timetables for continuous professional development.

Despite the importance of effective school leadership, many school leaders in Africa lack the necessary skills or professional development support, but recent Africa-based analysis and guidance exist. Quality leadership goes hand in hand with quality schools and better student performance.[166] School leaders are key to creating a positive school climate and culture of peace, tolerance, equity, inclusiveness, cooperation, and hard work. Quality leadership is also associated with improved teacher retention rates, higher levels of teacher job satisfaction, increased student motivation, reduced student drop-out rates, and parental involvement in schools, among others. Unfortunately, many school leaders in Africa lack leadership skills and have not benefitted from adequate professional development. In West Africa, a review of professional standards and competencies for teachers and school leaders suggests that programmes and policies for school leaders are lacking compared to what is in place for teachers and provides recommendations.[167] The work of the Flemish Association for Development Cooperation and Technical Assistance (VVOB) Education for Development on an African Centre for School Leadership is another source of guidance,[168] including on African concepts of school leadership. In addition, recent projects and analyses such as the "Women in Learning Leadership"(WiLL), a joint initiative of UNESCO-IIEP and UNICEF, are identifying the school leadership characteristics and practices that are effective in Africa, and how barriers to promoting them, including significant gender-based barriers, can be overcome.[169]

Qualification frameworks and minimum standards can help raise the status of qualified teachers and the wider perceptions of teaching as a career, but their adoption in Africa is extremely limited. Qualification frameworks and minimum standards can help raise the status of qualified teachers and the broader perceptions of teaching as a career. The African Union's Teacher Qualification Framework includes several significant measures, including some quite aspirational, for example, the elevation of minimum entry to degree-level teacher education. In practice, there is a need at all levels, from early childhood to higher education, to better define professional standards and competencies for teachers and link them to

[166] The importance of school leaders has long been noted, but it has been confirmed by more recent work. See UNESCO. (2024b). *Global Education Monitoring Report, 2024/5, Leadership in Education: Lead for Learning*. Paris: UNESCO.

[167] Nwokeocha, S., E. D., Kah, H., Njora, S., Nwokeocha, A. S., and Wodon. Q. (2023). *West Africa – Investing in Teachers and School Leaders: Professional Standards, Working Conditions, and Teacher Education*. Addis Ababa, Ethiopia: UNESCO International Institute for Capacity Building in Africa.

[168] See resources available https://www.vvob.org/en/african-centre-school-leadership.

[169] UNESCO. (n.d.). *Women in Learning Leadership – WiLL*. Available at: https://dakar.iiep.unesco.org/en/women-in-learning-leadership-will.

career stages. A survey of Ministry and Teacher Council leaders across Africa suggests that less than half of the countries have adopted and published professional standards for teachers, with the proportion having done so for school leaders being even lower. As to career stages, many countries have none, and even when they do exist, there are often less than four, the number recommended by the African Union. As to continuous professional development frameworks, while a slight majority of countries have adopted such frameworks, they do not typically lead to credits for participants. When this is the case, such credits are typically not actually required for promotion.

Sierra Leone is the first, and so far, the only country to have adopted the African Union career stages framework, including its salary structure. The career stages and proficiencies required are linked to continuous professional development, with teachers and school leaders receiving credit for the courses they take over time. All this is codified in the collective agreement signed between the Sierra Leone Teachers Union and the Sierra Leone Teaching Service Commission, which is the employer and regulator of teachers in the country (see Table 2 on career stages and requirements in Sierra Leone).

Table 2: Criteria for appointment along the teacher career path in Sierra Leone

New Teacher	Proficient Teacher	Highly Accomplished Teacher	Distinguished Teacher
Nationally approved teaching qualification; 0-5 years of teaching experience.	5 years as New Teacher; 50 credits of PD; From Higher Teachers Certificate upwards; Senior Teacher, Head of Department, Deputy Head Teacher, and Head Teacher.	5 years as Proficient Teacher; 50 credits of PD; First degree upwards; Senior Teacher, Head of Department, Deputy Head Teacher, Head Teacher, Vice Principal, and Principal.	5 years as Accomplished Teacher; 50 credits of PD; First degree upwards; Deputy Head Teacher, Head Teacher, Vice Principal, and Principal.

Source: Nwokeocha, S., Sessay, A., Njora, H., and Wodon, Q. (2024).

Box 7

Continuous professional development and collaborative learning in Rwanda

High-performing headteachers in Rwanda were identified and trained to provide practical support and professional development to other head teachers in their locality. In 2017, the Rwandan Ministry of Education launched the Building Learning Foundations programme to improve learning in English and Mathematics in public and government-subsidised primary schools. Strengthening school leadership is one of the three pillars of the programme, and it was approached by identifying "Leaders of learning" among headteachers in high-performing or continually improving schools. These leaders were then supported to act as change agents to improve teaching and learning beyond their own school by providing professional development support to other head teachers in their locality. 416 Local Leaders of Learning (LLLs) covering the entire country were identified, and they were supported by 60 (two per district) National Leaders of Learning (NLLs). The design of the leaders of learning roles was informed by international evidence and models of leadership, where effective leadership involves acting as a role model and helping solve real-world problems by offering on-the-job and highly contextualised support to peers. The initiative also responded to the recently expanded role and professional standards of head teachers, focusing more on teacher professional development and school performance rather than administration.

Professional learning communities were established at different levels to provide professional development and collaborative problem-solving spaces, and one-on-one peer coaching was systematised and supported. The NLL and LLL roles aimed to support headteachers in fulfilling their expanded roles and meeting the new standards. They did this by leading Professional Learning Communities (PLCs), which were established as part of the programme, wherein headteachers came together for peer support and collective and collaborative problem-solving. At the district level, NLLs and district officials have a termly PLC that discusses potential issues for LLLs in their district and identifies improvement priorities. At the local level, LLLs facilitate a PLC for all head teachers that focuses on school improvement practices, including the establishment and facilitation of running similar communities of practices for the teachers in their own schools. In addition to the PLCs, NLLs provide coaching training to LLLs. Then, the LLLs offer one-on-one coaching to a new head teacher or one in a particularly challenging school.

The programme has had a significant impact on headteachers' competencies and working practices in a remarkably short period of time, and the structures created by the programme have been effectively utilised for other purposes. The programme has improved headteachers' instructional leadership capacity and large gains in the proportion of headteachers meeting the new, expanded standards. At the beginning of the programme, 41 per cent of head teachers were achieving the competency standards, and after only two years, this had risen to 66 per cent. In addition to this quantitative improvement programme, participants greatly appreciated the increased sense of support and the development of learning communities and relationships within and across schools and districts. They also identified the positive change in headteacher and teacher dynamics, becoming much more collaborative, and the benefits of collective problem solving of common challenges facing schools, for example, ways to increase the use of English and ways to organise library access for children. The collection and use of data was an initial focus of PLC sessions, and headteachers and district officials point to a significant improvement in the understanding and quality of planning. The communities and structures developed through the programme have also been effective in ways unforeseen in the original design, for example, PLCs were used to convene head teachers to plan for school re-opening after COVID-19 and develop systems for identifying vulnerable children at risk of dropping out.

All learning leaders in the initiative were selected from active headteachers. They received no financial compensation but were provided with an accredited year-long training programme, resulting in a recognised qualification in leadership. Both NLLs and LLLs were selected from among existing experienced headteachers based on several criteria, including student performance and learning practices in school, years of experience, and a demonstrated ability and desire for collaborative leadership based on a school visit and interview with a selection committee. Participants remain serving as headteachers, and LLLs receive no compensation or additional pay for their roles. The primary motivation is the opportunity for professional development and to improve their own performance and that of their peers. The professional development provided to NLLs and LLLs is an accredited professional development one-year course co-designed and delivered with the University of Rwanda. Completion of the course, which involves a comprehensive portfolio demonstrating their new skills and knowledge, results in a recognised qualification in leadership.

Challenges encountered included supporting candidates through the initial training course and adequately involving district education officers in the PLCs, and uncertainty remains over the long-term sustainability of the initiative. The programme did encounter some challenges. The portfolio assessment required by the leadership course was unfamiliar to the first cohort of trainees, and they required substantial extra support to complete the practical assignment. The subsequent cohorts were offered more continual support, which led to better results. A second and largely unresolved challenge was how to actively engage district education officers in the programme. Although their engagement in and understanding of the programme did increase over time, they could not attend and engage significantly with PLCs due to other commitments. The most significant unresolved issue identified by stakeholders is that of longer-term sustainability, both in terms of required technical inputs from programme staff and financial sustainability, that is, will it become necessary to financially compensate LLLs for their additional responsibilities?

2.2.3 Conclusion

Although significant challenges persist in Africa concerning teachers, there are positive examples illustrating how this challenge can be overcome and common strategic areas that can guide successful interventions elsewhere. Significant challenges remain in Africa in relation to teachers, and this challenge is simultaneously quantitative and qualitative. There are simply not enough teachers in Africa, a situation which is likely to worsen as access to higher levels of education and pre-primary increases. Secondly, there are not enough effective teachers. This is not to blame the teachers but rather a consequence of ineffective initial training and ongoing professional development they receive and a consequence of the often-poor learning environments in which they are expected to work. Fortunately, there is much evidence and examples of good practice addressing these challenges, globally and from Africa, to help guide the necessary improvements. What is more, the two factors are closely interrelated. Policies and interventions that successfully affect one often also improve the other. For example, improving teacher deployment improves the working conditions of teachers, which can have a positive impact on learning conditions and outcomes. Similarly, improving levels of professional development opportunities and the career pathways of teachers can help raise their status and attract more applicants to the profession. In addition, there are a number of common strategic areas that can positively affect change for teachers in several ways: policy, data, working conditions, and collaboration.

Holistic teacher policies are required, and many related guidelines and frameworks are available. Teacher policies are the framework for recruiting, training, and deploying new teachers, and the continuous professional development of existing teachers. Holistic teacher policies that are aligned with national priorities and political frameworks are required. The development of such policies should use a collaborative approach, including the active participation of teachers and their representative organisations. Guidance on teacher policies is available among others from UNESCO and the Teacher Task Force, the recent Global Report on Teachers, the report of the United Nations Secretary-General's High-level Panel on the Teaching Profession, the Africa Teachers Report series, a World Bank blueprint from a few years ago, and a series of discussion papers under the Knowledge and Innovation Exchange programme. In addition, valuable instruments adopted by the African Union include the African Continental Framework of Standards and Competencies for the Teaching Profession, the African Continental Teacher Qualification Framework, the African Continental Guidelines for the Teaching Profession, and the African Continental Teacher Mobility Protocol, all of which build on the Global Framework of Professional Teaching Standards.

More and better data needs to be collected, and what is collected needs to be used more effectively. Although much relevant data exists, for example, the number of teachers per school and number of qualified teachers per school, the coverage of more detailed and relevant indicators is patchy, for example, the average teacher salary relative to other professionals requiring a comparable level of qualification; the percentage of teachers who received in-service training in the last 12 months by type of training; key information on school leadership. To strategically predict and manage teachers, including their supply, professionalisation, and career development, better data systems and tools are required, such as TMIS and HRMIS, like Senegal's MIRADOR system. Having said that, all countries could make better use of available data, for example, identifying and monitoring inequalities and inefficiencies in teacher deployment is relatively straightforward. In addition, household and labour force surveys could be used to provide much information on the lives of teachers, such as wage levels and working hours, information on their education, and to estimate the share of teachers in poverty.

Teacher education, career pathways and conditions need to be improved, partly through adequate funding in line with existing commitments and enhanced collaboration and coordination at national and international levels. Teacher education needs to be transformed from individual-focused, course-based and discrete to collaborative and continuous teacher-led training and development. Well-structured and well-defined career pathways recognise professional development, increased responsibility and reward and motivate the best teachers. The working conditions of teachers also need to be improved, including salaries and the immediate learning environments. This will require adequate public funding in line with existing benchmarks and commitments. However, it should also include more cost-neutral initiatives that provide recognition and appreciation of the work of teachers and outstanding

individuals. The effective production, development, and management of teachers requires a wide range of actors and stakeholders, not least teachers themselves. It is vital that all relevant actors collaborate to develop appropriately designed and well-coordinated initiatives. Similarly, at the international level, governments should enhance levels of collaboration and mutual learning, and this can be facilitated by their international partners, who should also ensure that any programmes they implement in countries are well aligned with national policies and priorities.

2.3 Foundational learning skills

2.3.1 Introduction

Foundational learning skills are the pillars upon which all future learning and personal development are built, enabling children to actively participate in further education and engage meaningfully in their communities. Foundational learning skills, which encompass basic literacy, numeracy, socio-emotional and cognitive abilities, are critical to the educational and developmental journey of every child. The ability to read with comprehension and perform basic arithmetic is not only essential for success within the school but also vital for daily life, allowing individuals to contribute fully to society.[170] Foundational learning is also crucial in fostering cognitive development, critical thinking, and problem-solving abilities, which keep children engaged and motivated throughout their educational endeavours. The impact of strong foundational skills extends far beyond the classroom, leading to reduced dropout rates, higher future earnings, and the breaking of the cycle of poverty.[171]

The global and regional commitment to foundational learning is enshrined in key educational frameworks, such as SDG 4 and CESA 16-25. SDG 4 and CESA 16-25 emphasise the importance of providing inclusive, equitable, and quality education for all, ensuring that no child is left behind.[172] Governments across Africa have demonstrated commitment to foundational learning skills by prioritising early childhood education and primary schooling in their national policies. International organisations such as UNICEF, UNESCO, and the World Bank have been instrumental in providing the necessary technical and financial support to enhance educational quality.[173] Regional bodies such as the AU continue to advocate for increased investment in foundational learning as a critical driver of sustainable development, for example through the End Learning Poverty for All in Africa Campaign.[174]

[170] World Bank. (2019). *Ending Learning Poverty: What Will It Take?*

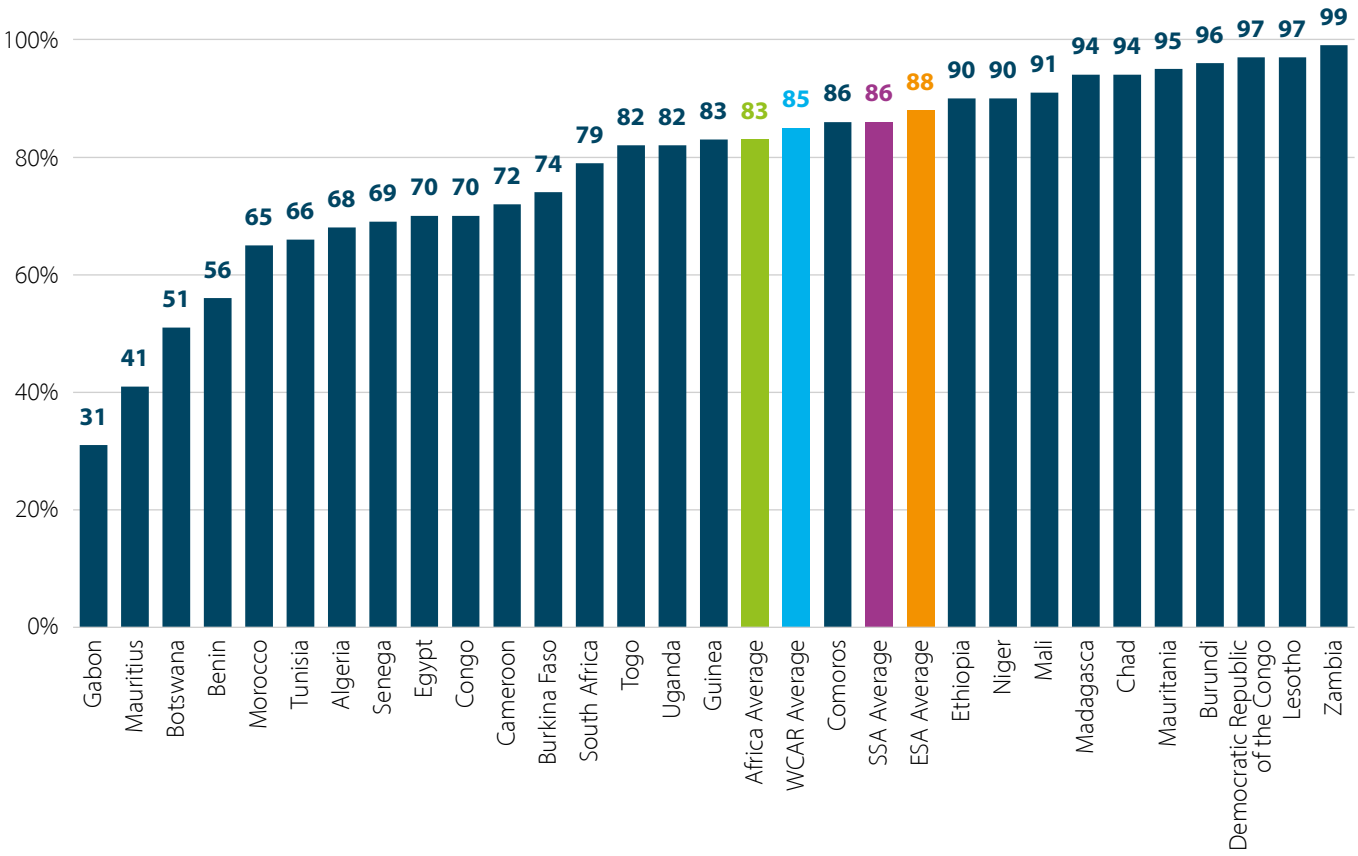
[171] UNICEF. (2021). *The State of the World's Children 2021*. Hanushek, E. A., and Woessmann, L. (2020). The economic impacts of learning losses. OECD Education Working Papers.

[172] United Nations. (2015). *Transforming our world: The 2030 Agenda for Sustainable Development*. African Union. (2016). Continental Education Strategy for Africa (CESA) 2016-2025. Addis Ababa: African Union.

[173] UNICEF. (2021). *The State of the World's Children 2021*, UNESCO. (2020). Global Education Monitoring Report (2020): Inclusion and Education – All Means All.

[174] African Union. (2024c). The Conference on Foundational Literacy and Numeracy (FLN) marked the launch on the End Learning Poverty for all in Africa (ELPAF) Campaign. Available at: https://au.int/en/pressreleases/20240910/launch-end-learning-poverty-all-africa-elpaf-campaign.

Figure 15: Proportion of children aged 10 who cannot read for understanding, 2019

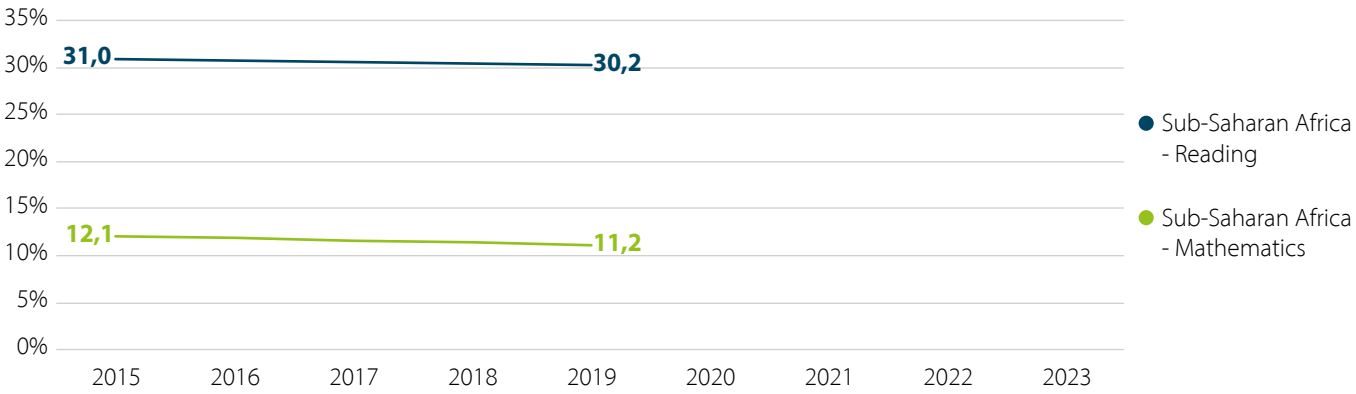


Data source: World Bank
Notes: (i) Data is from African countries that have implemented standardised learning assessments at foundational level, (ii) the continental average is weighted by the population of 10-year-olds from the countries.

An estimated four out of every five 10-year-olds in Africa cannot read and comprehend a simple text, but this varies significantly across countries with available data. The World Bank's Learning Poverty Report[175] estimates that 83 per cent of 10-year-olds in Africa cannot read and comprehend an age-appropriate text. This estimate is only based on countries with learning assessments, and the situation could be more severe in the many countries without this data. Figure 15 highlights the stark variations in learning poverty across countries. For instance, in Gabon, 31 per cent of children cannot read for understanding, followed by Mauritius and Botswana with 41 per cent and 51 per cent, respectively, suggesting these countries are making reasonable progress in reducing learning poverty relative to their peers. In contrast, Zambia, Lesotho, and the Democratic Republic of the Congo have some of the highest rates, with 99 per cent, 97 per cent, and 97 per cent of children, respectively, unable to read for understanding by age 10. The data further reveal that Sub-Saharan Africa (SSA) is particularly affected, with 9 in 10 children unable to read for understanding by age 10. Overall, these estimates depict a continent-wide crisis in foundational learning, clearly indicating that while some countries have made progress, many are still grappling with high levels of learning poverty. This widespread inability to read for understanding by age 10 is a critical barrier to achieving the educational goals set out in SDG 4 and CESA 2016-25. It also emphasises the importance of adopting comprehensive and context-specific strategies to improve foundational learning across Africa.

[175] World Bank. (2022b). *The State of Global Learning Poverty: 2022 Update.*

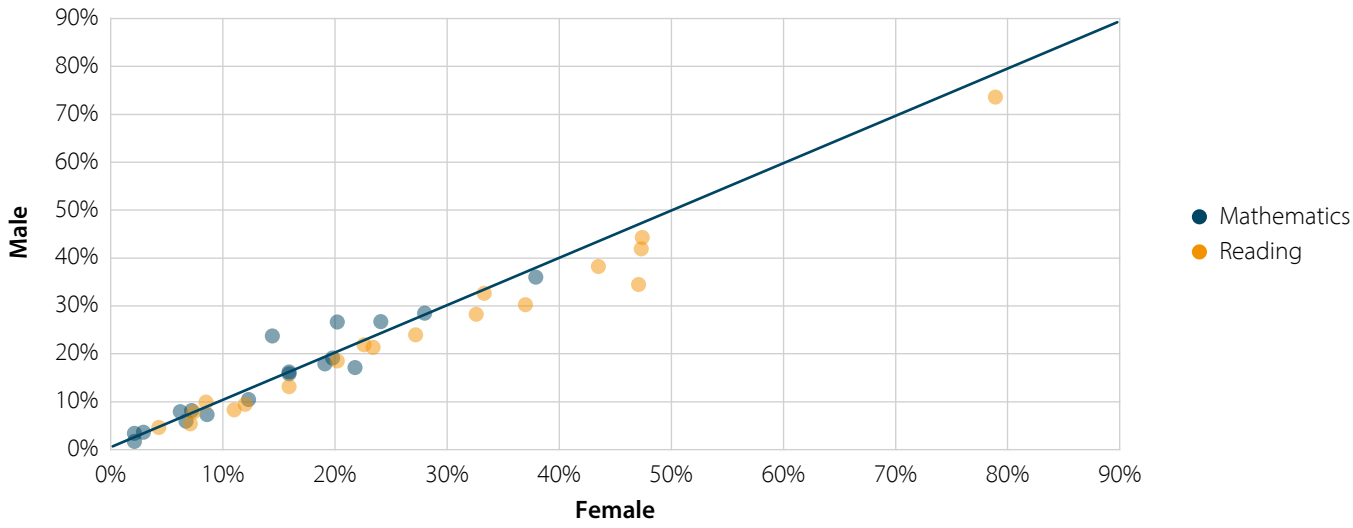
Figure 16: [SDG 4.1.1] Proportion of students at the end of primary education achieving at least a minimum proficiency level in mathematics and reading, by region, 2015-2023



Data source: UIS September 2024 data release. Note: No data available for Northern Africa.

The limited data that do exist suggest low and gradually decreasing levels of learning at the end of primary, especially in mathematics. Figure 16 displays the proportion of students at the end of primary education achieving at least a minimum proficiency level in mathematics and reading by region over time. Unfortunately, due to limited available data, there is no estimated value for Northern Africa, and there is no estimate for Sub-Saharan Africa later than 2019. However, the limited data that are available suggest that only 1 in 10 children at the end of primary are achieving the minimum proficiency level in mathematics and only 3 in 10 for reading. It also suggests that the situation is gradually worsening over time rather than improving. Figure 17 illustrates how these regional values mask wide variation at the country level. However, even then, only a few countries are close to achieving 50 per cent of students reaching minimum proficiency levels in reading at the end of primary school; Gabon is an outlier at having above 70 per cent. What can also be seen is the large number of countries with less than 10 per cent of their learners achieving minimum proficiency levels by primary school. The dotted line represents gender parity in learning; any spot below the line is a country and subject where girls perform better, and any spot above represents boys performing better. Girls outperform boys in reading in most countries, sometimes quite significantly. However, the picture is more mixed in relation to mathematics, with most blue spots on or near the parity line.

Figure 17: [SDG 4.1.1] Proportion of students at the end of primary education achieving at least a minimum proficiency level in mathematics and reading, by country and sex, most recent year available (2019-2023)



Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

Evidence suggests an urgent need for increased government action on foundational learning in Africa. To monitor progress on government efforts targeted towards foundational learning, UNICEF and the Hempel Foundation's Foundational Learning Action Tracker (FLAT) collect data on low- and middle-income countries' ongoing policy measures against the RAPID Framework for foundational learning.[176] In 2024, FLAT data for 52 African countries found that while many governments are taking action to reach every child and keep them in school, government actions appeared relatively weaker in terms of increasing the efficiency of instruction through proven measures and developing students' overall well-being to support learning. Moreover, in 2024, only 10 African countries showed a substantial increase in government efforts for foundational learning since 2023.[177]

2.3.2 Challenges and responses

2.3.2.1 Learning assessment data and related evidence

The foundational learning crisis in Africa is significantly compounded by the lack of systematic and frequent assessments to effectively measure foundational learning outcomes. Although foundational learning assessments have been conducted in various regions across Africa, their data coverage and recency are limited. Notably, the Programme for the analysis of educational systems of the CONFEMEN countries (PASEC) has been implemented in many West and Central African countries, but the most recent assessments were conducted in 2019. South Africa and Morocco participated in the Progress in International Reading Literacy Study (PIRLS) in 2016, while Algeria and Tunisia took part in the Trends in International Mathematics and Science Study (TIMSS) in 2007 and 2011, respectively. In Eastern and Southern Africa, the learning poverty estimates in countries such as Eswatini, Ethiopia, Uganda, and Zambia relied on National Learning Assessments (NLA). This distribution reveals significant gaps in assessment coverage, particularly in Southern and Eastern Africa, where many countries either lack regular, large-scale assessments or have not conducted any at all. In these regions, the Southern Africa Consortium for Measuring Learning Quality (SACMEQ) focuses primarily on the end of primary and secondary school cycles, leaving a crucial gap in understanding how children are progressing in foundational literacy and numeracy during their early years of schooling—compounded by the fact that the last assessment was conducted in 2013. These findings are further supported by survey data from the FLAT: out of 36 African countries with data, almost a fifth of countries reported that no nationally representative large-scale assessment of reading and/or math is conducted in the early grades (Grades 2/3).[178]

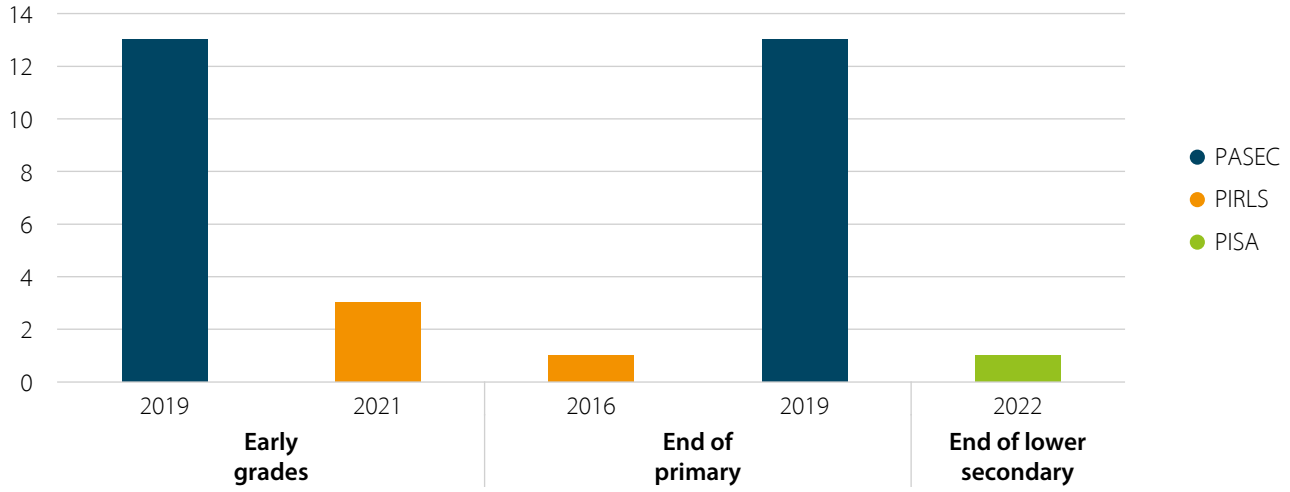
Even where foundational learning assessments exist, their recency and level of detail limit their impact on educational reforms. Figure 18 below illustrates how little recent data on foundational learning exists. PASEC, predominantly conducted in West and Central Africa, was last administered in 2019, limiting the ability to track more recent trends in foundational learning. Only three countries participating in PIRLS have more recent early years assessment data. Moreover, these assessments typically provide national-level data, which, while valuable for macro-level decision-making, offers limited insights at the local or school level, where more targeted interventions are needed. The high cost of participation in these assessments presents further barriers, restricting many countries from conducting them more frequently or expanding their scope to include more detailed, context-specific data. The absence of systematic assessments in key regions exacerbates the foundational learning crisis by limiting the availability of reliable data needed to inform policy interventions and educational reforms. Without granular data on learning outcomes, schools and policymakers struggle to make informed adjustments to teaching strategies, delaying critical improvements and hindering efforts to achieve better learning outcomes where they are most needed.

[176] UNICEF and the Hempel Foundation. (2024). *From Commitments to Action: Findings from the Foundational Learning Action Tracker 2024.* Available at: https://www.unicef.org/reports/commitments-action-2024.

[177] UNICEF and the Hempel Foundation. (2024). *Foundational Learning Action Tracker: Results for Africa.* Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

[178] UNICEF and the Hempel Foundation. (2024). *Foundational Learning Action Tracker: Results for Africa*. Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

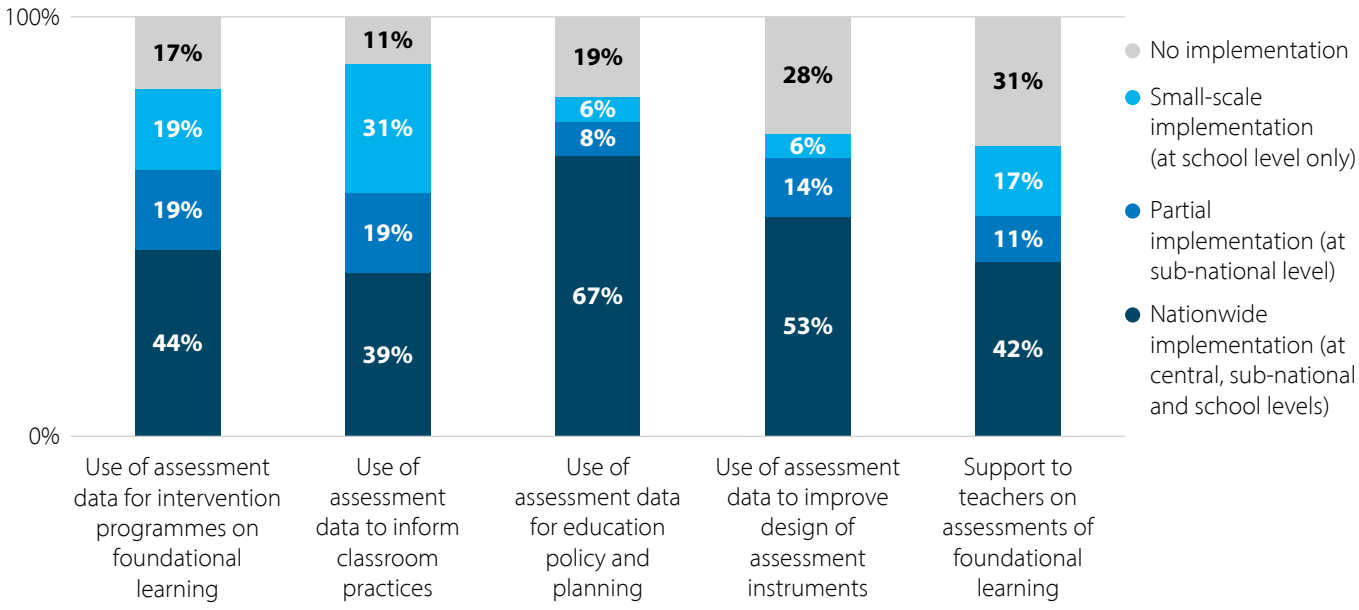
Figure 18: Number of countries by last year of foundational learning assessment available



Source: UNESCO World Inequality Database on Education. Accessed from: https://www.education-inequalities.org/ on 29-11-2024.

Importantly, recent evidence reveals a need to improve not only the collection but also the usage of learning assessment data. Out of 36 African countries with FLAT data, about 2 in 3 report using assessment data to inform education policy and planning nationwide. However, as presented in Figure 19, there is still much room for improvement in assessment data utilisation: almost a fifth of countries do not use assessment data to inform education policy and planning, and over a fifth do not use assessment data to improve the design of assessment instruments (for example, choice of mother tongue as the language of assessment). Moreover, almost a third of African countries with data do not provide support to teachers on assessments of foundational learning (for example, developing and conducting assessments).[179]

Figure 19: Share of African countries (N=36) implementing policy actions to assess learning levels regularly

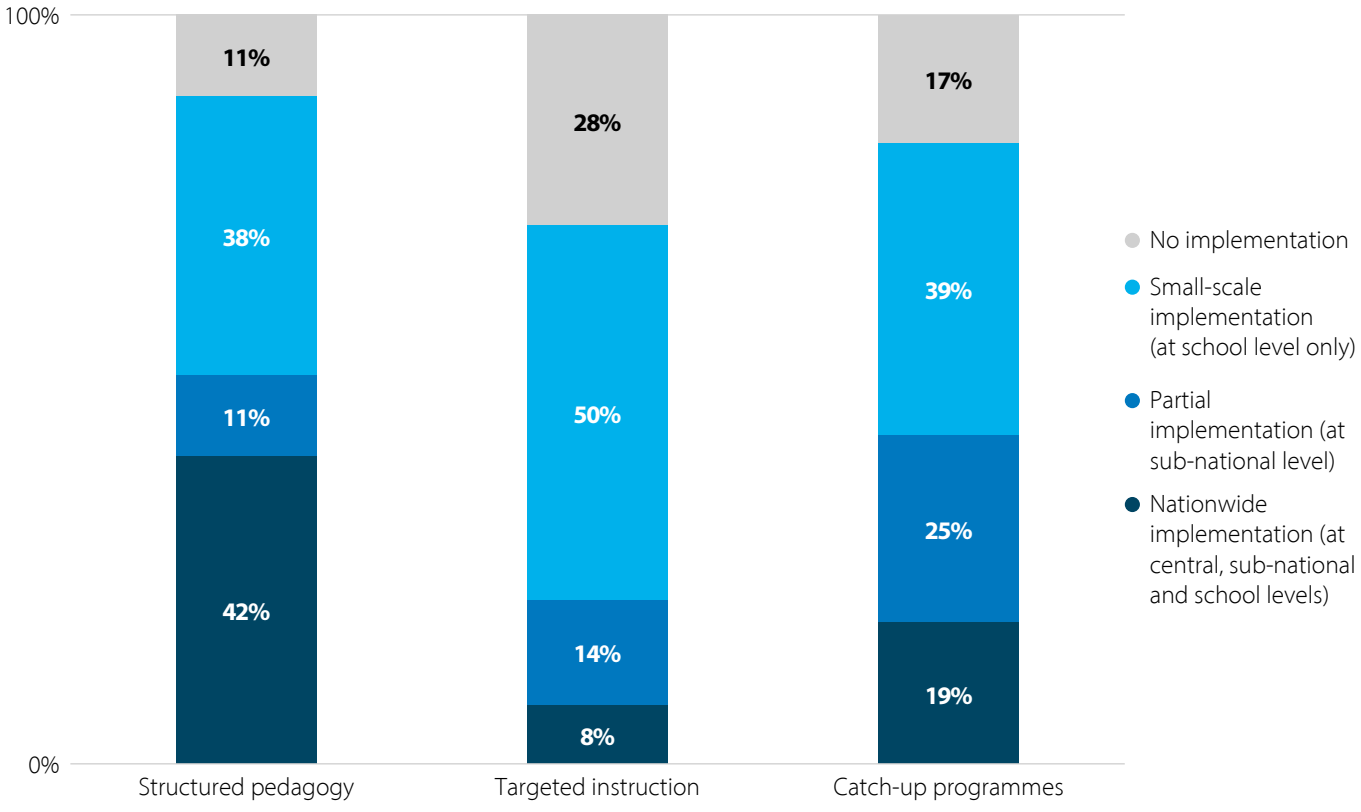


Source: UNICEF and the Hempel Foundation, 2024.

[179] Ibid.

Recent evidence exists identifying interventions that are particularly effective at enhancing foundational learning in low- and middle-income countries. The "Cost-Effective Approaches to Improve Global Learning"[180] identifies several interventions that are particularly effective at enhancing foundational learning in low- and middle-income countries. Among the *"Smart Buys" identified* are structured lesson plans combined with linked materials and ongoing teacher monitoring and training. This approach has proven to be highly cost-effective in contexts where traditional rote learning dominates, as it supports teachers with clear guidelines while reinforcing good pedagogy and providing socio-emotional support to students. Additionally, interventions such as "Teaching at the Right Level" (TaRL), which tailor instruction to the learning levels of students rather than their age, have shown remarkable results in improving literacy and numeracy outcomes. Recent survey findings suggest a need to scale up such proven measures to increase the efficiency of instruction in Africa: while about 2 in 5 African countries with data report implementing structured pedagogy in all schools nationwide, only about 1 in 10 report the same for targeted instruction (Figure 20).[181] Moreover, the evidence underscores the importance of Early Childhood Education (ECE) as a foundational investment that yields long-term benefits, particularly when it is integrated with a strong primary education system. Across the African continent, there are numerous examples of successful interventions that align with these cost-effective strategies and have led to significant improvements in foundational learning. The following case studies highlight some of these approaches, showing how different countries have overcome challenges and achieved notable results.

Figure 20: Share of African countries (N=36) implementing policy actions to increase the efficiency of instruction, 2024



Source: UNICEF and the Hempel Foundation, 2024.

[180] Global Education Evidence Advisory Panel. (2023). *Cost-Effective Approaches to Improve Global Learning: What Does Recent Evidence Tell Us Are Smart Buys for Improving Learning in Low and Middle-Income Countries?* Available at: https://www.globalpartnership.org/node/document/download?file=document/file/2024-02-educate-africans-21st-century-seizing-moment-rev2.pdf.

[181] UNICEF and the Hempel Foundation. (2024). *Foundational Learning Action Tracker: Results for Africa.* Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

2.3.2.2 Provision of early childhood education as a foundation for lifelong learning

Early childhood education is widely recognised as one of the most effective interventions for improving foundational learning outcomes. Evidence consistently shows that children who participate in quality ECE programmes are more likely to succeed in school and beyond.[182] For instance, longitudinal studies have demonstrated that children who attend ECE programmes are more likely to develop stronger cognitive and social skills, which are crucial for later academic achievement.[183] Across Africa, various ECE programmes have been implemented with positive impacts on early learning outcomes. These programmes have been associated with improved school readiness, higher enrolment rates, and better performance in primary school.[184]

Community-based Childcare Centres (CBCCs) in Malawi are a compelling example of the success of ECE initiatives in Africa, particularly for children from vulnerable and marginalised backgrounds. Established as a community-led initiative, CBCCs in Malawi offer early childhood development services necessary for children's readiness for primary education, including basic education and cognitive stimulation. The centres are particularly important in rural areas where access to formal early childhood education is limited. Despite challenges such as inadequate access, where only 34 per cent of eligible children nationally benefit from ECE, those who attend CBCCs show better developmental outcomes. According to the 2019 Multiple Indicator Cluster Survey (MICS), children in Malawi who attended ECE were 48 per cent more likely to be developmentally on track in literacy and numeracy compared to those who did not attend ECE.[185] Recognising the impact of CBCCs, the Government of Malawi is focused on scaling up ECE to expand access and improve the quality of ECE to set a strong foundation for future learning.

Pre-primary education in Rwanda is strongly associated with better learning outcomes thanks to a comprehensive approach involving sector planning, curriculum reform and community engagement. The government of Rwanda prioritised expanding access to pre-primary education through the Education Sector Strategic Plan (ESSP) 2018-2023, which highlighted ECE as a key priority. This commitment is evident in the increase in gross enrolment ratio, which rose from 10 per cent in 2014 to 33 per cent in 2021/22, and net enrolment rate, which grew from six per cent to 28 per cent during the same period.[186] A major component of this expansion was the development of a competence-based curriculum for pre-primary education, which emphasises learning through play. This method has been shown to stimulate cognitive development by engaging children in problem-solving, critical thinking, and decision-making. The curriculum is supported by the implementation of minimum standards to ensure equitable quality across pre-primary services, with a structured approach to improving service delivery. The programme has had notable results, with children who participate being 35 per cent more likely to achieve basic literacy and numeracy skills by the end of Grade 1 compared to their peers who do not attend ECE.[187] Additionally, the integration of community members in the establishment and management of ECE centres has created a sense of ownership and sustainability, ensuring that these early gains in education continue to benefit future generations.

[182] Heckman, J. J. (2006). *Skill formation and the economics of investing in disadvantaged children*, Barnett, W. S. (2011). *Effectiveness of early educational intervention. Science, 333*(6045), 975-978, and UNICEF. (2021). *The State of the World's Children 2021.*

[183] Shonkoff, J. P., and Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development* and Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M., Espinosa, L. M., Gormley, W. T., Ludwig, J., Magnuson, K. A., Phillips, D., & Zaslow, M. J. (2013). *Investing in our future: The evidence base on preschool education.*

[184] UNESCO. (2020). *Global Education Monitoring Report 2020: Inclusion and Education – All Means All* and Martinez, S., Naudeau, S., & Pereira, V. (2012). *The promise of preschool in Africa: A randomized impact evaluation of early childhood development in rural Mozambique.*

[185] National Statistical Office. (2021). *Malawi Multiple Indicator Cluster Survey 2019-20, Survey Findings Report.* Zomba, Malawi: National Statistical Office.

[186] MINEDUC. (2022). Education Sector Strategic Plan (ESSP) 2018-2023.

[187] Rwanda Education Board, 2023.

A play-based learning approach and enhanced teacher skills support better learning outcomes in Morocco, but inequalities in access persist. In Morocco, the drive toward universal pre-primary education has made significant strides, with the pre-primary net enrolment rate (NER) reaching 66 per cent by 2024.[188] The national curriculum is centred on a play-based learning approach, implemented across public pre-primary institutions to ensure a child-centred and comprehensive educational experience. This curriculum integrates structured activities like group play, interactive storytelling, and hands-on tasks to stimulate creativity, communication, and problem-solving skills. The dynamic classroom environments encourage children to engage with peers and materials, learning through guided discovery and exploration rather than traditional instruction. Teachers receive specialised training to balance these playful methods with academic objectives, emphasising the development of early literacy and numeracy.[189] Evidence reveals that children who attend pre-primary education are 36 per cent more likely to meet literacy and numeracy benchmarks by Grade 1 compared to those without early childhood education.[190] Despite these positive outcomes, challenges remain, particularly in rural regions where teacher shortages and limited access to resources hinder the programme's full implementation. Addressing these inequalities is essential to ensure that the benefits of early childhood education are experienced by all children across Morocco, regardless of their location.[191]

Ghana has managed to combine the highest levels of access to pre-primary in West Africa with quality learning outcomes, but scaling to rural areas remains a challenge. Ghana made notable progress in early childhood education through its Kindergarten Education system, targeting children aged 4 to 5 and integrating them into the formal education structure. The Competency-Based Curriculum emphasises play-based learning, which fosters cognitive, social, and emotional development crucial for foundational literacy and numeracy skills. Ghana boasts the highest pre-primary net enrolment rate in West Africa at 73 per cent.[192] The 2017/18 Ghana Multiple Indicator Cluster Survey also shows that children enrolled in kindergarten programmes are 43 per cent more likely to be developmentally on track in literacy and numeracy than those who did not attend.[193] Additionally, a study by Innovations for Poverty Action (IPA) found that children who participated in play-based preschool programmes in rural Ghana exhibited significant improvements in cognitive development, particularly in literacy and numeracy. The IPA research highlighted that these children were 29 per cent more likely to meet early-grade literacy benchmarks compared to peers without kindergarten exposure.[194] Despite these advances, challenges remain in rural areas, including disparities in teacher training and resource availability, which could affect the scalability of these educational gains across the country.

2.3.2.3 Structured pedagogy and tailored teaching approaches

Structured pedagogy, often using the Teaching at the Right Level (TaRL) approach, has proven highly effective in addressing foundational learning challenges across Africa. Structured pedagogy provides teachers with structured lesson plans, continuous training, and the necessary support to deliver high-quality, tailored instruction. It addresses specific learning needs of students by focusing on evidence-based strategies that enhance literacy and numeracy outcomes. In many countries, the approach is based on the TaRL methodology, which focuses classroom instruction on a child's current learning level within a context of grouping children according to their learning levels while focusing on foundational reading and mathematics skills.[195]

[188] UNESCO Institute for Statistics. (2024). September 2024 Update.
[189] UNESCO. (2020). Global Education Monitoring Report 2020: Inclusion and Education – All Means All.
[190] UNICEF. (2021). *The State of the World's Children 2021*.
[191] World Bank. (2019). *Ending Learning Poverty: What Will It Take?*
[192] UNESCO Institute for Statistics. (2024). September 2024 Update.
[193] Ghana Statistical Service. (2018). Ghana Multiple Indicator Cluster Survey 2017/18.
[194] IPA, 2018.
[195] See the works of Teaching at the Right Level Africa. Available at: https://teachingattherightlevel.org/

An initiative in Zambia targeting early-grade literacy and numeracy demonstrated a 60 per cent increase in students able to read and an 89 per cent increase in those performing subtraction. The *Catch-Up* programme in Zambia, based on TaRL, was piloted from November 2016 to April 2017 to address early-grade literacy and numeracy challenges.[196] Initially targeting learners in Grades 3 to 5 across 80 schools in Eastern and Southern Provinces schools, the programme dedicated one hour per day to interactive lessons. Students were grouped according to their literacy and numeracy levels rather than by age, allowing them to progress at their own pace. Teachers were trained in formative assessments and phonics-based instruction, enabling them to tailor lessons to meet the specific needs of their students, often using low-cost, locally sourced teaching aids. By 2019, the programme expanded to over 22 districts, covering 1,780 schools and benefitting 161,000 learners—surpassing its target of 145,000 students. Results showed a 60 per cent increase in students able to read at least a paragraph and an 89 per cent increase in students performing subtraction.[197] However, despite its success, the programme faced challenges in scaling up teacher capacity and maintaining consistent support across all participating schools. Rural schools struggled with access to adequate teaching materials and trained facilitators, slowing down the pace of implementation. Infrastructure limitations, the need for stronger school leadership, and greater parental involvement remain challenges. Nevertheless, the programme's success has driven its continued expansion, with the Zambian government scaling it up to additional provinces.

After only a few weeks of implementation, TaRL in Botswana achieved a significant reduction in the percentage of pupils unable to perform basic number operations. In Botswana, the TaRL programme was piloted in 2016 to address gaps in basic literacy and numeracy among primary school students. Initially, the programme targeted numeracy, where gaps were most significant, before expanding to literacy in later years. Implemented in collaboration with the Ministry of Education and Skills Development (MESD) and Youth Impact, the programme groups students based on learning levels rather than age or grade, ensuring that instruction is tailored to each student's needs. Teachers and facilitators use interactive, child-centred instructional methods supported by ongoing mentorship and regular formative assessments to track progress. By 2022, TaRL had reached over 20 per cent of Botswana's primary schools and demonstrated impressive results: the percentage of students unable to perform basic numeracy operations dropped from 34 per cent to eight per cent, and 72 per cent of students acquired new numeracy skills during 3-6 weeks of implementation. The programme's success is attributed to its alignment with Botswana's education policies, cost-effectiveness, and adaptability to local contexts. However, the programme has encountered challenges in maintaining teacher motivation and ensuring consistent monitoring. Despite these hurdles, the programme continues to expand to reach all primary schools by 2027.[198]

Structured pedagogy in Morocco has effectively reduced equity gaps by targeting foundational learning in the most underserved areas. In Morocco, the TaRL was introduced during the 2022–2023 school year to address significant learning gaps, particularly in rural and semi-urban areas. The programme targeted over 15,000 students across 200 schools, focusing on foundational skills in math, Arabic, and French. This approach allowed teachers to concentrate on the areas where students struggled most. Each day, students participated in 30-minute sessions focused on one subject—math, Arabic, or French—using engaging and interactive activities designed to make learning more effective. Despite the short duration of the intervention, the pilot produced remarkable results: 60 per cent of students improved in math, 53 per cent in French reading, and 47 per cent in Arabic reading. These gains, achieved in such a short time, highlight the potential of TaRL to quickly address foundational learning gaps. By focusing on student-centred, skill-level-based instruction, TaRL has proven to be highly effective in improving literacy and numeracy. Given the success of this pilot, the approach holds promise for broader

[196] UNICEF. (2022). *Improving early grade reading and numeracy through 'Catch-Up,' a remedial learning programme.*
[197] UNICEF. (2022). *Improving early grade reading and numeracy through 'Catch-Up,' a remedial learning programme.*
[198] Curtiss Wyss, M., Qargha, G. O., Arenge, G., Mukoyi, T., Elliott, M., Matsheng, M., & Clune, K. (2023). *Adapting, Innovating, and Scaling Foundational Learning: Four Lessons from Scaling Teaching at the Right Level in Botswana.*

implementation across Morocco, with the potential to significantly improve educational outcomes, especially in underserved areas.[199]

Continued research and analysis allow structured pedagogy initiatives to demonstrate impact and identify areas for further improvement. In Ghana, the Early Grade Reading (EGR) Program, implemented from 2017 to 2019, adopted a structured pedagogy approach focused on phonics-based reading instruction and the use of local languages. The programme targeted approximately 700,000 children in Primary 1 and Primary 2 across 100 districts. The initiative included comprehensive support through continuous teacher training, mentoring, and coaching, with teachers receiving school-based in-service training and regular visits from coaches. Structured pedagogy facilitated a methodical, step-by-step approach that improved the clarity of reading instruction and allowed teachers to monitor student progress more effectively. By the end of the programme, notable improvements were recorded in literacy outcomes. Students in the treatment group read an average of 8.6 more words per minute in Ghanaian languages than their peers in comparison schools. Reading comprehension scores improved by 10 per cent. Notably, the programme reduced the number of zero scorers—students unable to read a single word—by 38 per cent in Primary 1 and 47 per cent in Primary 2. Despite these gains, significant challenges remained, with 32 per cent of Primary 2 students still unable to read a word and 57 per cent unable to demonstrate reading comprehension.[200] Issues such as high rates of pupil absenteeism and teacher absence, as well as language mismatches, were identified as key obstacles, with recommendations suggesting the need for continued improvements in teacher training, a focus on remedial education for zero scorers, and addressing socio-economic factors like pupil hunger to enhance programme effectiveness.

2.3.2.4 Peer-based teacher training and continuous professional development

Context-specific continuous professional development that utilises cluster-based and peer learning is much more effective than traditional, generic one-off training. Effective teacher training is central to improving foundational learning outcomes. While centralised, one-off training has been the traditional method. Research increasingly supports cluster-based training models combined with continuous teacher support as more impactful. Unlike generic training sessions, which often fail to provide sustained support or address context-specific challenges, cluster-based models bring teachers together in smaller, localised groups for ongoing professional development. These clusters allow for peer learning, mentorship, and the contextual adaptation of pedagogical strategies, fostering a more practical and collaborative environment. Teachers benefit from regular interaction with peers and facilitators, making it easier to discuss real-time classroom challenges and receive feedback.[201] Continuous, localised support has been shown to result in more meaningful shifts in teacher practices, as opposed to one-time centralised training programmes that often lack follow-up or hands-on guidance.[202]

In Ethiopia, teachers meet regularly to share best practices, discuss classroom challenges, and receive continuous support from senior educators or facilitators, which has contributed to a 44 per cent increase in pre-literacy scores of their students. Ethiopia has been implementing a cluster-based teacher training approach through the General Education Quality Improvement Programme for Equity (GEQIP-E), designed to improve teaching quality by grouping schools into clusters for localised, ongoing professional development. Teachers meet regularly to share best practices, discuss classroom challenges, and receive continuous support from senior educators or facilitators. According to the World Bank's GEQIP-E programme, this approach has significantly improved both teaching practices and student learning outcomes, particularly in early grades. Teachers involved in the programme reported increased

[199] Binaoui, A., Moubtassime, M., & Belfakir, L. (2023). The Effectiveness of the TaRL Approach on Moroccan Pupils' Mathematics, Arabic, and French Reading Competencies.

[200] USAID. (2019). *Ghana Early Grade Reading Program: Impact Evaluation Endline Report.*

[201] Bold, T., Kimenyi, M., Mwabu, G., Ng'ang'a, A., & Sandefur, J. (2013). *Scaling up what works: Experimental evidence on external validity in Kenyan education.*

[202] World Bank. (2018a). *Learning to Realize Education's Promise.* World Development Report 2018.

confidence in using student-centred teaching methods, contributing to improved literacy and numeracy outcomes. One key result shows a 44 per cent progress in average pre-literacy scores as measured by Measuring Early Learning Quality and Outcomes (MELQO), while 99 per cent of Phase 1 schools were visited by cluster supervisors and key teachers, surpassing the target of 95 per cent. Additionally, the average score on school inspection standards for teaching practice reached 70 per cent, exceeding the target. These results demonstrate how targeted professional development and ongoing supervision are contributing to Ethiopia's progress in foundational education.

In Egypt, professional learning communities where teachers could collaborate, exchange ideas, and support each other were demonstrated to be crucial to the implementation of curriculum reforms. Teacher Professional Networks (TPNs) were introduced as part of the broader education reforms under Egypt's Vision 2030, focusing on transforming the teaching of mathematics. These reforms aimed to move away from traditional, memorisation-based approaches and foster more critical thinking, problem-solving, and student-centred learning. TPNs were established as localised professional learning communities where teachers could collaborate, exchange ideas, and support each other in adopting new pedagogical practices. They became integral to the implementation of the education curriculum reforms, which emphasised enhancing teacher professional skills, transforming instructional methods, and restructuring assessments. A case study of TPNs, analysed using the Goodson Change Model, explored their role in reforming K-12 mathematics education in two schools within the same district. While both schools were under the same national framework, their responses to the reform differed significantly. In one school, the TPN embraced the new methodology, fostering collaboration, peer support, and professional development. Teachers in this network actively implemented the curriculum changes, particularly in problem-solving, resulting in increased confidence and improved teaching practices. Conversely, the second school displayed resistance to change, with teachers adhering to traditional, memorisation-based methods. This highlighted a key challenge in reform implementation: cultural and pedagogical resistance within established teaching communities. Although TPNs demonstrated their potential to drive educational reforms in the receptive school, the resistance in the other underscored the difficulty of shifting deeply entrenched practices. While TPNs can promote pedagogical innovation, the study revealed that they may sometimes marginalise teachers who do not align with the dominant views within the network.[203]

2.3.2.5 Transferability and scalability of these good practices

Successful scaling and transfer of effective interventions such as TaRL and cluster-based teacher training requires contextualisation and adequate support from education stakeholders, especially Governments. The successful interventions in foundational learning across Africa offer a wealth of insights into how these approaches can be adapted and scaled. However, effective scaling is not simply a matter of replication. It requires a deep understanding of the educational, socio-economic, and cultural nuances of each region. While structured pedagogy and community engagement have worked in multiple countries, they must be adjusted to local contexts to ensure success.[204] One major challenge in scaling these interventions is guaranteeing adequate resources, both financial and human. The success of structured pedagogy or cluster-based teacher training hinges on having a well-trained teaching workforce alongside consistent support from local governments and international organisations.[205] In regions where teachers are in short supply or where education funding is limited, scaling these models becomes harder. This means governments must prioritise investment in both teacher development and the broader education sector to facilitate scalability.[206] Equally important is the adaptability of these

[203] Makramalla, M., Stylianides, A. J. (2024). *The role of teacher professional networks in Egypt's mathematics education reform.*
[204] World Bank. (2018b). *Learning to Realize Education's Promise.* World Development Report 2018.
[205] Bold, T., Kimenyi, M., Mwabu, G., Ng'ang'a, A., and Sandefur, J. (2013). *Scaling up what works: Experimental evidence on external validity in Kenyan education.*
[206] World Bank. (2019). *Ending Learning Poverty: What Will It Take?*

programmes and the scaling process more broadly.[207] For example, while the TaRL approach has improved literacy and numeracy in Zambia and Botswana, it cannot be copied exactly in other contexts. Differences in curricula, classroom sizes, and even languages of instruction mean that each country must tailor the approach to its own needs. Similarly, cluster-based teacher training models have worked well in Ethiopia and Egypt, but their success in other regions will depend on how they fit into local school governance systems and teacher support frameworks.

Collaboration between governments, donors, and civil society based on clarity of purposes and terminology is crucial for promoting and scaling successful interventions. The AUC and regional bodies like the East African Community (EAC), Economic Community of West African States (ECOWAS), and South African Development Community (SADC). are well-placed to promote knowledge-sharing and facilitate the transfer of effective solutions across borders. By creating platforms for policymakers and stakeholders to communicate clearly and learn from each other, these organisations help ensure that educational interventions can be scaled up across different countries.[208] This cross-border collaboration also allows countries to adapt successful models from similar contexts. Sustainability is another critical aspect of scaling interventions. Programmes should be designed to last beyond initial public funding or external support. This means building local capacity and local champions to manage and sustain the programmes over time.[209] Investments in teacher training institutions, educational research centres, and community engagement mechanisms are key to ensuring that programmes remain viable in the long term.[210] Engaging local communities in both the design and implementation of programmes also fosters ownership and commitment, both of which are essential for sustainability.[211]

Flexibility, based on adequate monitoring and evaluation, is essential when scaling interventions, especially in countries facing fragile or conflict-affected situations.[212] In all contexts, but especially in fragile and conflict-affected contexts, foundational learning programmes need to be adaptable and responsive to local challenges to sustain their impact over time. Programmes must also be adaptable based on real-time feedback so that they remain effective as they are scaled across different regions.[213] Therefore, robust monitoring and evaluation systems are key to tracking the implementation and outcomes of scaled programmes. Governments and organisations need clear benchmarks and accountability mechanisms to ensure that the interventions continue to deliver the desired results[214] and to inform adaptation as required.

[207] Olse, B. (2024). *Lessons informing the next phase of Research on Scaling the Impact of Innovations in Education.* Available at: https://www.brookings.edu/articles/lessons-informing-the-next-phase-of-research-on-scaling-the-impact-of-innovations-in-education/.

[208] UNESCO. (2020). Global Education Monitoring Report 2020: Inclusion and Education – All Means All.

[209] Olse, B. (2024). *Lessons informing the next phase of Research on Scaling the Impact of Innovations in Education.* Available at: https://www.brookings.edu/articles/lessons-informing-the-next-phase-of-research-on-scaling-the-impact-of-innovations-in-education/.

[210] Bold, T., Kimenyi, M., Mwabu, G., Ng'ang'a, A., and Sandefur, J. (2013). *Scaling up what works: Experimental evidence on external validity in Kenyan education.*

[211] UNICEF. (2019). *A World Ready to Learn: Prioritizing Quality Early Childhood Education.* Available at: https://www.unicef.org/media/57926/file/A-world-ready-to-learn-advocacy-brief-2019.pdf

[212] Olse, B. (2024). *Lessons informing the next phase of Research on Scaling the Impact of Innovations in Education.* Available at: https://www.brookings.edu/articles/lessons-informing-the-next-phase-of-research-on-scaling-the-impact-of-innovations-in-education/.

[213] Piper, B., Simmons Zuilkowski, S., Dubeck, M., Jepkemei, E., and King, S. J. (2018). *Identifying the essential ingredients to literacy and numeracy improvement: Teacher professional development and coaching, student textbooks, and structured teachers' guides. World Development*, *106*, 324–336.

[214] World Bank. (2019). *Ending Learning Poverty: What Will It Take?*

2.3.3 Conclusion

Africa faces a significant learning crisis, but several strategies have been proven successful in addressing this challenge. In Africa, despite large increases in access to education, 83 per cent of 10-year-olds cannot read and comprehend a simple text. This foundational learning gap severely limits children's potential, affecting their academic and economic futures and hindering broader socio-economic development across the continent.[215] However, several strategies have proven effective in addressing these challenges. Early childhood education, tailored teaching approaches, cluster-based continuous teacher development, and active community engagement have been instrumental in improving foundational learning outcomes.

Early childhood development is closely linked to foundational learning, and high-quality early education provides children with the cognitive, social, and emotional skills they need to thrive in primary school. Countries like Malawi, with its community-based childcare centres, and Morocco, with its focus on universal pre-primary education, have demonstrated the powerful impact of investing in ECD. Without strong early childhood foundations, efforts to improve learning in later years may struggle to achieve meaningful results. To tackle the learning crisis, countries must take comprehensive, sustained actions. Beyond improving teacher development, significant investment is needed in the broader workforce, including recruiting enough qualified teachers to ensure manageable class sizes. Overcrowded classrooms reduce teachers' ability to give personalised attention to students, widening the learning gaps. Adequate recruitment, alongside continuous professional support, is essential to improving education quality.[216]

Contextualisation, collaboration and systematic and frequent learning assessments are required for successful targeting, scaling and implementation of the proven strategies. Scaling proven approaches, such as teaching at the right level, while adapting them to local contexts, is critical. Robust monitoring and evaluation systems are vital to ensure interventions remain effective over time, enabling countries to track progress and adjust strategies as needed.[217] This is especially important concerning learning assessment data, which is often lacking and/or many years out of date. Cross-border collaboration, supported by regional bodies like the AU, will be key to scaling successful interventions and sharing best practices.[218] Addressing Africa's learning crisis requires a coordinated, long-term commitment. With sustained effort and strategic collaboration, every child in Africa can have the opportunity to succeed in school and beyond. By investing in the teacher workforce, strengthening early childhood education, and fostering community partnerships, African countries can improve learning outcomes for all children, laying the foundation for sustainable growth and prosperity across the continent.

To further address the learning crisis, it is essential to focus on inclusive education practices that ensure all children, regardless of their background or abilities, have access to quality education. The CESA emphasises the importance of inclusive education as a means to achieve SDG 4, which aims to ensure inclusive and equitable quality education and promote lifelong learning opportunities for all. Initiatives such as the African Union's eLearning Africa conference and various national digital education programmes demonstrate the potential of technology to transform education. However, to ensure the success of these initiatives, it is crucial to address the digital divide by providing adequate infrastructure, training for teachers, and access to devices and internet connectivity for all students.[219]

[215] UNICEF. (2021). The State of the World's Children 2021.

[216] Bold, T., Kimenyi, M., Mwabu, G., Ng'ang'a, A., and Sandefur, J. (2013). *Scaling up what works: Experimental evidence on external validity in Kenyan education.*

[217] World Bank. (2019). *Ending Learning Poverty: What Will It Take?*

[218] UNESCO. (2020). *Global Education Monitoring Report 2020: Inclusion and Education – All Means All.*

[219] African Union. (2016). *Continental Education Strategy for Africa 2016-2025.* Available at: https://au.int/sites/default/files/documents/29958-doc-cesa_-_english-v9.pdf.

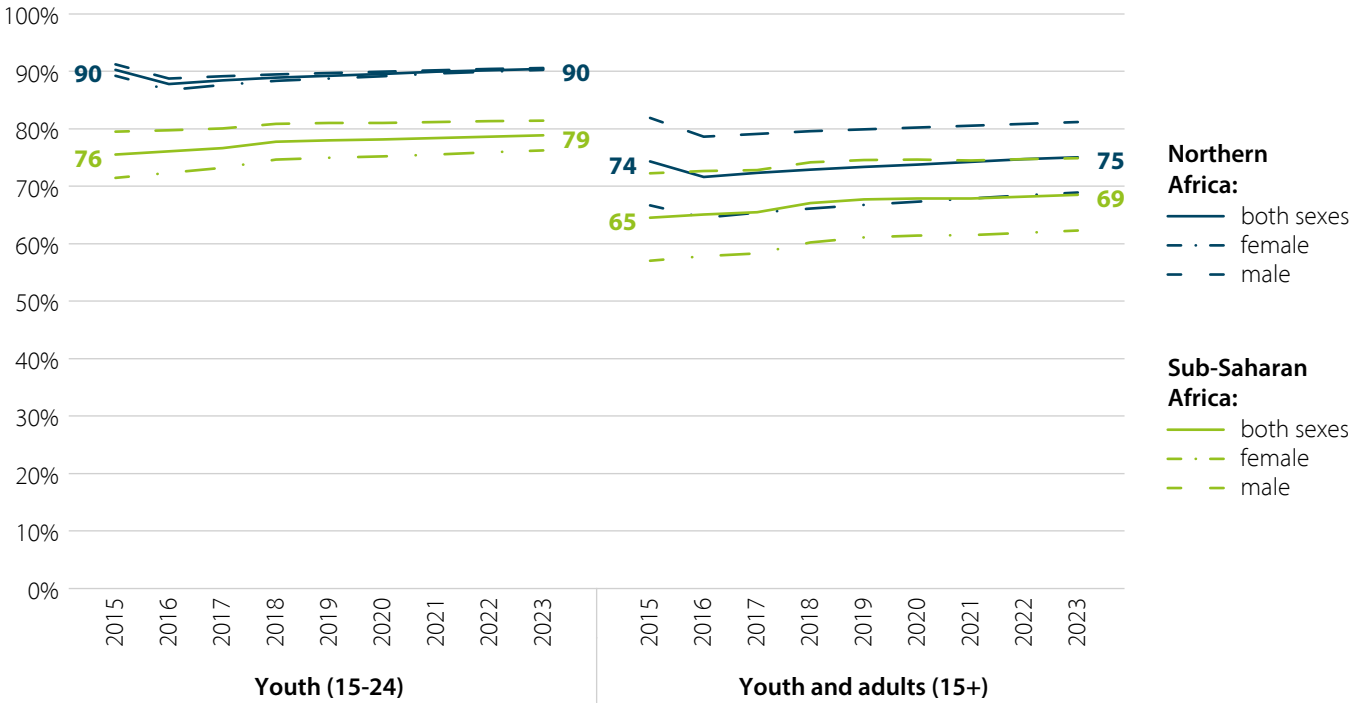
2.4 Literacy and foundational skills for youth and adults

2.4.1 Introduction

Literacy and numeracy[220] are at the core of foundational skills and lifelong learning and empowerment. Literacy empowers individuals, improves the quality of their lives and facilitates social transformation and sustainable development. In today's globalised and information-rich world, where rapid transformations are taking place in socio-economic, political, scientific, technological, environmental and cultural spheres, the ability to identify, understand, interpret, create, communicate and compute, using written, print and digital materials, is essential not only for mere reading, writing and numeracy but also for developing critical and higher order thinking.

Education 2030-SDG 4 and, by extension, CESA promotes and emphasises the importance of 'lifelong learning opportunities for all'. SDG 4 promotes a comprehensive and lifelong vision of learning. It advances literacy as a continuum of proficiency in reading, writing, and numeracy skills acquired and developed, or occasionally regressed, in specific contexts of learners across their lifespans, starting from birth. In addition, for its function of facilitating digital text-mediated communication, today's literacy constitutes a major part of digital skills. As such, it is important to enhance national systems, policies, programmes, and practices,

Figure 21: [SDG 4.6.2] Youth and adult literacy rate, by region, sex and age group (%), 2015-2023



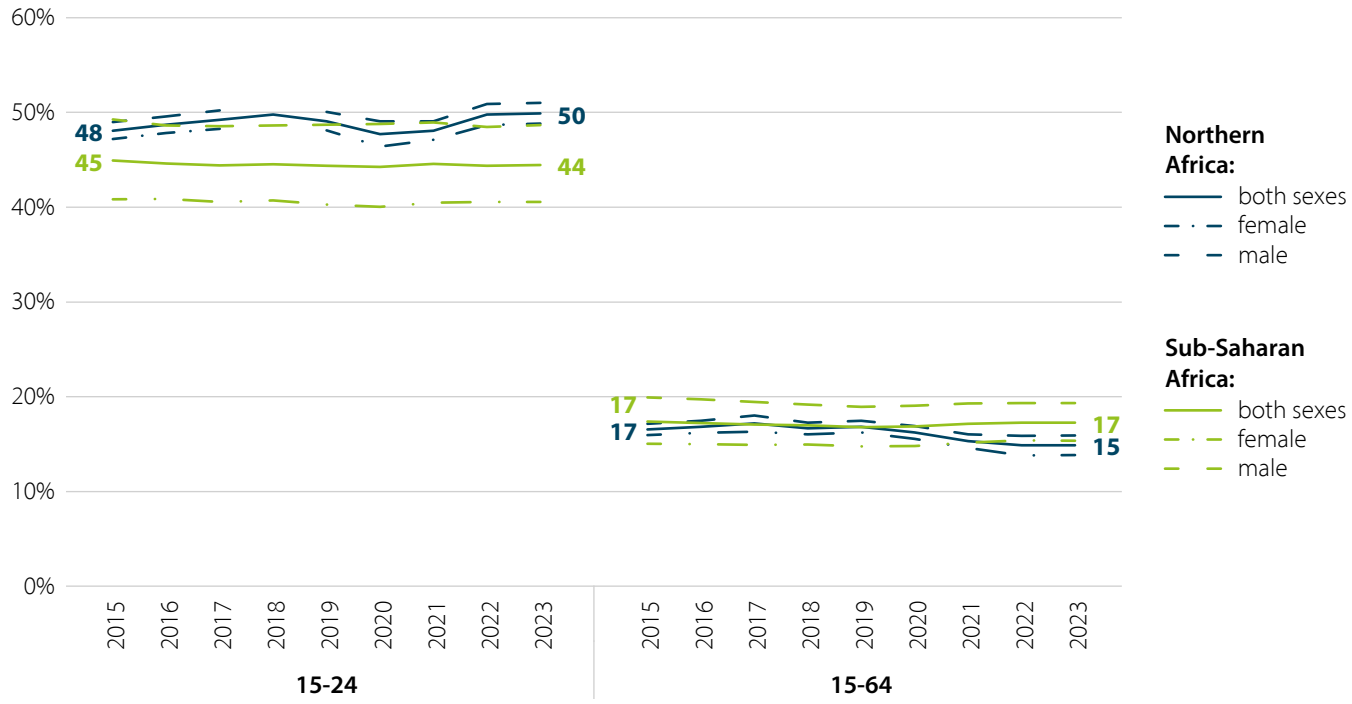
Data source: UIS September 2024 data release. Note: Data labels refer to both sexes. Annual data by sex is provided in the Annex 2.

[220] The word 'literacy' here is used to include reading, writing, and numeracy skills, based on these definitions of literacy (UNESCO, 2015b) and numeracy (OECD, 2019).

adopting this latest understanding of literacy to promote literacy learning as the lifelong process in formal, non-formal and information settings and across all age groups if we are to achieve the SDG 4 and to transform education and society at large. There are four literacy-related SDG 4 targets, namely Target 4.1 on primary and secondary education, Target 4.6 on youth and adult literacy, Target 4.3 concerning affordable and quality technical, vocational and tertiary education, and Target 4.4 on youth and adults with relevant skills for employment. The thematic indicators of SDG target 4.6 are also adopted by the Continental Education Strategy for Africa (CESA) 2016-2025 to monitor the progress towards Strategic Objective 6: Launch comprehensive and effective literacy programmes to eradicate the scourge of illiteracy.[221]

There has been progress in improving literacy rates, but the rate of progress has slowed considerably since 2019. Literacy rates among youth (ages 15-24) and youth and adults (ages 15+) have increased in both Sub-Saharan Africa and Northern Africa (Figure 21). The overall increase has not been very high, less than one percentage point in Northern Africa and less than five per cent in Sub-Saharan Africa. In addition, most of the improvement occurred before 2019. Since then, literacy rates have been broadly stagnant for all regions, genders and age groups. The gender gap in youth literacy has reduced slightly in Sub-Saharan Africa and completely in Northern Africa. However, the gender gap for ages 15+ remains significant and largely consistent in both Northern and Sub-Saharan Africa, constituting 61 per cent of the illiterate adults. It should be noted, however, that progress in male literacy rates is slower relative to female literacy rates in several countries, such as Gambia, Liberia and Mauritania. In 2022, more than half of non-literate youth populations were male in several countries, including Cabo Verde (71 per cent), Lesotho (78 per cent) and Zimbabwe (70 per cent).[222] When multiple factors such as gender, age and geographical location are considered, a more complex picture of inequalities emerges. The literacy rates for older women in several SSA countries were estimated to be as low as around 10 per cent in 2023.[223]

Figure 22: [SDG 4.3.1] Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by region, sex and age group (%), 2015-2023

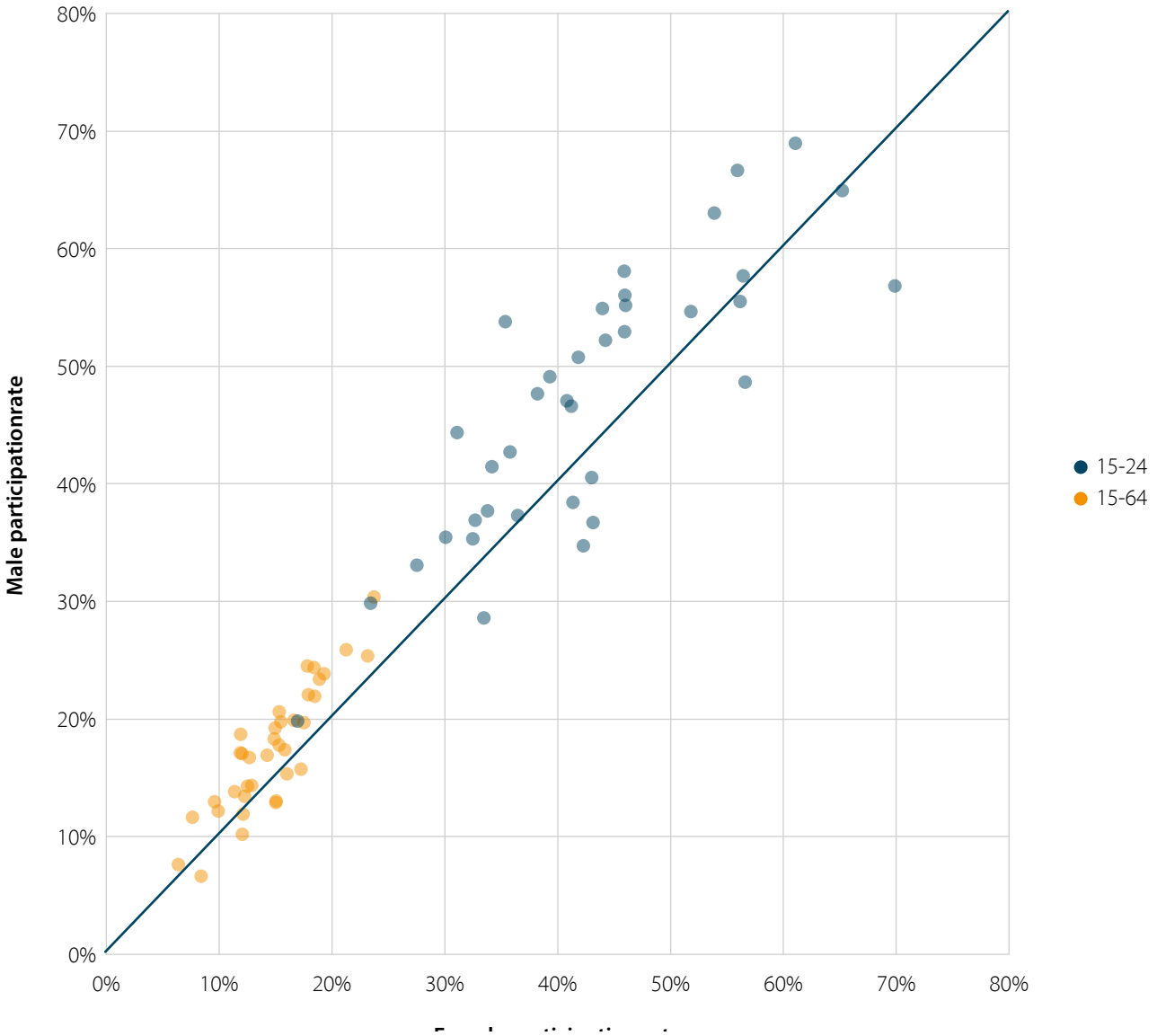


Data source: UIS September 2024 data release. Note: Data labels refer to both sexes. Annual data by sex is provided in the Annex 2.

[221] Regarding monitoring, there is overall alignment between targets of the CESA and SDG4 frameworks (UIS,2021).
[222] UIS Stat (2024)
[223] Ibid.

Participation rates of youth and adults in formal and non-formal education and training in the previous 12 months are remarkably similar to those of nearly 10 years ago, meaning they are low with significant gender gaps. Despite the SDG's emphasis on lifelong learning, there appears to have been no significant progress in increasing the levels of participation of youth and adults in formal and non-formal education and training. Youth participation rates in Sub-Saharan Africa are essentially the same as in 2015, and in Northern Africa, they are a couple of per cent higher (Figure 22). Furthermore, there appears to have been no significant progress in reducing the gender gap, with males more likely to attend in both regions and among both age groups. Once again, some countries are doing substantially better at providing access to large proportions of their populations than others. For example, only 18 per cent of youth are in training or education compared to 63 per cent in Tunisia. Among youth and adults, 27 per cent in Guinea-Bissau are in education and training, compared to only eight per cent and nine per cent in Seychelles and Niger, respectively. Only in a handful of countries are there disproportionately more female learners than males, such as Tunisia and Lesotho. The reverse situation is much more common and often has gaps of more than 10 per cent.

Figure 23: [SDG 4.3.1] Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months, by country, sex and age group, most recent year available (2019-2023)



Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

2.4.2 Challenges and responses

2.4.2.1 Equity

Inequities in literacy and foundational skills observable in later life are often the consequence of persistent educational inequities in formal basic education. The mixed picture of progress in youth and adult literacy in Sub-Saharan Africa can be attributed to several factors. A major one is persistent educational inequalities and inadequate quality of basic education, resulting in millions of children failing to acquire basic literacy skills. Despite significant progress in the primary school completion rate from 60 per cent in 2015 to 67 per cent in 2023, only one in five children in Sub-Saharan Africa reaches the minimum level of proficiency in reading and mathematics by the end of primary.[224] In countries such as South Sudan (lowest Human Development Index (HDI)), Burkina Faso, Mali, and Guinea, individuals complete, on average, between two and four years of formal education.[225] There are disparities, certain geographical locations (for example, rural areas, countries in conflict or post-conflict situations) and populations (for example, female learners, learners with disabilities and from minority groups). In 2023, 2.5 million children were affected by the closure of 13,263 schools in West and Central Africa due to security.[226] Given that Africa's population median age is 20 years, with its working-age population being projected to increase by 450 million by 2050, taking specific measures is required to address these challenges will have significant impact of a country's path towards more peaceful, just and sustainable societies.[227]

2.4.2.2 Financing

Youth and adult literacy programmes are generally underfunded, with informal and non-formal education often receiving just one per cent of total education budgets in Africa. Across the continent, governments are the principal funder of education, while youth and adult literacy programmes are commonly offered by a wide range of non-state actors and partners. Yet, the national budgets for non-formal education and literacy programmes tend to be insufficient. National efforts and donors' support have been geared more towards literacy in the early grades of formal school than towards youth and adult literacy.[228] Globally, the majority of the 102 countries that responded to the UNESCO survey (57 per cent) spent less than four per cent of their national education budget on adult literacy and education (UIS, 2022). Before the COVID-19 pandemic, 28 per cent of the 36 African countries that responded to the survey increased Adult Learning and Education (ALE) spending as a proportion of public education expenditures, and 50 per cent maintained the same proportion. However, 22 per cent of the reporting countries decreased the proportion of ALE budget in their public spending. With very few exceptions, most African governments invest only one per cent of their total education budget into informal and non-formal education development.[229] Enhanced data is also required to understand the full picture of financing for literacy and non-formal education[230] as currently programmes are often project-based, provided by a range of partners, and can be managed by different ministries, for example, the case of Uganda documented by UNESCO Institute for Lifelong Learning (UIL).[231]

[224] UNESCO. (2024f). *Monitoring progress towards SDG target 4.1 on primary and secondary education.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000391732.

[225] UNDP. (2024). Human Development Index (HDI). Available at: https://hdr.undp.org/data-center/human-development-index#/indicies/HDI.

[226] Eight West and Central African countries affected by conflicts: Burkina Faso, Cameroon, Central African Republic, Chad, Democratic Republic of the Congo, Mali, Niger, and Nigeria.

[227] UNDP. (2024). Human Development Index (HDI). Available at: https://hdr.undp.org/data-center/human-development-index#/indicies/HDI.

[228] Results for Development (R4D). (2016). *A landscape analysis of the global literacy sector.* Results for Development. Available at: https://r4d.org/wp-content/uploads/R4D_Project-Literacy-Landscape-Analysis.pdf.

[229] African Union. (2016). *Continental Education Strategy for Africa 2016-2025.* Available at: https://au.int/sites/default/files/documents/29958-doc-cesa_-_english-v9.pdf.

[230] The Fourth GRALE reports that 38 countries out of 149 countries responded by the survey could not provide information on financing for adult learning and education (UIL, 2019).

[231] Uganda – Challenges in reporting financing for literacy (UIL, 2022).

2.4.2.3 Literacy and lifelong learning

The global shift from the reductive dichotomy of 'literate' versus 'illiterate' towards a continuum of capacities and learning needs to be adopted in practice. This issue of underfunding is related to other challenges faced by youth and adult literacy and lifelong learning in the national education systems. A major issue is that the latest understanding of literacy as a continuum of proficiency in reading, writing and numeracy has not been fully adopted in national systems, policies, programmes, and monitoring efforts. Conventional statistics, such as literacy rates, use a simple notion of literacy, by which persons are categorised as either 'literate' or 'illiterate', often based on self-reported information. Adopting the latest concept of literacy will allow for more effective monitoring and corrective actions, utilising more varied and nuanced approaches. In so doing, there are other issues to be addressed, such as the limited availability of data and evidence,[232] the insufficient relevance of curriculum and pedagogy/andragogy, the lack of materials and infrastructure, a lack of trained educators, and weak policy and governance systems to promote youth and adult literacy as an integral part of lifelong learning systems involving other education sub-sectors and/or non-education sectors.[233]

2.4.2.4 National policies and frameworks

There has been significant progress in ALE policy development and implementation in a number of countries in Africa. According to the Fifth Global Report of Adult Learning and Education (GRALE5),[234] during 2018 and 2019, globally, a higher level of commitment to literacy and basic skills was observed, together with that for professional training and continuing education, compared to global citizenship education. In Sub-Saharan Africa, 63 per cent of 32 countries that responded to the survey reported progress in the implementation of ALE registration, while 75 per cent progressed in the ALE policy implementation. For instance, Guinea drafted its national policy and a competency framework for literacy and non-formal education in 2019 and implemented a nationwide learning programme for 97,000 young people and adults. Malawi approved its first National Adult Literacy and Education Policy in February 2020 as part of its National Education Sector Plan (2020–2025). Uganda has put in place policy frameworks that support ALE in relation to income generation, training and apprenticeships, and community development. Special attention is given to linking numeracy and literacy to increased access to credit and other financial services for youth and women to enable them to start income-generating activities and to create jobs (see Case Study below for more details). In Ghana, its 2010-2020 Education Plan marked a policy shift, highlighting the importance of maintaining literacy programmes beyond basic education. Morocco developed a plan to improve reading and writing skills across the country, and the Agence Nationale de Lutte Contre l'Analphabétisme has proposed a national literacy programme, emphasising coordination with various actors, creation of educational tools and professional training to implement literacy services.

[232] For the SDG Global Indicator 4.6.1 on the percentage of young people and adults achieving proficiency in literacy and numeracy, the data is currently available only in 15 countries for literacy and in 14 countries for numeracy for the period between 2013 and 2017 across the world (UIS, 2024).

[233] UIL. (2021). *Embracing a culture of lifelong learning: envisioning lifelong learning for sustainable futures in Southern Africa.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000378085.

[234] UIL. (2022). *Fifth Global Report on Adult Learning and Education.* Available at: https://www.uil.unesco.org/en/grale5.

Box 8

Policy integration and multi-sector collaboration in Uganda

A nationwide programme led to enhanced literacy levels by combining literacy teaching with the acquisition of contextually relevant life skills. Uganda significantly improved the quality of ALE by relating literacy and numeracy knowledge and skills to the specific context, needs and interests of communities.[235] From 2016 to 2022, Uganda's adult female literacy rate (15+ years) increased from 61 per cent to 76 per cent, while the male literacy rate increased from 79 per cent to 84 per cent.[236] The implementation of the Integrated Community Learning for Wealth Creation (ICOLEW) programme, with the financial support of DVV International, in all districts of Uganda proved successful in enhancing the literacy skills of youth and adult (15+) learners by combining literacy teaching with the acquisition of relevant life skills, adapted to each context, and in alignment with the national development agenda.

The programme operates through community empowerment groups led by locally trained and supported facilitators. The programme embeds financial literacy skills both through teaching content and activities but also by supporting learners in organising themselves in village savings and loans associations, thus fostering social cohesion and solidarity.[237] In rural areas, the programme operates through community empowerment groups comprised of maximum 30 adult learners that are directly taught by a trained educator from the local community who is, in turn, supported by the programme supervisors and managers at different government departments. The local governments are involved in selecting and mentoring trainers in different localities who, in turn, select and train community-level facilitators. Selected facilitators must possess the Ugandan Certificate of Education, be willing to serve the community, and have effective communication skills, among other competencies. Educators undergo a mandatory 15 days of pre-service training to build their skills and capacity to teach adults in the classroom and five days of in-service training every six months to address any skills gaps that may arise during teaching. Educators are formally engaged by the responsible officer of lower local government and may only serve for one teaching cycle (of two years) to allow other community members to become involved.[238] To graduate, each adult learner must undergo a total minimum participation time of 624 hours (six hours a week, for two years), of which 24 hours must be in consecutive weeks.[239]

Learning materials are developed collaboratively, including targeted learners, ensuring that their content and format are contextually relevant and address a wide range of practical skills. In developing curricula and learning materials, stakeholders from all levels are involved (managers of the programme at the national level, local governments' supervisors, and the trainers of facilitators), with a leading role being attributed to facilitators and learners. Learning materials are thus developed in the majority language of the given community and must respond to the educational goals and situations of learners, which generally include the acquisition of other skills, such as agriculture, crafting, or entrepreneurship.[240] Finally, the programme uses continuous formative and summative assessments to measure effectiveness, relying on the Literacy Assessment and Monitoring Programme (LAMP) scale developed by UNESCO.

[235] UIL. (2022). *5th global report on adult learning and education: citizenship education: empowering adults for change.* p.98. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000381666.

[236] UIS. (2024). *SDG 4 Data Explorer.* Available at: https://sdg4-data.uis.unesco.org/.

[237] Ministry of Gender, Labour and Social Development (MGLSD) of Uganda. (2020). *Integrated Community Learning for Wealth Creation (ICOLEW) programme: ICOLEW Implementation Guidelines.* Available at: https://mglsd.go.ug/wp-content/uploads/2021/09/ICOLEW-IMPLEMENTATION-GUIDELINES-2-2.pdf.

[238] UIL. (2022). *5th global report on adult learning and education: citizenship education: empowering adults for change.* p.98. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000381666.

[239] Ministry of Gender, Labour and Social Development (MGLSD) of Uganda. (2020). *Integrated Community Learning for Wealth Creation (ICOLEW) programme: ICOLEW Implementation Guidelines.* Available at: https://mglsd.go.ug/wp-content/uploads/2021/09/ICOLEW-IMPLEMENTATION-GUIDELINES-2-2.pdf.

[240] Ibid.

The programme's success has informed the national Non-Formal Adult Learning and Community Education Strategy, which has led to increased participation in community leadership and governance among female learners. Increasing poverty rates have been identified as a challenge in breaking the cycle of illiteracy in Uganda. In response, the recent government-driven Non-Formal Adult Learning and Community Education Strategy for Uganda builds upon the experience of the ICOLEW programme, addressing some of the programmes' challenges, such as the limited number of community learning centres that beneficiaries can access, and enhancing some of the positive results. With 80 community empowerment groups setting up group bank accounts, ICOLEW adult learners cumulatively saved Uganda shillings 740,332,700 between 2016 and 2019, encouraging learners to trust and benefit from formal banking institutions. Participation in Non-Formal Adult Learning and Community Education Strategy has been found to improve the self-esteem and confidence of female adult learners. This ultimately led to increased participation in governance and decision-making by female learners taking up elective community leadership.[241]

2.4.2.5 Measuring and monitoring

There has been significant progress in setting quality standards and expected learning outcomes in curricula, National Qualification Frameworks (NQFs) and other competency frameworks and using them as references to develop Recognition, Validation and Accreditation (RVA) frameworks to make prior and acquired skills visible. The UNESCO Institute for Lifelong Learning (UIL)'s Action Research on Measuring Literacy Learning and Educational Alternatives (RAMAED)[242] is supporting 12 African countries in developing a robust system for monitoring and evaluating the quality of literacy provision. The twelve countries, in the spirit of co-construction, have developed a range of harmonised measurement tools in the field of literacy (harmonised skills reference framework, evaluation framework, guide for drawing up test items, guides for translating and adapting test items into national languages, etc.). The documents produced constitute a rich and essential reference for the realisation of the survey, the development of training and certification modules for literacy teachers, and the review and improvement of literacy programmes. Morocco, Chad and Côte d'Ivoire have finalised the testing of measurement tools in Arabic, Sar, Chadian Arabic and French. The other countries are in the process of translating the material for the pilot survey into several national languages (Baatonum, Fon, Yoruba, Éwé, Kabiyè, Wolof, Sereer Mooré, Dioula, Bamanankan, Songhoï, Hausa, Zarma, Lingala and Swahili). In line with ministerial recommendations, PASEC and RAMAED will also collaborate on developing measurement tools for the alternative education sector. Country experiences have shown the potential of RVAs linked with competency frameworks for converting non-formal education and informal learning into a visible asset, official qualifications, and further opportunities in formal education systems and the world of work. They have also empowered learners with enhanced self-awareness, a sense of achievement and greater social participation. Several issues, however, remain, including the complexity of applying NQFs and RVA frameworks into practice, the requirement of additional cost and efforts, and institutional and individual capacities.[243] A risk that needs to be carefully mitigated is that a discourse of standards and certification that formalises and standardises non-formal education and training provision could further marginalise NGOs providing non-formal education.

[241] Ministry of Gender, Labour, and Social Development. (2023). *Non-Formal Adult Learning and Community Education Strategy for Uganda (NALCES) 2023/24-2027/28.*

[242] This effort was supported by experts from the University of Paris 13, OECD, the French Ministry of Education, and PASEC, a programme for measuring educational system performance at primary school level in sub-Saharan Africa. The current phase of RAMAA implemented in 12 countries, including Côte d'Ivoire, will lead in 2021 to its pilot survey. For further information, please see: https://uil.unesco.org/fr/alphabetisation/resultats-lappumé-ramaa/pourquoi-ramaa-est-importante-secteur, https://uil.unesco.org/fr/alphabetisation/resultats-lappemploi-ramaa/recherche-action-mesure-apprentissages-beneficiaires, https://www.gcedclearinghouse.org/sites/default/files/resources/200634eng.pdf.

[243] Aitchison, J. and Alidou, H. (2009). *The State and Development of Adult Learning and Education in Sub-Saharan Africa: Regional Synthesis Report.* Hamburg: UNESCO Institute for Lifelong Learning. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000182924.

2.4.2.6 Literacy and life skills educators

Educators are central to ensuring quality teaching and learning for youth and adult literacy, and many countries are implementing successful initiatives to increase educator supply and capacity. Youth and adult literacy educators are diverse, ranging from literacy educators in formal basic institutions, such as formal schoolteachers, to literacy facilitators, community animators and mobilisers, volunteers, and adult education tutors who tend to work in non-formal education. A number of countries have taken initiatives to institutionalise recruitment, training, and management of literacy educators, systematise qualifications, professionalise educators by developing competency frameworks, and provide training. For instance, Morocco established a Training Institute for Literacy Professions to build the capacities of literacy educators and professionals by developing training programmes and resources, including curriculum development, creating training modules, establishing governance mechanisms, testing programmes regionally, and evaluating outcomes. Adopting digital technology, this training programme targets around 3000 literacy educators and 484 literacy personnel. In Senegal, the integrated management of educators who serve in both formal and non-formal education has proven to be effective. It established a comprehensive system to provide continuous training for educators to teach in both formal and non-formal sectors. To strengthen educators' capacities and advance the professionalisation of adult educators, Egypt has rolled out Curriculum globALE, a common core competency framework for the training of adult educators, developed by DVV International, UIL, the German Institute for Adult Education and the International Council for Adult Education. In 2022, the government and partners discussed the collaborative development of a roadmap for contextualising and implementing Curriculum globALE in Egypt. This comprehensive framework of competencies and practical tools for policy and practice in the professionalisation of ALE builds on existing experiences and considers international scientific standards. In Seychelles, a community-based parental support project implemented by members of the Seychelles Association of Retired Education Professionals has worked with retired educators to encourage parents and family members of young children (0-5 years) to read aloud, tell stories and engage in literacy activities with their children regularly from a very early age to support their language, emotional and social development.

Box 9

Building capacities of educators to promote literacy and lifelong learning in Egypt

Despite steady progress in increasing literacy rates, significant inequalities persist, prompting the Egypt Adult Education Authority to work with various partners to increase the capacity of literacy educators. Egypt has made steady progress in literacy. Between 2010 and 2022, the adult literacy rate increased from 72 per cent to 75 per cent, and the youth literacy rate increased from 88 per cent to 92 per cent. However, challenges remain, particularly in rural areas and among women. In 2022, the literacy rate was 69 per cent for women and 80 per cent for men, while disparities between urban and rural populations were pronounced. Addressing these gaps is essential to achieving Egypt's Vision 2030, which aims to improve the quality of life through enhanced access to quality education for all. In alignment with Egypt's Vision 2030 and the National Literacy Strategy 2014-2030, Egypt's Adult Education Authority (AEA) has collaborated with various partners to build capacities of educators for youth and adult literacy.

The AEA has collaborated with national universities that launched community-centric literacy projects to promote social and economic development, particularly for disadvantaged groups in rural areas. The two prominent projects led by the Ain-Shams University and the Mansoura University, which have gained international recognition, winning the UNESCO Literacy Prize in 2021 and 2024, respectively, are geared to adult education and lifelong learning to equip rural populations with essential skills, including literacy, digital competencies, and life skills, to foster active participation in society and the labour market. Both Ain-Shams and Mansoura University have adopted a community-centric approach to literacy and adult education, focusing on integrating university students and faculty members into the

adult education landscape. The projects motivate Egyptian university students to participate in literacy programmes and train them to become adult education facilitators. Additionally, students are trained to engage with their local communities to encourage community members with low literacy skills to attend literacy classes and to raise social awareness about the benefits of literacy and education.

Through collaborative design and implementation, the projects are responsive to the specific community needs while also aligned with national policies. A crucial factor in implementing these projects has been the establishment of strong community partnerships between the universities, communities, local institutions, Civil Society Organisations (CSOs), and the AEA. These partnerships ensure that the literacy efforts aligned with the national policies are sustainable and responsive to the specific needs of rural communities. The Mansoura University project successfully reached 17 villages and districts in the Dakahlia Governorate, where 147 training programmes were conducted to prepare and qualify the students involved.[244] This initiative has significantly contributed to improving people's literacy skills in the region, with approximately 143,000 citizens gaining literacy skills through more than 61,000 educational classes held across various villages. To further support the project's objectives, Mansoura University has implemented a range of complementary programmes and activities. Over the past few years, around 83 awareness caravans have been launched in collaboration with the National Council for Women and the "Decent Life" Initiative to promote the importance of literacy throughout Dakahlia's villages, broadening the project's impact and reaching wider segments of the community.

Both university projects leveraged available digital tools, such as online platforms and multimedia content, to extend the reach of education to remote areas and enhance the digital literacy of educators. The use of technology-enabled the democratisation of learning opportunities, breaking down barriers created by geographical locations and socio-economic status. The Ain Shams University's digital technology-supported literacy programmes for learners in rural areas reached out to 42,900 learners, of whom 21,537 completed the project between 2015 and 2021.[245] In addition, since 2022, the AEA has also implemented an initiative[246] to enhance the digital skills of literacy educators in partnership with the UNESCO Institute for Lifelong Learning and the UNESCO Cairo Office within the framework of the UNESCO's Global Education Coalition and Global Alliance for Literacy within the Framework of Lifelong Learning. Between 2022 and 2024, about 90 master-level trainers of teacher training, as well as stakeholders from AEA, the Ministry of Social Solidarity and Civil Society and the Regional Centre for Adult Education (ASFEC) in Sirs Alayyan, Egypt, benefited from the initiative.

The identified gender gap in literacy rates is being addressed by developing a specific curriculum addressing the learning needs of women, especially in rural areas, and targeted capacity building of key stakeholders in adult education. To address the gender gap, in 2024, the AEA, in collaboration with UNESCO, have built capacities of 35 trainers from key stakeholders in adult education (for example, AEA, the Ministry of Social Solidarity, CSOs and ASEFC) to deliver the "Women, Family, and Community" (WFC) curriculum that was developed in 2023. The WFC curriculum was designed to meet the specific learning needs of women, particularly those in rural areas, by overcoming the limitations of the previous 'one-curriculum' system.[247] The WFC curriculum focuses on the social and economic empowerment of marginalised women, covering topics such as family learning, social and emotional learning, sustainable development, financial literacy, entrepreneurship, and digital skills. The feedback from around 20 literacy educators was integrated into the curriculum content. The training was to be rolled out in three governorates, namely Giza, Aswan and Damietta by the end of 2024.

[244] Mansoura University. (2024). *Mansoura University wins UNESCO Confucius Prize for Literacy.* Available at: https://www.mans.edu.eg/mans-news/6616-mansoura-university-wins-unesco-confucius-prize-for-literacy.

[245] UNESCO. (2021f). *Project at Ain-Shams University in Egypt wins UNESCO literacy prize.* Available at: https://www.unesco.org/en/articles/project-ain-shams-university-egypt-wins-unesco-literacy-prize.

[246] UNESCO. (2022c). *UIL launches technology training for literacy educators in Egypt.* Available at: https://www.uil.unesco.org/en/articles/uil-launches-technology-training-literacy-educators-egypt.

[247] UNESCO. (2024d). *Interview: Promoting inclusivity and female empowerment through adult and lifelong learning in Egypt.* Available at: https://www.unesco.org/en/articles/interview-promoting-inclusivity-and-female-empowerment-through-adult-and-lifelong-learning-egypt.

2.4.3 Conclusion

A holistic, lifelong learning approach based on the latest concept of literacy is required to increase the rates of progress. Literacy-related policies, systems, governance, programmes and practices need to be developed based on the latest understanding of literacy as a continuum of proficiency in reading, writing and numeracy that changes across the lifespan. This calls for a holistic and pronged approach to literacy: 1) building a solid foundation through formal basic education; 2) providing meaningful literacy learning opportunities for out-of-school children, youth and adults; and 3) enriching multilingual literate environments. In addition, inter-sectoral and inter-disciplinary approaches are also important to promote literacy, where perpetuating cycles of poverty and socioeconomic, political, cultural, and environmental challenges impact literacy learning. Institutional ruptures such as political instability, civil conflicts, and inadequate governance, significantly hinder literacy by disrupting educational systems and infrastructure, which often leads to school closures, teacher shortages, lack of resources like textbooks and learning materials, and overall instability that deters learners and their families from attending learning spaces.

Ensuring robust systems and policies that pay special attention to marginalised people and translating such policies into action through inclusive governance and partnerships is required. Many African countries recognise literacy as an area of priority, but this recognition is not fully translated into concrete action with adequate resources. More investment is required to address chronic underfunding for literacy, especially through nonformal education. An inclusive governance system is crucial for scaling up and co-ordinating efforts of governments and development partners, ensuring alignment with national policies and thus enhancing the overall effectiveness and impact of literacy efforts. Literacy policies and programmes need to pay special attention to the unique profile and needs of the most marginalised and their specific contexts. Gender disparities and prejudice persist due to cultural norms often favouring boys, early marriages and pregnancies that force girls to drop out of school, and traditional beliefs that devalue the education of girls and women. The urban and rural divide in access to educational resources and opportunities is still to be narrowed. Special attention is also needed for other marginalised people, such as people from minority groups, people with disabilities, and in conflict and post-conflict countries.

The most effective approaches involve collaboration and coordination across multiple actors while keeping learners at the centre. The relevance of policies and programmes is enhanced when learners' profiles, needs and aspirations are put at their centre. Related to this is the need to ensure that literacy policies, programmes and practices are owned by local communities and anchored in local governance systems. Such approaches can facilitate the optimal use of local resources, active engagement of local government and partners, and tailoring programmes more effectively to learners' needs. The quality of literacy provision is enhanced by ensuring the appropriate use of the language of instruction and the relevance of learning content, pedagogy, assessment, teaching and learning materials, and learning environments. Multilingual approaches to literacy development have proven to yield multiple benefits for learners and their communities, while such approaches contribute to fostering linguistic, cultural and cognitive diversity. In the short run, these approaches can pose challenges due to limited resources and capacities (for example, curricula, educators, pedagogies, textbooks, reading materials, and assessments). However, it can be an effective investment in the long run.

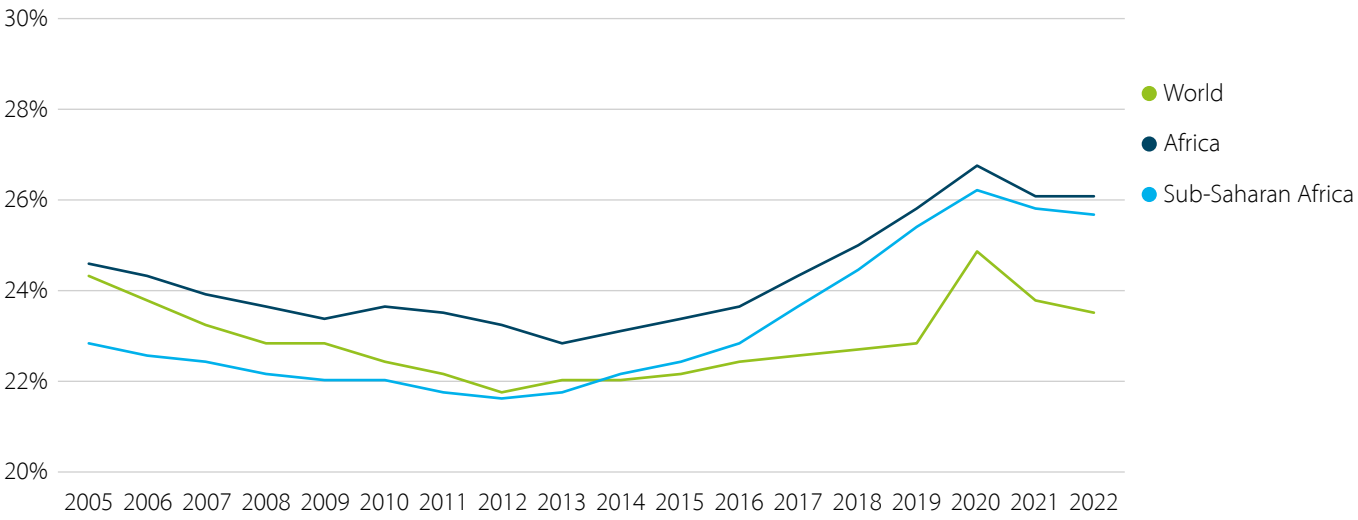
A balance needs to be struck between context-specific approaches and standardisation, and the use of technology and realistic available resources and capacities. The literacy skills required are specific to learners' needs and their contexts. As such, not all literacy programmes are transferable. At the same time, there is merit in organising literacy provision and monitoring it in a standardised manner, such as the RAMAED competency framework. In other cases, approaches to literacy provision, rather than the content, can be transferred, as was the case of the Faire-Faire approaches. Modern digital technology presents opportunities for expanding quality literacy provision and improving system management. However, the effective use of technology requires a good understanding of the local conditions in which the new technology is to be adopted, its main purposes, and the capacities and resources of those expected to use it. Where digital technology (for example, Personal Computers (PCs) and mobile phones) cannot be used, low-tech solutions (for example, TV and radio) can effectively support teaching and learning.

2.5 TVET, including life skills for poverty reduction, solidarity and sustainable development

2.5.1 Introduction

Africa is the youngest region in the world, but a large proportion of this population does not have employment, education, or training. Africa accounts for 20 per cent of the world's population under the age of 25, and its working-age population is expected to reach 600 million people in 2030, with a youth share of 37 per cent.[248] According to the ILO,[249] Africa is the region with the youngest population, and the number of young Africans is expected to continue to increase rapidly in the immediate future. Africa's youth face pressing challenges, especially when transitioning from school to work. Indeed, according to the International Labour Organization (ILO), more than 72 million (approximately one in four) young Africans[250] are not in education, employment or training, and this has increased significantly since 2014 and has not fully recovered after the COVID-19 pandemic (see Figure 24 below). In Sub-Saharan Africa, the main concern is not youth unemployment but lack of secure work, with nearly three out of every four employed in insecure forms of work and one in three workers earning less than the median wage.[251]

Figure 24: Share of young people (15-24 years) not in employment, education or training



Data source: ILO, Modelled Estimates, 2023. Available under CC BY 4.0.

[248] African Center for Economic Transformation. (2023). *How Technical and Vocational Education Can Help Close Skills Gaps in Africa.* Available at: https://acetforafrica.org/research-and-analysis/reports-studies/reports/how-technical-and-vocational-education-can-help-close-skills-gaps-in-africa/.

[249] International Labour Organization. (2022). *Global Employment Trends for Youth 2022: Africa.* Available at: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_emp/documents/briefingnote/wcms_853322.pdf.

[250] International Labour Organization. (2023a). *African youth face pressing challenges in the transition from school to work.* Available at: https://ilostat.ilo.org/fr/blog/african-youth-face-pressing-challenges-in-the-transition-from-school-to-work/.

[251] International Labour Organization. (2024a). *Global Employment trends for Youth 2024: Decent work, brighter futures.* Available at: https://www.ilo.org/sites/default/files/2024-11/GET_2024_EN_web4.pdf.

Despite being more educated than their elders, African youth are much more likely to be out of work partly because of a training-employment mismatch. The increase in the unemployment rate in more than half of all African countries is partly due to a training-employment mismatch.[252] Although African youth today are more educated than their elders—64 per cent of youth (18 - 35-year-olds) have had at least some secondary school education, compared to 35 per cent of citizens aged 56 and older—they are more likely than their elders to be out of work or seeking employment. This dilemma is further illustrated by Afrobarometer surveys in 2023,[253] which showed that "unemployment" ranks as the most important problem for African youth (37 per cent of 18 - 35-year-olds surveyed identified unemployment as their most important problem, compared to 28 per cent for 56-year-olds and above). According to the World Economic Forum,[254] 'Future of Jobs': "Skills gaps are reported to be most problematic in Sub-Saharan Africa, where they are seen to limit the transformation of 70 per cent of companies—11 per cent above the global average." Similarly, the ILO and the African Development Bank have found that TVET systems in Africa struggle to meet labour market demands and the aspirations of Africans due to a lack of effective linkages between the TVET systems, institutions and social partners.[255]

Effective TVET benefits not only those directly employed but also their family members, the wider community, and societies. It can also contribute to structural and sustainable economic growth. TVET equips individuals with the competencies and knowledge required for productive employment, thereby increasing their income-earning potential. By acquiring operational skills, individuals can become gainfully employed, contributing to the growth of the economy. The benefits of fostering productive employment do not only pertain to the economy and its players but affect the wider community. Increased income, for instance, generates additional resources that can be invested in education, healthcare, and other societal priorities. This contributes to a virtuous cycle that leads to long-term socio-economic benefits for the entire population. In certain societal and cultural contexts, increasing the income of the most impoverished segments of the population might also help diversify job opportunities for these groups, reducing the likelihood of conflict and violence. Evidence shows that providing technical and vocational skills is linked not only to increased worker, firm, and overall productivity but more broadly contributes to fostering more equitable growth.[256] Incorporating life skills into the spectrum makes it possible to further expand these impacts. Enhanced skills, encompassing foundational cognitive, socioemotional, digital, and occupation-specific technical skills, can facilitate the transition of work and economic activity towards more productive uses within and across sectors, thereby contributing to structural transformation and economic growth.

TVET's important role in bridging the gap between education and employment is recognised in global and regional frameworks. In this context, the development of the skills of young people and workers through effective Technical and Vocational Education and Training (TVET) is crucial. TVET can facilitate employability, allowing access to sustainable employment; it not only trains low-skilled and unqualified jobseekers but also allows companies to find skilled workers and meet the needs of the labour market. The importance of TVET and global and regional commitments are enshrined in the Sustainable Development Goal 4 (SDG 4) and the Continental Education Strategy for Africa (CESA 16-25). SDG targets 4.3, 4.5 and 4.b directly address TVET, and its role in developing life skills is the explicit focus of Target 4.4:

[252] Ibid.

[253] AFRO Barometer. (2023). *Africa's youth are more educated, less employed, and less politically engaged than their elders.* Available at: https://www.afrobarometer.org/wp-content/uploads/2023/11/News-release_Africas-youth-more-educated-less-employed-less-engaged-Afrobarometer-16Nov2023-.pdf.

[254] World Economic Forum. (2023). *Future of Jobs Report, 2023.* Available at: https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf.

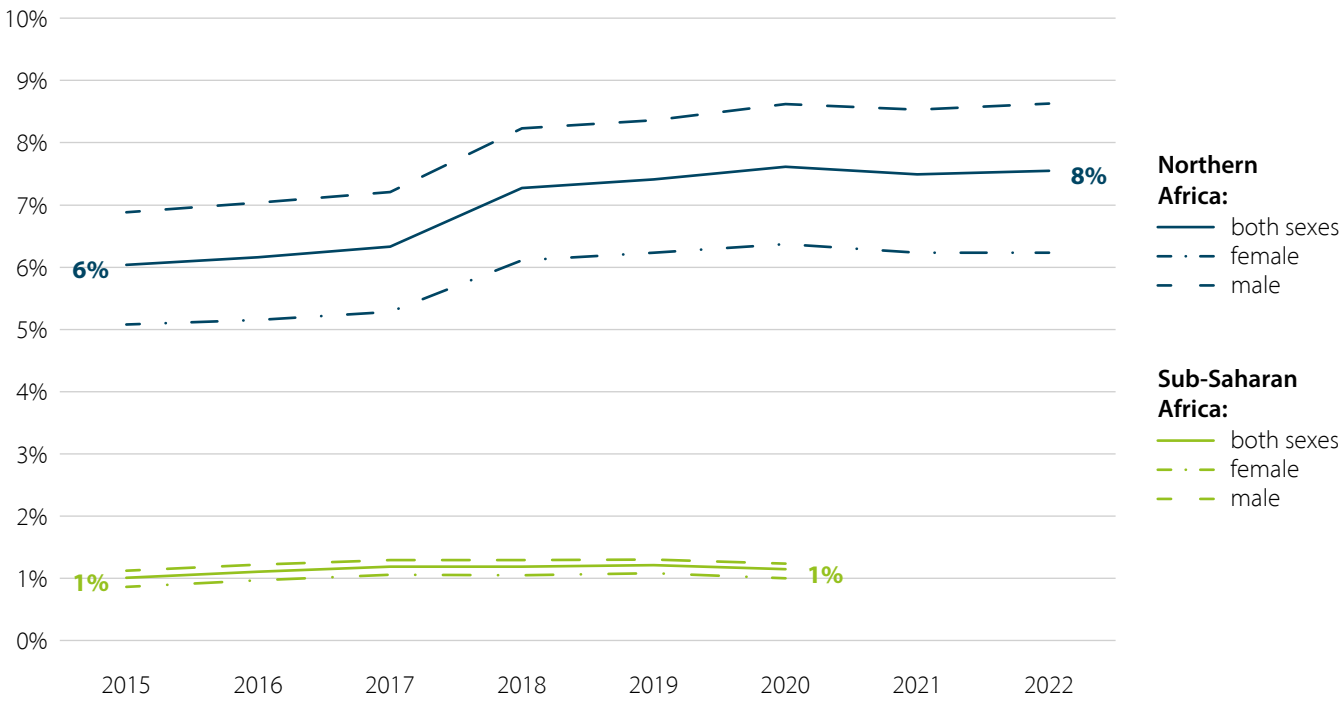
[255] International Labour Organisation. (2023c). *Building pathways to sustainable growth: Strengthening TVET and productive sector linkages in Africa.* Available at: https://www.ilo.org/publications/building-pathways-sustainable-growth-strengthening-tvet-and-productive.

[256] World Bank. (2023b). *Better Technical Vocational Education Training (TVET).* Available at: https://www.worldbank.org/en/topic/skillsdevelopment/publication/better-technical-vocational-education-training-TVET, UNESCO. (2023b). *Building better formal TVET systems: principles and practice in low- and middle income countries.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000386135, and International Labour Organization (ILO). (2023b). *Building better Formal TVET Systems – Principles and Practice in Low- and Middle Income Countries.* Available at: https://www.ilo.org/publications/building-better-formal-tvet-systems-principles-and-practice-low-and-middle.

"By 2030, substantially increase the number of youth and adults with relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship". The importance of TVET within the CESA and its unique role in bridging the gap between education and employment is evident in the CESA Strategic Objective 8: "Expand TVET opportunities at both secondary and tertiary levels and strengthen linkages between the world of work and education and training systems".

Despite international and regional commitments to TVET, access levels remain low across Africa, especially in Sub-Saharan Africa, and there is limited sign of significant improvement. In Africa, the percentage of young people aged 15-24 years participating in technical or vocational education, either in formal or non-formal (work-based or other settings) education, is very low. Figure 25 shows that this rate increased from 6 per cent to 7.6 per cent between 2015 and 2022 for the Northern Africa region and seems to stagnate for the Sub-Saharan Africa region (between 1 per cent and 1.2 per cent). Only a few countries with available data have a proportion of 15- to 24-year-olds enrolled in vocational education, more than 4 per cent (Figure 26). These countries include Seychelles (20.8 per cent), Egypt (11.5 per cent), Morocco (8.6 per cent), Cameroon (6.8 per cent), Rwanda (4.5 per cent), Sao Tome and Principe (4.4 per cent) and South Africa (4.2 per cent). For the other African countries, the rate is alarmingly low, less than 2 per cent, indicating very low participation in technical and vocational education and training. It needs to be noted, however, that statistical systems do not fully reflect realities on the African continent. Labour force surveys from 40 countries in Africa show that, on average, 9 per cent of 15- 24-year-olds have participated in TVET.[257] A review of statistics on apprenticeships (with data available for 14 countries in Africa) shows that in some countries, apprentices—many of whom learn in small enterprises in the informal economy—largely outnumber students in vocational education,[258] Although the gender gap remains small in Sub-Saharan Africa, partly due to the low overall level, the gender gap in Northern Africa is very large, with females increasingly disadvantaged.

Figure 25: [SDG 4.3.3] Proportion of 15- to 24-year-olds enrolled in vocational education, by region and sex (%), 2015-2023

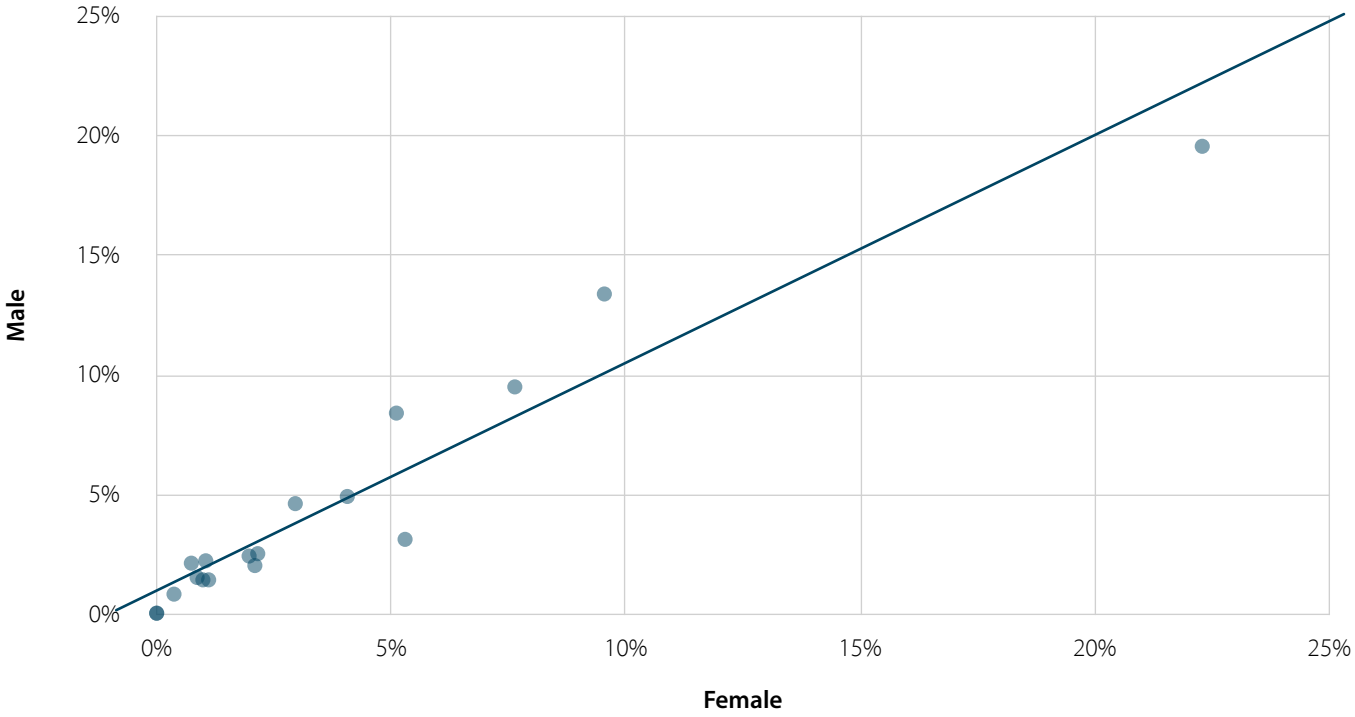


Data source: UIS September 2024 data release. Note: Data labels refer to both sexes. Annual data by sex is provided in the Annex 2.

[257] See a ILOSTAT article about youth participation in work-based learning. Available at: https://ilostat.ilo.org/blog/insights-into-youth-participation-in-work-based-learning/.

[258] See a ILO brief about apprentices in countries with large informal economies. Available at: https://www.ilo.org/publications/statistical-brief-apprentices-countries-large-informal-economies.

Figure 26: [SDG 4.3.3] Proportion of 15- to 24-year-olds enrolled in vocational education, by region and sex (%), 2015-2023



Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

2.5.2 Challenges and responses

2.5.2.1 Quality, relevance and qualifications

The opportunities offered by TVET and skills development in Africa are accompanied by a number of challenges, including relevance of content, inequality in access, quality of instruction/facilities and recognition of qualifications. There are several challenges with TVET and life skills development in Africa. Those range from the critical lack of alignment between what is required by societies and economies and what is taught in classes all the way down to the structural lack of trainers and scarcity of resources and infrastructure affecting the TVET sub-sector in the region. Ensuring that TVET programmes are updated and aligned with the evolving needs of societies and the labour market is a complex task that requires frequent consultations between bodies representing employers, workers, governments, and private actors. Such consultations should inform all aspects of TVET, including governance, M&E and delivery. Governance can be strengthened in part through sector skills bodies,[259] while the delivery of TVET is improved when it involves work-based learning and quality apprenticeships.[260] A number of African countries are now utilising systematic skills anticipation in which labour market actors identify and prepare to address future skills needs, to avoid gaps between the demand and supply of skills.[261]

[259] International Labour Organisation. (2021). *A resource Guide for Sector Skills Bodies*. Available at: https://www.ilo.org/publications/resource-guide-sector-skills-bodies.

[260] International Labour Organization. (2023g). *R208 – recommendation (No. 208) on quality apprenticeships, 2023.* Available at: https://normlex.ilo.org/dyn/nrmlx_fr/f?p=1000:12100:0::NO::P12100_INSTRUMENT_ID,P12100_LANG_CODE:4347381,en:NO.

[261] International Labour Organization. (2023e). *Learning Brief: Strengthening Skills Anticipation Systems and Processes.* Available at: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40africa/%40ro-abidjan/%40sro-harare/documents/publication/wcms_881331.pdf.

Providing access to TVET for all, including marginalised groups such as women, rural populations, and people with disabilities, is far from being a reality. Technologies could be leveraged to this end, as is the case of tele-education (via satellite technology), digital hubs, e-learning platforms and widespread use of portable devices as teaching/learning tools. TVET trainers are a scarce human resource in Africa, and a lot needs to be done in terms of training of trainers to ensure the sustainability of teachers'/trainers' strategies in the TVET domain. Upgrading infrastructure, including workshops, laboratories, and equipment, is necessary to provide practical and hands-on opportunities to all learners and ensure the availability of adequate teaching materials and resources to support effective training. TVET is still viewed as a less prestigious education pathway compared to academic education, making it difficult to attract learners and thus hindering its long-term socioeconomic potential—in particular, if transitions to further learning are barred.

Coherent qualification systems and frameworks at national and regional levels maximise the utility and benefits of skills obtained, benefitting the individuals and the societies more. TVET and skills development can improve socioeconomic and geographic mobility. The design and implementation of coherent qualification systems and frameworks at both national and regional levels enhance the ability to compare certifications across borders and facilitate their transferability. Recognition of prior learning systems helps make skills visible that were acquired non-formally or informally, or outside of the country, for example, the new Recognition of Prior Learning policy in Kenya that certifies skills gained outside formal education to empower informal workers and refugees with official credentials,[262] This also promotes the standardisation of credential recognition and improves quality assurance mechanisms, including their responsiveness to labour market demands and skills needs. This makes it possible for learners to move and expand their employability horizons and, thus, their opportunities, reducing borders across domestic and foreign labour markets. Finally, geographic mobility promotes cultural exchange and contributes to economic diversity. Individuals moving between regions bring different perspectives, skills and experiences, enriching the cultural and economic fabric of different geographic areas.

TVET enrolment in Madagascar has increased significantly in response to improved government funding and wide-ranging interventions aimed at enhancing the quality of TVET provision, diversifying the offer, and increasing the number of accredited training pathways. The Capacity Development for Education (CapED) programme is a global UNESCO initiative that has been active since 2003. It includes supporting the delivery of TVET on the operational level and helping institutions increase the quality, labour market relevance, attractiveness and inclusion of their training offer. In this respect, significant results have been achieved in the domain of evidence-based curricula development, integrating life skills, TVET quality assurance mechanisms, TVET teacher development and the creation of labour market linkages and work-based learning opportunities, directly engaging the private sector. With a four-fold increase in the national budget dedicated to TVET, the government of Madagascar now prioritises the sub-sector as a vehicle to alleviate poverty in the country. The CapEd interventions aimed at increasing the quality of TVET provision, diversifying the offer, and increasing the number of training paths providing recognised and valued qualifications to learners from all backgrounds. The programme also supported the development of TVET teachers and leaders. The attractiveness of the sector increased as TVET enrolment rose by 48 per cent over the last decade, providing new educational opportunities to a much wider public of potential learners, often belonging to marginalised groups and/or living in remote areas.

2.5.2.2 Economic and societal empowerment

The positive impact of TVET has the potential to be increased and extend beyond the economy by integrating life skills into its programmes. TVET has a substantial socioeconomic role to play in Africa, touching upon productive employment and directly reducing informality, promoting geographic

[262] International Labour Organization. (2024b). *Kenya's Journey to recognizing Informal Skills: The making of the Recognition of Prior Learning Policy.* Available at: https://www.ilo.org/resource/article/kenyas-journey-recognizing-informal-skills-making-recognition-prior.

mobility, increasing social inclusion and addressing the needs of vulnerable groups. TVET can unveil significant opportunities for poverty reduction and sustainable development in Africa. One of the major opportunities lies in integrating life skills into formal and non-formal education systems, which can enhance the quality of education and ensure that learners are prepared to navigate the uncertainties brought about by rapidly changing economies and societies in the 21st Century. Increasing and diversifying learning opportunities can help people skill, upskill and reskill to meet the needs of the new age, equipping them with the competencies and life skills necessary for decent work and life.

Successful TVET and broader skills development promote and require collaboration, community engagement and empowerment. When individuals gain and combine foundational and practical skills, they not only become economically self-sufficient but also empowered to actively participate in their communities. Literate individuals are more likely to be aware of their rights, access resources, and advocate for themselves and their communities. This empowerment helps break the poverty cycle by fostering a sense of agency and self-determination. Empowerment encourages individuals to take control of their lives, fostering independence and breaking down barriers that may lead to social exclusion. Moreover, community-focused elements in TVET programmes address local needs, encourage community engagement, and facilitate access to information and resources for collective progress. In this way, skills development acts as a catalyst for social cohesion. Empowered individuals become key contributors to the well-being and resilience of their communities, ultimately promoting a more inclusive and interconnected society.

A multi-partner initiative in Kenya combined private-sector, local government, and TVET enhanced employment opportunities and workforce competitiveness for disenfranchised youth. USAID's Kenya Youth Employment and Skills Program (K-YES) worked with the private sector, local governments and TVET institutions to endow youth who have not completed secondary school with the skills, assets, and support to compete and succeed in the workplace and society. K-YES partnered with TVET institutions to improve their capacity, service delivery, partnerships and sustainability. The application of a collaborating, learning, and adapting approach has resulted in strong outcomes, including increased youth enrolment, improved quality of services at vocational training centres, and improved financial capacity and sustainability among vocational training centres. Through the project, more than 300,000 youth were connected to relevant job and business skills and youth mentorship networks, and more than 50,000 found new or better employment.[263]

Box 10

Results-based financing of TVET for enhanced employability in Ethiopia

Results-based financing of short-skill courses in Ethiopia led to high levels of employability among graduates and high levels of satisfaction among employers. The Helvetas' Skills and Knowledge for Youth project utilised Results-Based Financing (RBF) of short-term vocational education courses to increase employability and labour market insertion of disadvantaged youth and to empower them to escape cyclical poverty. The project ran between 2015 and 2021 in Bahir Dar, Debretabor and Dangila Town in North-West Ethiopia, where it utilised performance-based contracts and financial incentives to motivate both public and private TVET service providers to improve training quality and support offered to students to find gainful, long-term employment. An evaluation of the project found that 79 per cent of graduates were employed, 92 per cent reported satisfaction with their current job, and 94 per cent reported an improvement in their living conditions. TVET providers also reported positive outcomes with improvements in post-training support to graduates, initial employment opportunities and improved working relationships with private sector

[263] RTI International. (2020). *Tapping the Potential of Kenyan Youth Through Skills Empowerment.* Available at: https://www.rti.org/impact/tapping-potential-kenyan-youth-through-skills-empowerment.

employers. This improvement in TVET provision was confirmed by employers being satisfied with graduates' skill levels and graduates' positive opinions of the training received.[264]

The TVET providers were paid based on training delivery, skills acquisition and gainful employment of graduates, and differential pricing was used to enhance equity. As in many African contexts, traditional input-driven TVET programmes in Ethiopia were not adequately preparing potential students for gainful local employment nor providing the private sector with the skilled employees it required. The project changed this by working with a broad range of actors, including TVET providers, the private sector, employer representatives, and government partners, to design and implement the shift towards RBF. The TVET providers were paid for training delivery (approximately 30 per cent of the total payment) and successful passing of the official assessment (approx. 50 per cent) and for the gainful employment of the graduates (approx. 20 per cent). The final payment only being made after four months of employment. The incentive-based system, combined with differential pricing, was used to enhance equity outcomes by associating female trainees and trainees with special needs with higher remuneration packages for TVET providers. The project was so effective in this regard that the initial target for female participation was exceeded by 25 per cent. Another significant benefit of the RBF approach is that it usually attracts new funding options, as investments can be directly linked to measurable results. Once established, RBF lends itself to scale-up and replication as responsibility for quality assurance, trainee follow-up support, and successful job placement, which are taken up by the TVET providers rather than overarching project managers. Similarly, it also shifts an element of the investment risk from the donor/government/trainee to the TVET provider, who can earn more than through the traditional input method if successful in achieving the agreed-upon results.

Challenges encountered were effectively resolved through broad and collaborative stakeholder engagement and partnerships, and flexibility in the type and level of support offered to TVET providers. The RBF approach in TVET has been shown to better align the interests of the funder, training provider, trainee and the private sector. However, like all innovative approaches, it does pose a number of implementation challenges, not least convincing TVET providers to join and concerns over financial constraints negatively affecting the quality of the training. The project found that these could be overcome through effective dialogue, differential pricing, and providing non-financial support for training providers, especially smaller providers in rural areas. Part of this support was through capacity building and partnership formation, with it particularly important to combine both public and private providers. Public (government providers) were important partners in anchoring and institutionalising the RBF approach, while private, profit-oriented providers were more flexible and more motivated to adapt in line with payment incentives. Another significant and context-specific challenge is the selection of suitable payment metrics and pricing systems. The project found that "intense debates among the concerned stakeholders are necessary for the development of feasible and effective RBF modalities", emphasising the need for wide and collaborative stakeholder engagement to begin such an initiative. The ILO has identified additional necessary conditions for effective RBF in TVET provision, including a well-functioning training market, sufficient competition among TVET providers, and the existence of relevant employment opportunities for graduates.[265]

2.5.2.3 Equity

Given the inequities in levels and types of employment, TVET also has the potential to dramatically reduce long-standing inequalities in societies. TVET and life skills development within it are pivotal for promoting social inclusion by providing individuals with the knowledge and capabilities needed to fully participate in society and the economy, especially for vulnerable and disadvantaged groups. When

[264] Innovative Finance for Education. (2021). *Helveta's Skills and Knowledge for Youth Project: A Case Study of Results-based Financing for Vocational Education and Training.* Available at: https://resources.norrag.org/resource/view/636/367.

[265] International Labour Organisation. (2023d). *Financing mechanisms for promoting social inclusion in skills and lifelong learning systems: Global overview of current practices and policy options.* Available at: https://www.ilo.org/publications/financing-mechanisms-promoting-social-inclusion-skills-and-lifelong.

individuals acquire diverse and practical skills through TVET, they enhance their employability potential. This is particularly crucial for marginalised groups, such as individuals with disabilities or those from disadvantaged backgrounds, as it offers them new opportunities for their productive engagement in the economy and the society they live in. In doing so, TVET may also help break down traditional gender roles and stereotypes by equipping girls and women with the skills needed to find remunerative employment opportunities outside of their traditional household roles. Alternative but comparable examples may apply to the labour market integration of people living in remote areas and individuals speaking different national languages.

Parallel initiatives in Togo are improving the quality and workplace relevance of TVET while also addressing equity barriers through integrating national languages. In Togo, a lot of efforts have been devoted to the diversification of the TVET offer and the integration of national languages into TVET pedagogies. This last intervention expanded access to training and increased the employability of the Togolese population despite cultural differences and other socioeconomic barriers hindering the integration of disadvantaged groups. In addition, the programme facilitated the creation of partnerships with the private sector to drive the integration of learners into the labour market following a demand-driven approach. The parallel work ongoing to develop and deploy a national Qualification Framework and a system for the Recognition of Prior Learning will further contribute to this objective, enhancing the attractiveness of TVET and increasing the availability of qualified and certified workforce.

TVET initiatives in Ethiopia and Mauritania are providing practical on-the-job training that benefits refugees and their host communities. ILO and its partner, the Lutheran World Foundation, constructed a satellite vocational training centre in the district of Kebribeyah, Somali Regional State of Ethiopia. The project utilised local constructors and labour force as well as construction materials from the local market, and those directly involved received on-the-job training in technical construction skills. The completed training centre provides practical skills development for both host and refugee communities.[266] In Mauritania, a Chantier Ecole approach was used to construct an elementary school in the refugee camp at Mbera in the southeastern corner of the country. The approach combines on-the-job training while constructing critical infrastructure complemented by off-the-job learning. It provides training for 16- to 28-year-olds in trades where local demand is strong, for example, bricklaying, plumbing, electrician, etc. and promotes gender equality, with women accounting for half of students in all trades.[267]

Recognition of Prior Learning is especially important for those who have informally gained skills in the past and can be particularly relevant for vulnerable populations such as refugees and internally displaced persons. Recognition of Prior Learning (RPL) involves identifying, assessing and acknowledging an individual's skills, knowledge and competencies acquired through formal, non-formal, or informal learning experiences. Its goal is to give individuals credit for their existing knowledge and skills, enabling them to obtain formal recognition, certification, or credits without going through unnecessary duplication of learning. RPL further increases the availability of a skilled labour force and helps individuals get their skills certified and recognised, making them more attractive to potential employers and meaningful social actors. When properly deployed, this helps expand work opportunities for individuals who rely on informal economies, often characterised by limited social protection systems and poor working conditions. RPL also holds significant importance in the context of refugees and Internally Displaced Persons (IDPs). In these cases, the system becomes a critical means of acknowledging individuals' prior learning, often acquired in challenging circumstances and facilitates their integration into new educational and employment contexts. By recognising and valuing individuals' prior learning, society can contribute to their successful integration, empowerment, and the rebuilding of their lives in new environments while at the same time harnessing the broader social and economic development of host communities.

[266] International Labour Organization. (2023f). *Satellite vocational training center brings hope to displaced and local communities in Ethiopia.* Available at: https://www.ilo.org/resource/article/satellite-vocational-training-center-brings-hope-displaced-and-local.

[267] International Labour Organization. (2020). *At Mbera refugee camp, in Mauritania, the ILO is training young people in building trades.* Available at: https://www.ilo.org/resource/article/mbera-refugee-camp-mauritania-ilo-training-young-people-building-trades.

Box 11

Providing career guidance and support to marginalised, low-literacy youth in South Africa

The online SkillCraft platform provides marginalised and low-literacy young jobseekers with a skills assessment, career and training guidance, and resources. The SkillCraft project in South Africa aimed to address the intersection of some of the most significant challenges linked to TVET in Africa today: youth unemployment, skills mismatch, inequity and lack of 21st Century skills. With financial support from Swiss Development Cooperation, the World Bank, and two South African youth employment programmes—Youth Employment Service and Harambee Youth Employment Accelerator—developed SkillCraft, a "task-based, digital, 21st Century skills assessment and career guidance tool freely available to job seekers through a computer, tablet, or mobile device".[268] The tool supports vulnerable youth who do not have access to traditional career guidance information or services to:[269]

- Identify their labour market interests and job-relevant skills.
- Define jobs aligned with interests and skills.
- Identify skills gaps between their current skill sets and those needed for their dream jobs/what's available in the labour market.
- Access free upskilling programmes to fill those skill gaps.
- Communicate skills and abilities to employers in a marketable way.

The platform uses games and quizzes to provide users with tangible and practical outputs, which 94 per cent of users said helped them better understand their job-related strengths and weaknesses. SkillCraft provides the users with tangible and practical outputs, including a skills certificate (with details on their current skills, strengths, and weaknesses), links to resources, for example, training and networks, links to related job vacancies, and a summary output to be shared with potential employers. The platform is based on standard assessments from established psychology and neuroscience literature and asses twenty-three 21st Century skills, including cognitive abilities, emotional intelligence and career interests. However, as the target audience is youth with low levels of literacy, it uses games and quizzes that are culturally neutral and with limited text to conduct the assessments. User response has been overwhelmingly positive, with 94 per cent reporting that they better understand their job-related strengths and weaknesses, 93 per cent planning to attach the skills certificate to their Curriculum Vitae (CV) with job applications, and 55 per cent reporting already doing so. There was also a positive impact on their planned job search and upskilling, with 83 per cent planning to increase their job search and 81 per cent planning to spend three or more hours a week upskilling. Ultimately, 97 per cent of users would recommend the platform to other youth.

An evaluation of the platform found its assessments to be robust and found that the provision of detailed interactive feedback on skills had a measurable impact on the job-seeking behaviours of the users. The robustness of the platform's assessments and the effectiveness of the platform's feedback were also evaluated. It was found that "SkillCraft is a valid and reliable assessment of 21st Century skills for disadvantaged, young, unemployed South African jobseekers, providing an equitable assessment regardless of education level or gender". The fact that education level was not correlated with test results emphasises the importance of having new 21st Century specific assessments and tools to guide youth into these industries and further career paths. Existing formal education pathways are underserving this generation and society at large by failing to systematically identify and nurture these skills. It was also found that there was a measurable difference in the job-seeking behaviours of those youth who received only the skills certificate

[268] World Bank. (2022a). *My Skills, My Career Superpowers: How Skillcraft Helps Jobseekers to Self-assess, Identify and Develop Skill for Jobs in South Africa.* Available at: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099520011182241119/p168508034b5480f60b33803c003af2b163.

[269] World Bank. (2021b). *Skillcraft: free Skills Profiler for Unemployed Youth.* Available at: https://thedocs.worldbank.org/en/doc/a05d25ed27db0dd11be557d196f852e2-0380022021/original/CKEx-May-11-Work-and-Productivity-SkillsCraft.pdf.

and those who received the detailed interactive feedback mapping their skill strengths to occupations. This is an important result and echoes other findings where formal skills certification in isolation increases earnings and employment but does not change job search behaviour.[270]

2.5.3 Conclusion

In order for TVET to be effective, it must be relevant and of high quality, from curriculum content to trainer competency and material inputs. TVET programmes need to be closely aligned with the specific needs of the local labour market as well as of the societies. This involves regularly updating curricula based on industry trends, technological advancements, and economic shifts to ensure that skills taught are relevant and in demand while being useful to progress towards a common good and a climate of social progress and development. In addition, developing and maintaining high standards for TVET institutions and programmes is critical. This includes establishing accreditation systems, continuous teacher training, and adopting competency-based education frameworks that not only pay attention to practical skills but also promote the development of life skills.

Effective partnerships and collaboration, including the target communities, are required if TVET is to be continually relevant, sustainable and of high quality. Collaboration between government and the productive sector, including workers' organisations, educational institutions, as well as development and civil society partners is crucial. The implementation of TVET and its partnerships needed to be effectively governed and guided. Therefore, clear policies, governance frameworks, and institutional support are required to sustain TVET initiatives at large, and fully enable its socioeconomic potential. National education and training policies must prioritise TVET, allocate adequate funding, and promote the recognition of formal and non-formal TVET as a credible alternative to traditional education. It should also seek additional sources of funding or support, especially from the private sector, which should benefit directly from the related increases in skilled and employable populations. Engaging communities, local governments, and civil society organisations, including young people themselves, in TVET programme design and implementation ensures local buy-in and relevance. This grassroots support is crucial for scaling initiatives across different regions. Scalability is enhanced by developing local capacity, including training trainers, enhancing management capabilities, and creating supportive ecosystems for TVET institutions. Building local capacity ensures that TVET systems can grow independently and sustainably without over-reliance on external support.

TVET programmes should be inclusive and target the skills development of the most marginalised. Ensuring access to TVET for marginalised and vulnerable groups, such as women, youth, and persons with disabilities, is essential for broad-based social development. This may require targeted policies and incentives, such as scholarships, stipends, and community outreach programmes, as well as leveraging digital technologies and tools to improve outreach. However, it is necessary to realise the larger potential impacts of TVET and employability skills development.

The varied and ever-changing nature of economies and, therefore, related to TVET, provide much scope for innovation in TVET content, delivery methods, and financing, but scale-up should be guided by rigorous data collection and evidence. For scalability and sustainability, TVET programmes require sustainable financing models. These can include a mix of public funding, private sector investment, international development aid, and innovative financing mechanisms such as RBF and social impact bonds. TVET is also well-positioned to leverage technology and e-learning tools. Digital learning platforms, mobile training apps, and online courses can potentially enhance the scalability, relevance and effectiveness of TVET programmes while promoting their larger diffusion, for example, in remote and underserved areas or among those with mobility issues. Effective TVET solutions often start with pilot programmes that are later scaled based on the lessons learned. It is essential to create models that are

[270] World Bank. (2020b). *Publication: Job Search and Hiring with Two-Sided Limited Information about Workseekers' Skills.* Available at: https://openknowledge.worldbank.org/entities/publication/222485a2-3b99-551d-8c4c-182e8a61bf96.

flexible and scalable to accommodate different regions or countries with varying levels of socioeconomic development, allowing for adaptability to different local contexts. Pilot programmes should also be carefully monitored to accurately account for all costs, necessary inputs and any outcome results.

Collaboration within and across countries in TVET provides many benefits, including sharing best practices, a broader vision of social development and greater employment prospects for skilled workers. TVET is remarkably varied both in content, delivery methods, and duration. Such variation provides much scope for mutual learning and cooperation within and across African countries. Actors should promote sharing best practices, standardisation of certifications, and mutual recognition of qualifications. This can facilitate the scaling of successful TVET models across borders and promote a larger vision for social development aligned with the principles of sustainable development and progress. It can also support greater levels of employment opportunities for TVET graduates. However, successful TVET models must be adapted to fit local contexts, including the specific economic, cultural, and social landscapes. What works in one country or region may not be directly transferable to another without modifications and adaptation mechanisms in place.

2.6 Higher education

2.6.1 Introduction

Higher education is essential for Africa's socioeconomic transformation, driving the development of innovation, research, and skilled human capital. With approximately 70 per cent of Africa's population under 30, there is huge demographic potential and an opportunity to dramatically improve the continent's global competitiveness. Higher education is crucial for harnessing this potential, ensuring the continent benefits from the demographic dividend potential. This is why universities, technical colleges and other higher education providers do and will play a pivotal role in addressing key challenges such as unemployment, economic inequality, and industrial growth while fostering technological advancements and research crucial to sustainable development.

The large informal economy in Africa presents a challenge for graduates and the higher education sector, which must target both informal economies and emerging digital economies. Africa's informal economy, encompassing 85 per cent of the workforce, presents a significant challenge by limiting opportunities for formal, waged employment. While this poses obstacles for university graduates, it also opens possibilities for higher education to play a transformative role by aligning its curricula with the realities of the job market. In addition to addressing the informal sector, including street vending and small-scale farming, there is a growing demand for high-end skills in sectors like the digital economy, renewable energy, and environmental sustainability. Higher education institutions need to incorporate programmes that equip students with digital literacy, Artificial Intelligence (AI) skills, and green technologies to meet the demands of these emerging industries. By focusing on both the informal economy and emerging high-skill sectors, higher education in Africa can empower graduates to contribute meaningfully to the continent's economic transformation.

Continental and global frameworks like the CESA (16-25) and SDG 4 emphasise the critical role of higher education in fostering sustainable development across Africa.[271] CESA, adopted by the African Union, focuses on transforming education systems to meet 21st Century challenges by strengthening universities as hubs for research, innovation, and entrepreneurship (CESA strategic objectives 8 and 9).[272] It also highlights the importance of technical and vocational education (TVET) to ensure students acquire

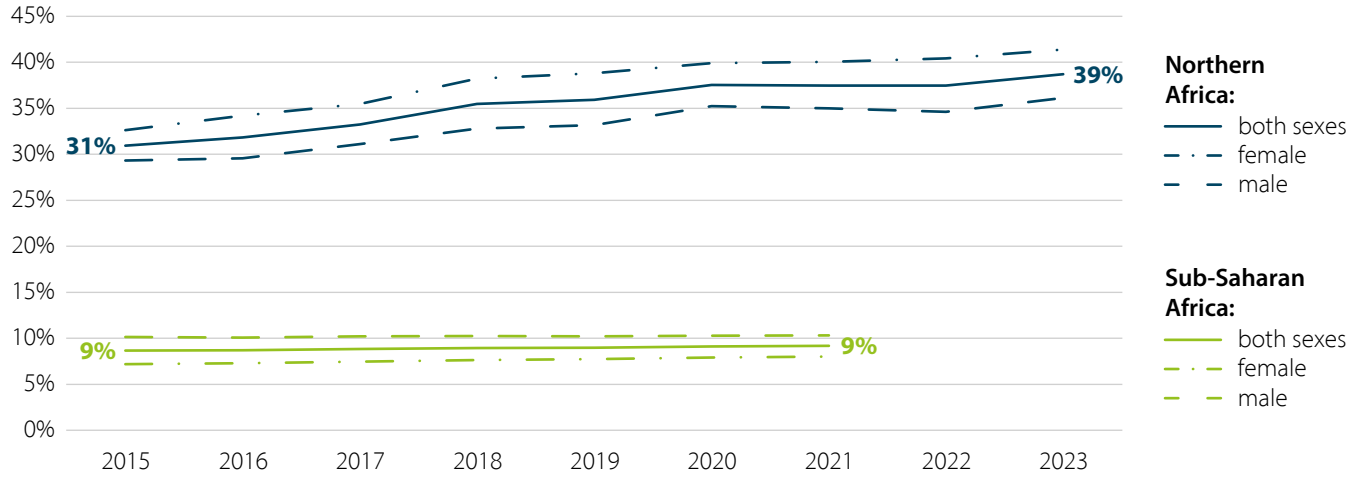
[271] Association of African Universities. *Continental Education Strategy for Africa.* Available at: https://aau.org/current-projects/continental-education-strategy-for-africa/.

[272] African Union. (2016). *Continental Education Strategy for Africa 2016-2025.* Available at: https://ecosocc.au.int/sites/default/files/files/2021-09/continental-strategy-education-africa-english.pdf.

practical skills that support economic growth and industrialisation (CESA strategic objective 8). On a global scale, SDG 4 aims to ensure inclusive, equitable, and quality education while promoting lifelong learning by 2030. In Africa, SDG 4 prioritises expanding access to higher education for women, marginalised communities, and people in conflict-affected regions.[273] Specific SDG 4 targets relevant to higher education include:[274] Targets 4.3, 4.4 and 4.5. Both CESA and SDG 4 emphasise the importance of public-private partnerships, regional collaboration, and adequate financing to ensure higher education systems can address labour market needs and contribute to broader socioeconomic progress. These frameworks also underscore the need for inclusive policies that remove barriers to education, preparing students to thrive in a global economy while contributing to sustainable development within Africa.

Access to higher education in Africa is growing unevenly, with persistent gender gaps, with most of the expansion coming in Northern Africa and from better-resourced but less equitable private institutions. Tertiary Education enrolment in Sub-Saharan Africa barely increased between 2015 and 2021 (Figure 27). Over the same time period, enrolment in Northern Africa increased from 31 per cent to 37 per cent and has recently reached 39 per cent. The low enrolment rate in Sub-Saharan Africa highlights ongoing challenges in access to higher education, with disparities across countries and regions remaining significant. Persistent challenges remain in ensuring equity in access to higher education, especially for women and marginalised communities. In countries where participation in tertiary education is low, girls and women are very disadvantaged in terms of access (probably because of selection/dropouts in lower levels). In almost all countries with higher participation overall (mainly North Africa and Southern African countries), significantly more women enrol in tertiary education than men (Figure 28). Africa's higher education system has yet to fully incorporate lifelong learning pathways and flexible educational structures, limiting opportunities for non-traditional learners and adults to re-enter the system. Higher education institutions in Africa are diverse, with public universities dominating but private universities expanding to meet demand, especially in countries like Kenya and Nigeria. Nevertheless, private institutions, though better financed, often serve wealthier populations, leaving lower-income students with limited options. Additionally, governance issues further complicate the landscape, as many universities lack institutional autonomy, hindering their ability to innovate and adapt to the evolving needs of the labour market.[275] Efforts like the African Quality Rating Mechanism aim to improve overall consistency of quality and standardise assessments across institutions, but challenges persist, particularly in underfunding.[276]

Figure 27: [SDG 4.3.2] Gross enrolment ratio for tertiary education, by region and sex (%), 2015-2023



Data source: UIS September 2024 data release. Note: Data labels refer to both sexes. Annual data by sex is provided in the Annex 2.

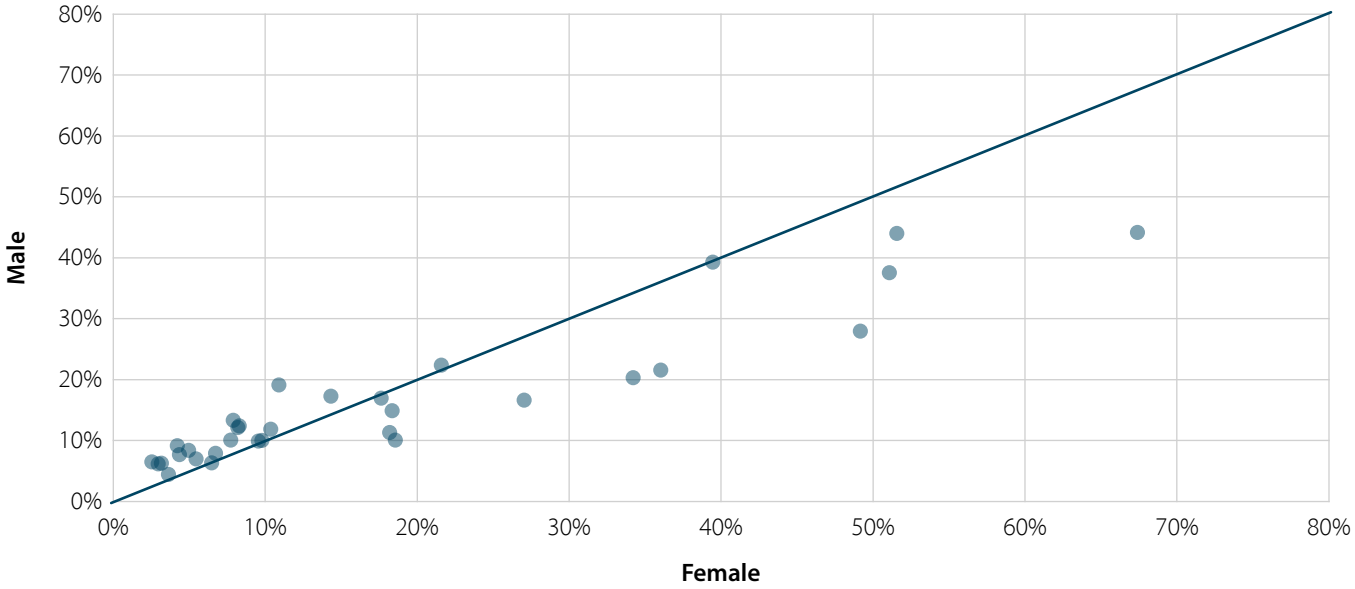
[273] UNESCO. (2023c). *Education in Africa. Placing equity at the heart of policy. Continental report.* Available at: https://www.unesco.org/en/articles/education-africa-placing-equity-heart-policy-continental-report.

[274] The Global Goals. Available at: https://www.globalgoals.org/goals/4-quality-education/.

[275] University of the Free State. (2023). Available at: https://www.ufs.ac.za/templates/news-archive/campus-news/2023/june/academic-freedom-and-institutional-autonomy-must-not-be-used-to-cover-up-poor-governance-and-lack-of-accountability-at-our-universities.

[276] Check out the African Quality Rating Mechanism System. Available at: https://aqrm.aau.org/.

Figure 28: [SDG 4.3.2] Gross enrolment ratio for tertiary education, by country and sex, most recent year available (2019-2024)



Data source: UIS September 2024 data release. Note: Data values by country are provided in the Annex 2.

2.6.2 Challenges and responses

2.6.2.1 Equity

Inequity in access to higher education is a persistent and common challenge, but there are successful examples of targeted interventions. Access to higher education is inequitable, partly due to the cumulative effect of inequalities at lower levels of education and the unique barriers posed by higher education, such as higher entry costs, more limited physical locations, and longstanding cultural biases. Diversified and targeted responses are required to address the different barriers to equity and inclusion. Countries like the United Republic of Tanzania have worked to increase access by establishing satellite campuses in rural areas.[277] South African higher education institutions have implemented race-based admission policies and financial aid programmes specifically aimed at overcoming longstanding barriers faced by underprivileged students.[278] While many countries have implemented effective solutions in improving gender balance, especially in STEM fields, for example, targeted financial aid to female students in Rwanda,[279] and mentorship programmes for female STEM students in Uganda.[280]

[277] World Bank. (2021c). *Tanzania: World bank Supports Expanded Access to Opportunities and Services, Especially for Women and Youth.* Available at: https://www.worldbank.org/en/news/press-release/2021/05/27/tanzania-world-bank-supports-expanded-access-to-opportunities-and-services-especially-for-women-and-youth.

[278] UNESCO. (2023i). *South Africa: tracing good and emerging practices on the right to higher education around the world; policy initiatives on the right to higher education in South Africa.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000386117.

[279] VOA. (2017). *Rwanda Ramps Up STEM Education for Girls.* Available at: https://www.voanews.com/a/rwanda-leading-way-in-girls-in-stem-field/4148108.html.

[280] Makerere University. (2023). *VC launches mentorship program for female students in STEM.* Available at: https://news.mak.ac.ug/2023/04/vc-launches-mentorship-program-for-female-students-in-stem/.

Box 12

Free higher education for low-income students and research investments in South Africa

South Africa simultaneously responded to equity gaps in access to higher education and limited capacity in its research capacity. In part due to high levels of poverty and inequality, South Africa has long struggled with access to higher education, particularly for low-income students. University fees were a significant barrier, leading to the #FeesMustFall protests in 2015, where students demanded free education.[281] At the same time, South Africa faced challenges in developing its research capacity to drive innovation and socio-economic development. The South African government responded to these challenges by introducing free higher education for low-income students in 2018, making tuition-free education available to households earning below a certain income threshold.[282] Additionally, the government increased its investment in research and development, particularly in STEM fields, and supported universities in building research infrastructure and collaborations with international research bodies.

The reforms have seen significant increases in higher education enrolment among disadvantaged students and have contributed to improving South African institutions' research outputs and reputations. Since the introduction of free higher education, university enrolment among disadvantaged students has increased significantly. According to reports, the scheme is expected to help nearly 90 per cent of South African university students.[283] Investments in research capacity have also borne fruit; South Africa is now one of the leading research hubs on the continent, with universities such as the University of Cape Town and the University of the Witwatersrand recognised globally for their research output. These initiatives have begun to address inequality in access to education while enhancing South Africa's research capabilities.

However, such rapid expansion and public subsidy of the highest levels of education in the context of low learning outcomes and non-universal completion of lower levels of education have caused debate. The rapid expansion of access to higher education has been supported by large investment from the government in the sub-sector. Between 2019 and 2022, the national student finance aid scheme disbursed 123 billion South African rand worth of loans for 2,918,624 beneficiaries.[284] This large investment has arguably diverted much-needed funds away from lower levels of education, such as pre-primary and primary, and raised concerns that it has increased inequalities rather than decreased them, as the most marginalised do not reach the end of secondary school. There are also concerns that the rapid expansion of access to higher education has not significantly reduced youth unemployment, as hoped, but by focusing on academic degrees rather than skills development, it has created a university degree "arms race".[285]

2.6.2.2 Financing and private sector

Inadequate financing, especially from limited public resources, has been partly alleviated in some contexts through student loan schemes, private provision, and public-private partnerships. The higher unit costs of higher education pose a significant financial challenge for governments and potential higher education students alike. Although Government funding remains the dominant model, significant challenges in other sub-sectors mean it is often insufficient to meet the increasing demand. Private universities have become more prominent, particularly in Kenya, Nigeria, and Ghana, where

[281] International Journal of Educational Research. (2018). *#FeesMustFall and the decolonized university in South Africa: tensions and Opportunities in a globalized world.* Available at: https://philarchive.org/archive/GRIFAT-9v1/1000.
[282] Free higher education for poor, working class students | SAnews.
[283] Human Sciences Research Council. (2024). *The implications of fee-free higher education.* Available at: https://hsrc.ac.za/news/latest-news/the-implications-of-fee-free-higher-education/.
[284] Business Tech. (2024). New R3.8 billion fund for South Africa's 'missing middle.
[285] Human Sciences Research Council. (2024). The implications of fee-free higher education. Available at: https://hsrc.ac.za/news/latest-news/the-implications-of-fee-free-higher-education/.

they help absorb the excess demand that public universities cannot accommodate. In Kenya, private universities account for around 20 per cent of higher education enrolment, but affordability remains a barrier.[286] Student loan schemes are a common approach to sharing the cost of higher education between governments and students, but these programmes can face challenges such as low repayment rates and limited coverage.[287] Public-Private Partnerships (PPPs) are becoming increasingly common and represent an important source of additional investment in the sub-sector where universities can collaborate with companies like IBM to develop technology centres and research hubs as in South Africa[288] or in Senegal, where PPPs have been used for purposes as diverse as infrastructure and voucher mechanisms.[289]

Labour market alignment is a persistent challenge for higher education, but some countries have made progress by modernising curricula while others have developed close ties between institutions and the private sector. One of the significant challenges in African higher education is the persistent mismatch between educational programmes and labour market needs. This gap is especially pronounced in sectors like technology, engineering, and vocational trades, where industries require hands-on, job-ready skills that are not adequately covered in most university programmes. Countries such as South Africa and Zambia have made progress in modernising their curricula, incorporating more STEM and ICT-driven courses.[290] Other countries have developed close ties between education institutions and the private sector and local economies to ensure academic programmes are responsive to market needs and provide students with practical, job-relevant skills directly applicable to the local economy.[291] [292]

Regional initiatives such as the African Higher Education Centres of Excellence support universities to develop cutting-edge programmes that provide graduates with the practical skills required by the economy. The African Higher Education Centres of Excellence[293] is a World Bank-funded initiative that aims to strengthen select universities across Africa by establishing specialised centres focused on areas of regional importance such as STEM, health sciences, agriculture, and applied sciences. The programme's core goal is to address the labour market mismatch by aligning academic programmes more closely with industry needs and fostering regional partnerships and collaboration between universities, governments, and industries, including regional collaboration and integration in academic research and training. The initiative encourages universities to develop cutting-edge programmes that provide graduates with the practical skills required in the workplace. Through ACE, African institutions are better equipped to deliver quality education and conduct research that directly contributes to national and regional development goals. In Nigeria, Ghana, and Kenya, the focus is on agriculture technology, healthcare innovations, and engineering, aiming to reduce the skills gap limiting employability. The initiative is an example of how targeted investment and regional cooperation can help bridge the gap between academia and the labour market, addressing one of the continent's most pressing higher education challenges.

2.6.2.3 Lifelong learning

Lifelong upskilling is becoming increasingly common in higher education institutions in Africa, with more variety in the duration and modalities of learning. At the same time, progress is also being made in relation to recognition and certification. Lifelong learning and continuous professional development are

[286] Oketch, O., M. (2009). *The tension of elite vs. massified higher education systems: how prospective students perceive public and private universities in Kenya.* Available at: https://journals.uclpress.co.uk/lre/article/2936/galley/17662/view/.
[287] See the Higher Education Loans Board for more information. Available at: https://www.helb.co.ke/ https://www.sltf.gov.gh.
[288] Atlantic Council. (2023). *Why US technology multinational are looking to Africa for AI and other emerging technologies: Scaling tropical-tolerant R&D innovations.* Available at: https://www.atlanticcouncil.org/blogs/geotech-cues/why-us-technology-multinationals-are-looking-to-africa-for-ai-and-other-emerging-technologies/.
[289] Languille, S. (2020). *African universities and the rise of public-private partnerships: Illustrations from Senegal.* In Gideon, J. and Unterhalter, E., eds.
[290] University of Bristol – School of Education. (2018). *Approaches to Strengthening Secondary STEM & ICT Education in Sub-Saharan Africa.* Available at: https://www.bristol.ac.uk/media-library/sites/education/documents/Binder1.pdf.
[291] World Bank Group. (2024c). *Rwanda Economic Update: Investing in Skills Development Can Spur Rwanda's Private Sector Growth and Economic Transformation.* Available at: https://www.worldbank.org/en/country/rwanda/publication/rwanda-economic-update-september-2024.
[292] Makerere University. Available at: https://www.mak.ac.ug/study-mak/colleges-departments
[293] About The African Higher Education Centers of Excellence (ACE) Project. Available at: https://ace.aau.org/about-ace-impact/.

becoming increasingly important in Africa's higher education landscape. Universities and other institutions are starting to offer short courses, micro-credentials, and online learning platforms to equip individuals with the skills necessary to stay competitive in rapidly evolving job markets. This shift is particularly important given Africa's large youth population and the continent's need for workforce development that is both flexible and accessible. Good institutional examples provide a structured framework for quality assurance, certification, and course management while aligning continuing education efforts across faculties and campuses, extending its benefits to a wider community of learners, including non-traditional students.[294] They emphasise the continual and broad scope of lifelong upskilling by targeting various demographics, including working adults and integrating students into a wide range of activities, for example, community development, research, and public debates.[295] An important component of lifelong learning is that of recognition and certification. Many countries have made progress in enhancing and standardising quality assurance and national qualifications frameworks. At the regional level, the African Union has been working towards the establishment of a Continental Qualifications Framework to ensure that qualifications are recognised across borders.[296]

Box 13

Ghana—lifelong learning policies and flexible learning pathways

Ghana has managed to incorporate flexible lifelong learning into a traditional, rigid higher education system through coordinated and comprehensive reforms. Ghana's higher education system, like many in Africa, had been constrained by traditional, rigid learning pathways that limit opportunities for adults, professionals, and students returning after interruptions. The challenge was to make higher education more flexible and accessible to a diverse population while maintaining quality. Ghana's National Accreditation Board introduced policies incorporating lifelong learning principles into the higher education system.[297] These policies focus on flexible learning pathways that allow for credit transfers, recognition of prior learning, and part-time study options, enabling individuals to pursue higher education without following the traditional full-time, campus-based model. This initiative, supported by the National Council for Tertiary Education, emphasises integrating non-formal and informal education as part of a broader lifelong learning framework. This ensures that learning outside of traditional academic institutions is acknowledged and accredited.

Distance learning has been expanded, allowing more marginalised learners in rural areas and working professionals to access higher education. A notable aspect of Ghana's approach has been the expansion of distance learning programmes. Public universities such as the University of Ghana[298] and Kwame Nkrumah University of Science and Technology[299] have developed robust distance learning platforms, allowing students to access education remotely. This has been particularly valuable for students in rural areas, who previously had limited access to higher education. The introduction of online degree programmes has also been an important step in accommodating working professionals who require more flexible schedules.

Not only have access levels increased, but the link between higher education and the labour market has also improved with more TVET offerings and more working professionals as students. The incorporation of lifelong learning policies has led to increased participation in higher education among adult learners and working professionals enrolling in higher education programmes. Ghana has seen a rise in enrolments in distance learning programmes, as well as an expansion in TVET offerings. The system's flexibility has made education more inclusive, helping to bridge the skills gap and better align academic programmes with the needs of the labour market.

[294] UNESCO. (2023g). *International trends of lifelong learning in higher education: Research report.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000385339/PDF/385339eng.pdf.multi.

[295] UNESCO. (2023f). *Institutional practices of implementing lifelong learning in higher education: research report.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000385434/PDF/385434eng.pdf.multi.

[296] African Continental Qualification framework. Available at: https://acqf.africa/about/overview.

[297] The Ghana Tertiary Education Commission. Available at: https://gtec.edu.gh/about-us.

[298] University of Ghana School of Continuing and Distance Education. Available at: https://scde.ug.edu.gh.

[299] Kwame Nkrumah University of Science and Technology. Available at: https://idl.knust.edu.gh.

Promoting research and innovation within African higher education is a cornerstone for sustainable development and increasing the region's global competitiveness, but it remains limited by low and inequitable access to basic infrastructure. Higher education is pivotal in driving advancements, particularly in fields critical to Africa's socio-economic needs, such as health, agriculture, and technology. It is, therefore, crucial that countries develop policies that support innovation ecosystems, encourage collaborations between universities and industries, and foster regional research networks. Higher education institutions are increasingly fostering entrepreneurship by integrating entrepreneurial training and establishing incubation hubs that support students in transforming their academic knowledge into business ventures.[300] Linked to this is the increasing digitisation of higher education, with some countries partnering with global institutions to drive ICT-based education reforms, which led to the development of e-learning platforms.[301] Other countries using digital platforms to streamline loan applications, increasing students' ability to access funding for education. Although Africa's higher education sector is gradually catching up with digital transformation, access to basic infrastructure remains low and highly inequitable, so any related reforms should be designed and implemented to reduce current inequities rather than increase them.

Rwanda has positioned itself as a leader in ICT-driven education reform through a multi-faceted strategy involving infrastructure investment, the private sector and higher education partnerships while also strengthening education at lower levels. Rwanda, recovering from the 1994 genocide, has focused on rebuilding its education system with a strong emphasis on technology and innovation as engines of growth. However, challenges such as limited access to technology, poor infrastructure, and insufficient teacher training hampered the effectiveness of ICT integration in the education system. To overcome these challenges, Rwanda partnered with global institutions such as Mastercard Foundation and Carnegie Mellon University to drive ICT-based education reforms.[302] The government invested in a range of ICT equipment in higher education. Rwanda also developed smart classrooms and began offering degrees in ICT and engineering to ensure that graduates are well-equipped for the technology-driven global economy.[303] These efforts have transformed Rwanda into one of Africa's ICT leaders, boasting some of the highest internet connectivity and digital literacy rates on the continent. The development of e-learning platforms has also significantly increased access to education, particularly during the COVID-19 pandemic, when many schools shifted online.[304] Rwanda is now recognised as a model for ICT-driven education reform in Africa.

2.6.3 Conclusion

Progress has been slow but steady, and despite the promise offered by some examples, higher education in Africa still faces a number of pressing challenges. The state of higher education in Africa shows promising signs of progress but remains uneven across the continent. Significant progress has been made in increasing access, quality and flexibility. However, challenges such as overall limited access, persistent inequalities, variation in the quality of education, underfunding, and inadequate infrastructure continue to hinder the sector's full potential. Ensuring equity and inclusion for, particularly women, those from lower economic backgrounds, and rural populations remains a critical task in achieving SDG 4, which calls for inclusive and equitable quality education for all.

[300] Carnegie African Diaspora Fellowship Program. Available at: https://www.iie.org/programs/carnegie-african-diaspora-fellowship-program/.

[301] See study on ICT Integration in Education curriculum in Higher Education: Challenges and opportunities in the University of Rwanda- College of Education. Available at: https://www.researchgate.net/publication/360514254_ICT_Integration_in_Educational_curriculum_in_Higher_Education_Challenges_and_opportunities_in_the_University_of_Rwanda-College_of_Education.

[302] Actuia. (2022). *Carnegie Mellon University and Mastercard Foundation Partner with Rwandan Government to Expand Engineering and Technology Programs.* Available at: https://www.actuia.com/actualite/la-carnegie-mellon-university-et-la-fondation-mastercard-sassocient-au-gouvernement-rwandais-pour-developper-des-programmes-dingenierie-et-de-technologie/.

[303] UNU-WIDER. (2024). *Smart classroom and education outcomes: Evidence from Rwanda.* Available at: https://www.wider.unu.edu/sites/default/files/Publications/Working-paper/PDF/wp2024-7-smart-classrooms-education-outcomes-Rwanda.pdf.

[304] See course categories from Rwanda Polytechnic. Available at: https://elearning.rp.ac.rw.

Collaborative partnerships are crucial for effective higher education reforms, given the financial costs, the technical expertise required and the variety of destinations for graduates of higher education programmes. One of the most crucial factors in successful higher education initiatives is collaborative partnerships between governments, international organisations, and the private sector. In South Africa, the government's initiative to provide free higher education for low-income students was supported by strong internal partnerships and policy frameworks. Similarly, Rwanda's success in implementing ICT-driven education reforms relied heavily on partnerships with global technology firms like Mastercard Foundation and institutions like Carnegie Mellon University, which brought technical expertise and resources to the table. The entire Achievement and Commitment to Excellence (ACE) initiative is based around collaborative partnerships, and in Ghana, the implementation of lifelong learning policies through the National Accreditation Board benefited from collaborations with international education bodies, ensuring that the country's policies aligned with global best practices. These partnerships were essential in pooling resources, sharing knowledge, and providing the expertise needed to overcome challenges.

Higher education reforms, not least those related to research and development and lifelong learning, are long-term investments, the full benefits of which will not be felt by societies for years, maybe even decades, after the initial investment. Therefore, sustained financial and political commitment is vital. Another key success factor for higher education initiatives is long-term vision and sustained financial and political commitment. In South Africa, the government's decision to introduce free higher education for low-income students required significant and sustained financial investment. Despite economic pressures, this commitment continued, ensuring the policy's long-term success. Similarly, Rwanda's investment in digital infrastructure and education reforms was backed by strong political will and financial support, allowing for the creation of smart classrooms and e-learning platforms. In Ghana, financial backing from the government supported flexible learning pathways, enabling more inclusive access to education for adult learners and professionals. Without this level of investment, these programmes, and others like them, would not have been able to scale.

Successful initiatives and reforms emphasise the variety of possible policy options and the need to implement ones that are context-specific, addressing clearly identified issues within the higher education ecosystem. Adaptive and context-specific solutions are crucial if context-specific challenges in higher education are to be overcome. In South Africa, the policy of targeting low-income students for free higher education was specifically designed to address the country's socioeconomic disparities. Rwanda's focus on digital education reform was aligned with its national goal of becoming a regional technology hub, making the adoption of ICT-driven reforms both timely and relevant. By offering more adaptable pathways and expanding distance learning, Ghana has provided more opportunities for individuals to pursue higher education while remaining responsive to labour market needs. The flexibility of lifelong learning policies addressed the needs of non-traditional students and working professionals, ensuring that education could be accessible to a wider range of people. These adaptive policies allowed each country to tailor its education reforms to its unique context, leading to more effective and impactful solutions.

The future of higher education in Africa is diverse, with more students from diverse backgrounds and education experiences, diverse and flexible learning pathways, and diverse providers and funders. To move forward, it is essential to continue expanding research capacity, particularly in STEM fields, while integrating flexible lifelong learning pathways that accommodate diverse student populations, including adult learners and professionals. Regional collaboration, such as the African Quality Rating Mechanism System and partnerships with global institutions, will play a vital role in ensuring that successful models are transferable and scalable across the continent. Furthermore, sustained investment from governments and international partners is needed to overcome funding gaps and support the digital transformation and overall expansion of higher education systems. By addressing the challenges faced through collaborative efforts and adaptable policies, African higher education can not only meet the growing demand for quality education but also serve as a key driver of economic and social transformation across the continent.

Section 3

Governance and management of the education system

3.1 Planning and management of education systems

3.1.1 Introduction

Effective planning and management of education systems are critical for achieving sustainable educational outcomes. Planning and management provide the structure necessary for delivering quality education, ensuring that resources are used efficiently and aligned with national priorities. Planning serves as a roadmap, enabling governments to allocate resources in ways that meet present needs while also addressing long-term goals. Without sound management, education systems risk inefficiency, leading to wasted resources and unmet educational needs. Moreover, weak management can exacerbate disparities, particularly in underserved regions and for marginalised groups. A well-managed education system promotes accountability and ensures educational policies are implemented effectively. By aligning educational plans with broader national development objectives, countries can enhance the overall impact of their education sector investments.

Global and regional frameworks have emphasised the importance of education plans, and significant efforts have been made to improve the planning and management of education systems. The Incheon Declaration (2015) underscores the need for countries to commit to robust, inclusive, and sustainable education plans. The Education 2030 Framework for Action[305] further emphasises that education systems should be evidence-based, regularly monitored, and responsive to changing needs. These high-level frameworks call for a strategic approach to education management, encouraging countries to strengthen their capacity to plan, implement, and monitor educational reforms effectively. In Africa, the Agenda 2063 places education at the heart of the continent's development strategy.[306] It calls for education systems that not only provide universal access but also foster the skills needed for economic development.

Effective governance and management of education systems are crucial for achieving sustainable educational outcomes. The Global Education Monitoring (GEM) Report highlights that strong leadership and governance frameworks are essential for the successful implementation of educational policies. According to the GEM Report 2024/5, effective educational leadership involves setting clear expectations, promoting accountability, and ensuring educational policies are evidence-based and regularly monitored. This approach helps address disparities and ensure that resources are allocated efficiently to meet both immediate and long-term educational goals. The report emphasises the importance of building the capacity of education leaders and managers to adapt to changing needs and challenges, thereby enhancing the overall effectiveness of the education system. In addition, the GEM Report underscores the role of governance in fostering inclusive and equitable education systems. It points out that transparent and accountable governance structures are vital for ensuring that educational resources are used effectively and reach the most marginalised groups. The report also highlights the need for robust data systems to monitor progress and inform policy decisions. By aligning educational governance with broader national development strategies, countries can enhance the impact of their education sector investments and contribute to achieving Sustainable Development Goal 4 (SDG 4). This strategic alignment ensures that education systems are not only efficient but also equitable and inclusive, providing quality education for all.[307]

[305] UNESCO. (2015). *'Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4'.*

[306] African Union Commission (AUC). (2015). *Agenda 2063: The Africa We Want.*

[307] See the last Global Education Monitoring Report. Available at: https://www.unesco.org/gem-report/en.

3.1.2 Challenges and responses

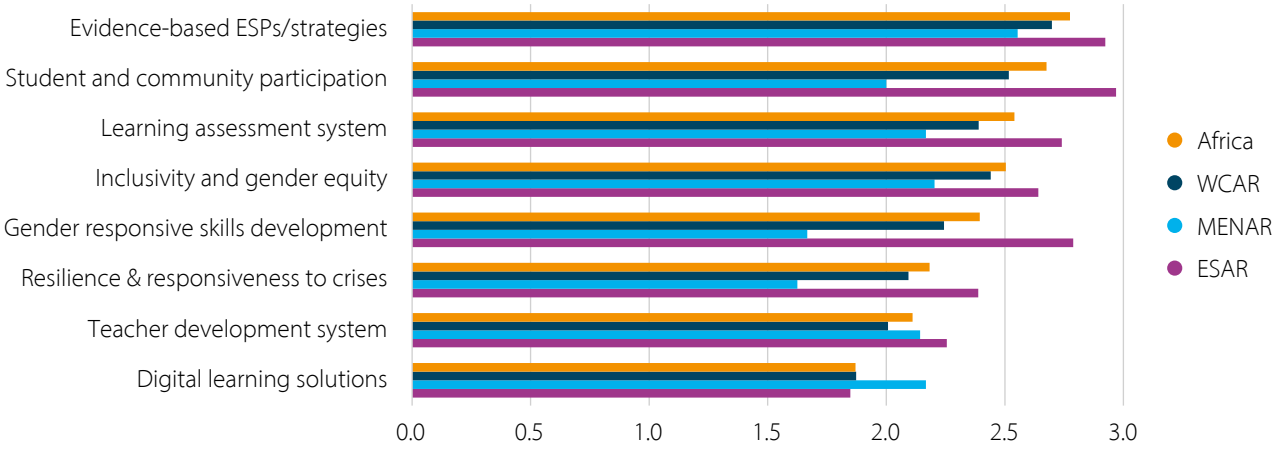
3.1.2.1 Education sector planning

High-level commitments set ambitious targets for planning and education systems. However, the reality for many African countries is mixed. According to UNICEF's internal monitoring, the continent demonstrates varying levels of progress across several indicators related to education system management, including inclusivity, resilience, digital learning, and teacher development. The monitoring system employs a four-point scale to assess progress on these key aspects. A score of 1 indicates a weak aspect of the system, 2 reflects that the relevant aspect of the system is at an initiating phase, 3 signifies that a particular aspect is established, and 4 represents championing a particular aspect. The desire is for countries to reach the championing level, where education systems are fully functional, integrated, and delivering strong, sustained educational outcomes. According to 2023 data, the continent's performance on the eight selected aspects is varied, as illustrated in Figure 29.

- **Inclusivity and gender equity (Score: 2 – Initiating):** Countries are in the early stages of developing and implementing gender equity policies within their education systems. These efforts, though present, are not yet fully integrated, leaving room for broader application across all levels of education.
- **Resilience and responsiveness to humanitarian crises (Score: 2 – Initiating):** Some progress is visible in building education systems that can continue during crises, but full resilience has not yet been established. Systems remain vulnerable to disruptions caused by humanitarian challenges.
- **Implementation of evidence-based education sector plans (Score: 2 – Initiating):** Many countries are preparing evidence-based policies and plans, but implementation remains an issue. This finding is also corroborated in the implement working paper.[308]
- **Effectiveness of teacher development systems (Score: 2 – Initiating):** While frameworks for teacher development are in place, continuous professional development programmes remain weak.
- **Effectiveness of learning assessment systems (Score: 1 – Weak):** Learning assessments remain the most underdeveloped area, with significant gaps in systems that track student performance, as also discussed in Section 2.3 on foundational learning skills.
- **Effectiveness of student and community participation (Score: 1 – Weak):** Involvement of students and communities in educational decision-making is minimal. There are few channels for participation, which limits the impact of local perspectives on education reforms.
- **Effectiveness of digital learning solutions (Score: 2 – Initiating):** Countries are gradually adopting digital learning solutions, but access remains uneven, particularly in rural areas.
- **Gender-responsive skills development systems (Score: 2 – Initiating):** Early-stage efforts to create gender-responsive skills programmes are evident but are not yet fully functional or accessible. The programmes remain limited in scope and reach across various regions.

[308] UNICEF. (2023a). *How to unleash the power of data to transform education policies.* Available at: https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2024/01/Data-for-Education-PDF-1.pdf.

Figure 29: Performance against selected system management parameters in Africa, 2023



Source: UNICEF internal monitoring, 2023.

Planning forms the backbone of any well-functioning education system, ensuring that all components—from infrastructure to curriculum development to teaching and learning—are aligned with national goals and resources. A well-structured plan enables an education system to adapt to changing conditions, whether demographic shifts, economic challenges, or emergencies. Strong planning not only improves the allocation of financial and human resources but also strengthens coordination between stakeholders at all levels, from policymakers to schools. It creates a clear roadmap for achieving educational objectives and helps ensure that education systems remain resilient and sustainable over time. The following aspects outline essential elements and processes for a robust education sector plan.[309]

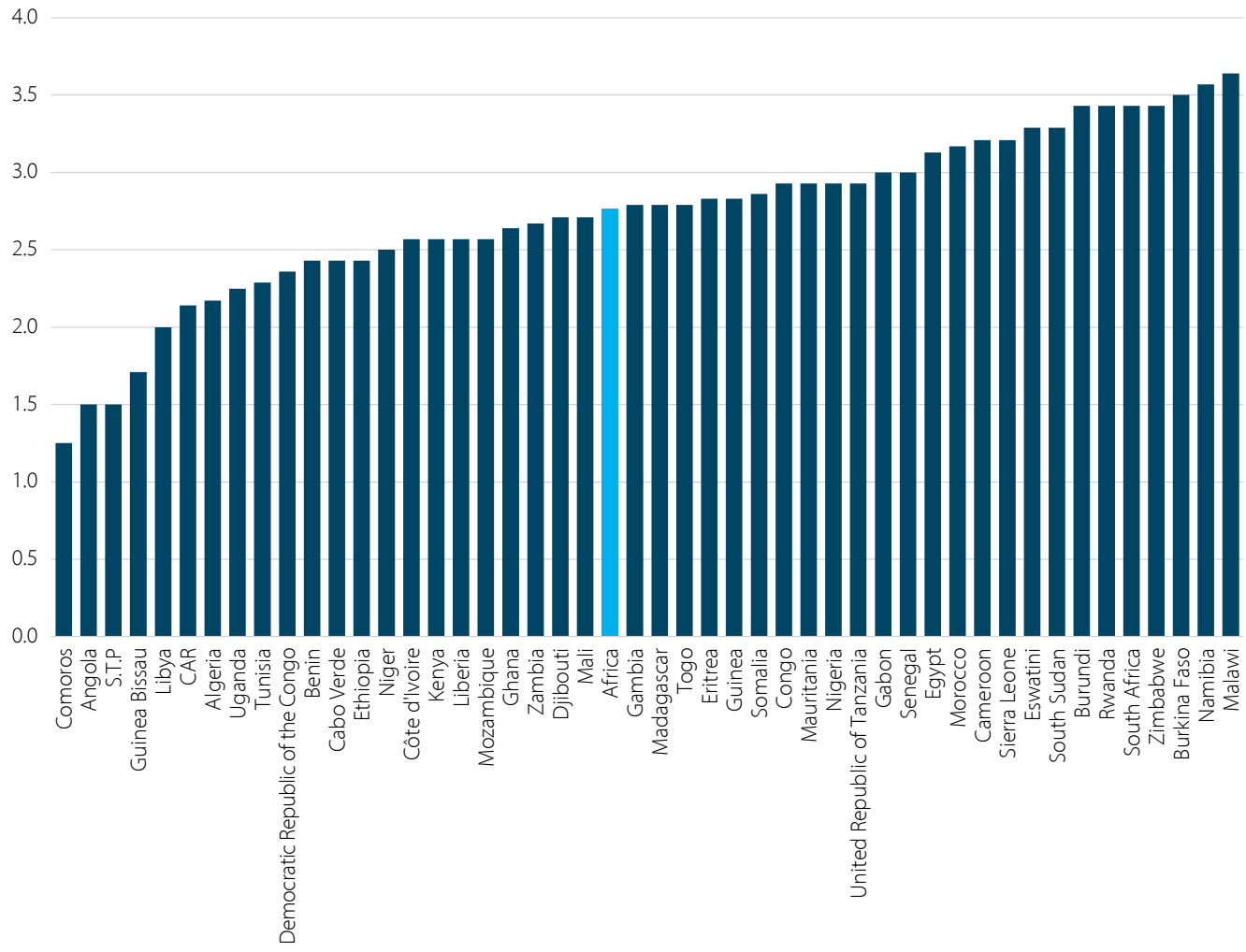
- **Sector analysis:** Begin with a comprehensive, evidence-based analysis of the education system to identify key challenges and gaps to ensure the resulting plan addresses real issues and is tailored to the country's specific context.
- **Stakeholder participation:** Ensure a participatory process involving all relevant stakeholders, such as government ministries, civil society, and development partners, for inclusive consultations and alignment of national priorities that enhance ownership and strengthen chances of successful implementation.
- **Strategic focus and policy integration:** The Education Sector Plan (ESP) should have clear, strategic objectives that address the root causes of identified challenges. These objectives should be realistic and actionable. An ESP should be comprehensive, covering all levels of education, and reflect synergies with other sectors, such as health and finance.
- **Financial planning:** The ESP should be financially sustainable based on the estimation of resources likely to be available to implement the proposed programmes. Resource projection should align with national budgets and include external funding sources if necessary.
- **Monitoring and evaluation:** An M&E framework is vital for tracking progress and ensuring the plan remains relevant. The framework should include measurable indicators, regular reporting mechanisms, and periodic evaluations to allow for adjustments in response to emerging challenges or new data.

309 UNESCO-IIEP. (2015). *Guidelines for the development of education sector plans.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000233767.

- **Risk management:** Integrating risk mitigation strategies into the plan is crucial, especially in fragile contexts. An ESP should include mechanisms for ensuring educational continuity during crises such as disasters, conflicts, or economic downturns. Building resilience into an education system helps safeguard progress and maintain stability in service delivery.

The development of a credible education sector plan is only a step toward desired educational outcomes; its implementation is what ultimately determines the success of the system. However, levels of sector plan implementation vary significantly across Africa. Effective implementation transforms strategic objectives into real-world improvements in education access, quality, and equity. As illustrated in Figure 30, there is a wide variation in the extent to which African countries implement their sector plans. For instance, Malawi and Namibia have scores of 3.6, demonstrating established systems of translating plans into practice. On the lower end, countries like Comoros, Angola, and Sao Tome and Principe, which scored between 1.3 and 1.5, face substantial barriers in implementing their plans. These barriers often stem from insufficient funding, weak institutional capacity, or challenges in coordination. Most countries fall within the 2-3 range, indicating that while they are in a relatively good space, especially those in the established category, more work is needed to ensure full and effective implementation of their plans. The overall continental score of 2.8 underscores the importance of continued efforts to strengthen institutional frameworks, secure sustainable financing, and enhance monitoring and evaluation systems.

Figure 30: Extent to which evidence-based and holistic ESPs are implemented, 2023



Source: UNICEF internal monitoring, 2023.

Many factors influence the successful implementation of plans, among them political leadership, evidence-based decision-making and stakeholder engagement are particularly important. Several studies highlight the key factors that contribute to the successful implementation of evidence-based education sector plans. Strong political will is a critical driver, as shown by countries that prioritise education reforms and consistently allocate resources to back their commitments.[310] [311] Political leadership plays a decisive role in creating an enabling environment for sustainable education reforms. In addition, evidence-based policymaking is crucial, particularly in countries that have invested in robust data systems. These systems provide the data needed for informed decision-making and allow governments to monitor and adjust policies effectively.[312] Evidence-based policymaking enables targeted interventions that address real needs, leading to more efficient management of the education sector. Moreover, stakeholder engagement is essential. The involvement of teachers, parents, civil society organisations, and private sector actors ensures that education reforms are grounded in community needs and perspectives, making them more likely to succeed.[313] Countries that foster participatory processes during planning and implementation tend to see higher ownership and better outcomes in education reforms.

3.1.2.2 Education Financial Management

Education financing is a crucial factor influencing the successful implementation of plans and the long-term and sustainable achievement of their goals. Education financing is fundamental to building and sustaining a strong education system. It provides the necessary resources for governments to effectively implement education plans, ensuring that key elements such as infrastructure, teacher development, learning materials, and technology are well-supported and aligned with national goals. Financing is crucial not only for expanding access to education but also for enhancing the quality and relevance of learning. In the broader context of education planning and management, financing serves as the engine that drives both the execution and sustainability of educational reforms. Adequate and predictable funding enables governments to allocate resources effectively, making timely interventions. Additionally, financing supports monitoring and evaluation efforts, allowing governments to track progress and adjust as needed to ensure that education outcomes are achieved as planned.

The critical role of education financing is emphasised by the many global and regional commitments made to increase funding for education systems. The Incheon Declaration[314] set ambitious targets for education financing, calling on countries to allocate 4-6 per cent of GDP or 15-20 per cent of public expenditure to education to meet the SDG 4 targets, aimed at ensuring inclusive and equitable quality education and promoting lifelong learning opportunities for all.[315] This commitment was further reinforced in the Addis Ababa Action Agenda (2015), which highlighted the importance of domestic resource mobilisation in achieving these education funding targets. The agenda, supported by the United Nations, encouraged nations to meet or exceed the 4-6 per cent Gross Domestic Product (GDP) and 15-20 per cent expenditure benchmarks to ensure sustained and equitable financing.[316] Similarly, the Education 2030 Framework for Action, adopted by UNESCO, echoed these goals and emphasised the need for sustainable and equitable financing across all levels of education, reinforcing the importance of long-term investment to support the expansion of educational opportunities globally.[317] In line with

[310] UNESCO. (2015). *'Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4'.*

[311] World Bank. (2018b). *World Development Report: Learning to Realize Education's Promise.* Available at: https://www.worldbank.org/en/publication/wdr2018.

[312] UNESCO-IIEP. (2015). *Guidelines for the development of education sector plans.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000233767.

[313] UNICEF. (2019b). *Minimum Quality Standards and Indicators for Community Engagement.*

[314] UNESCO. (2015). *'Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4'.*

[315] Ibid.

[316] United Nations. (2015a). *Addis Ababa Action Agenda of the Third International Conference on Financing for Development.*

[317] UNESCO. (2015). *'Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4'.*

these earlier commitments, the Global Partnership for Education (GPE) Financing Conference (2018) urged countries to maintain and strive towards meeting these benchmarks while also focusing on improving efficiency in education spending to ensure that investments lead to tangible outcomes.[318] The importance of education financing was again underscored at the Transforming Education Summit,[319] which emphasised the continued need to meet or exceed the same 4-6 per cent GDP and 15-20 per cent public expenditure targets while also promoting innovative financing solutions to bridge the growing funding gap in education.[320] Furthermore, the Tashkent Declaration introduced a specific target, calling for 10 per cent of education budgets to be dedicated to Early Childhood Care and Education (ECCE) while maintaining alignment with the overall 15-20 per cent expenditure guidelines.[321]

Despite the many high-level commitments, most African countries struggle to meet the recommended education spending benchmarks. As shown in Figure 31, education expenditure as a percentage of national spending across African countries falls just below 15 per cent of the recommended lower threshold (in 2024 or the latest available year), with stark variation from country to country. Topping the chart is Sierra Leone, which dedicated an impressive 29 per cent of its national expenditure to education, well above the 20 per cent mark, underscoring the country's strong prioritisation of education. Other top spenders on education include Namibia (25 per cent), Morocco (23 per cent), Ethiopia (23 per cent), Senegal (23 per cent), Botswana (21 per cent) and Burkina Faso (20 per cent), all demonstrating a solid commitment to education funding. Countries like Côte d'Ivoire, Kenya, Tunisia, South Africa, and Madagascar allocate 15-19 per cent of their national educational budget. Although they fall short of the 20 per cent mark, they surpass the minimum 15 per cent benchmark, suggesting a relatively strong commitment to education, which should positively influence educational outcomes in these countries. A significant number of countries—Algeria, Niger, Gabon, Gambia, and Uganda—fall below the 15 per cent benchmark, spending between 10-14 per cent of their budgets on education. Countries like Nigeria (5 per cent), Somalia (4 per cent), and South Sudan (3 per cent) show alarmingly low levels of expenditure on education and far below the 15 per cent benchmark. This underfunding is likely tied to broader challenges such as economic instability, conflict, and competing fiscal priorities. These results reveal considerable disparities across Africa, with some countries dedicating nearly 10 times more of their national budgets to education than others. Countries investing more than 20 per cent of their national budgets in education are positioning themselves for significant improvements in access to education, equity, and overall quality. These higher investments help provide the financial foundation to address the learning crisis and support long-term educational growth.

The current low levels of spending result from nearly ten years of decline in education spending in Eastern and Southern Africa and West and Central Africa. Figure 32 illustrates the average education spending across the three major regions in the continent between 2014 and 2024. In the Eastern and Southern Africa region, education expenditure started relatively high at 18 per cent in 2014. It gradually declined from 2016 to reach 16 per cent by 2021, before further dropping to 11 per cent in 2024. West and Central Africa presents a mixed picture, starting off at 15 per cent in 2014, then encouragingly rising to 17 per cent by 2017 before experiencing a gradual decline. By 2021, spending returned to 15 per cent, and from 2022 onwards, the region saw a more dramatic drop, falling to 12 per cent by 2024. North Africa's relative stability in spending contrasts with the declines seen in Eastern and Southern Africa and West and Central Africa. The substantial drops in these latter regions, particularly post-2022, call for urgent policy attention to stabilise and potentially reverse these downward trends. Protecting education funding is critical for the long-term social and economic development of these regions, especially as they contend with complex challenges such as growing youth populations and the need for improved educational infrastructure.

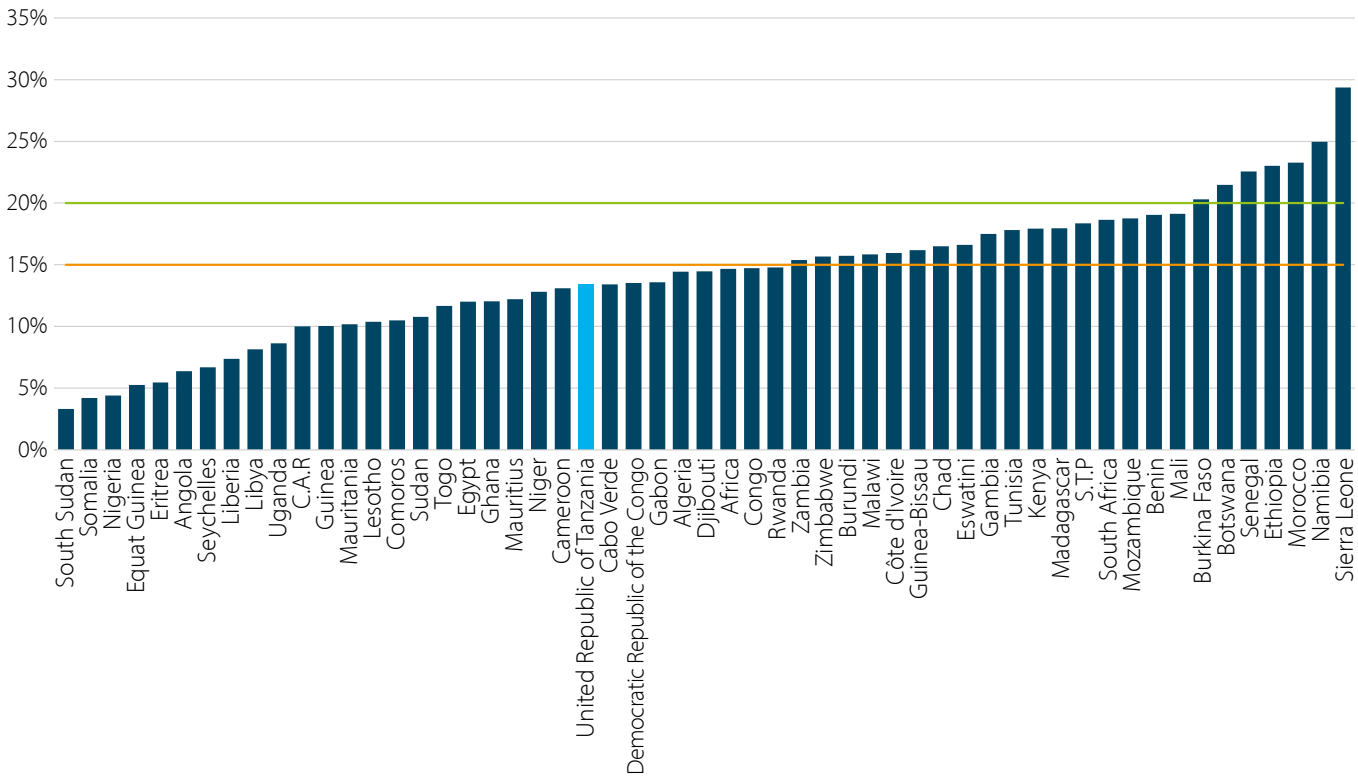
[318] GPE. (2018). *Financing Conference: An Investment in the Future.*

[319] United Nations. (2022). *Report on the 2022 Transforming Education Summit.*

[320] World Bank. (2024b). *Education: Innovative Financing in Developing Countries.* Available at: https://documents1.worldbank.org/curated/en/099042624181519346/pdf/P5009781490d0b070195ed1cd5436f2922c.pdf.

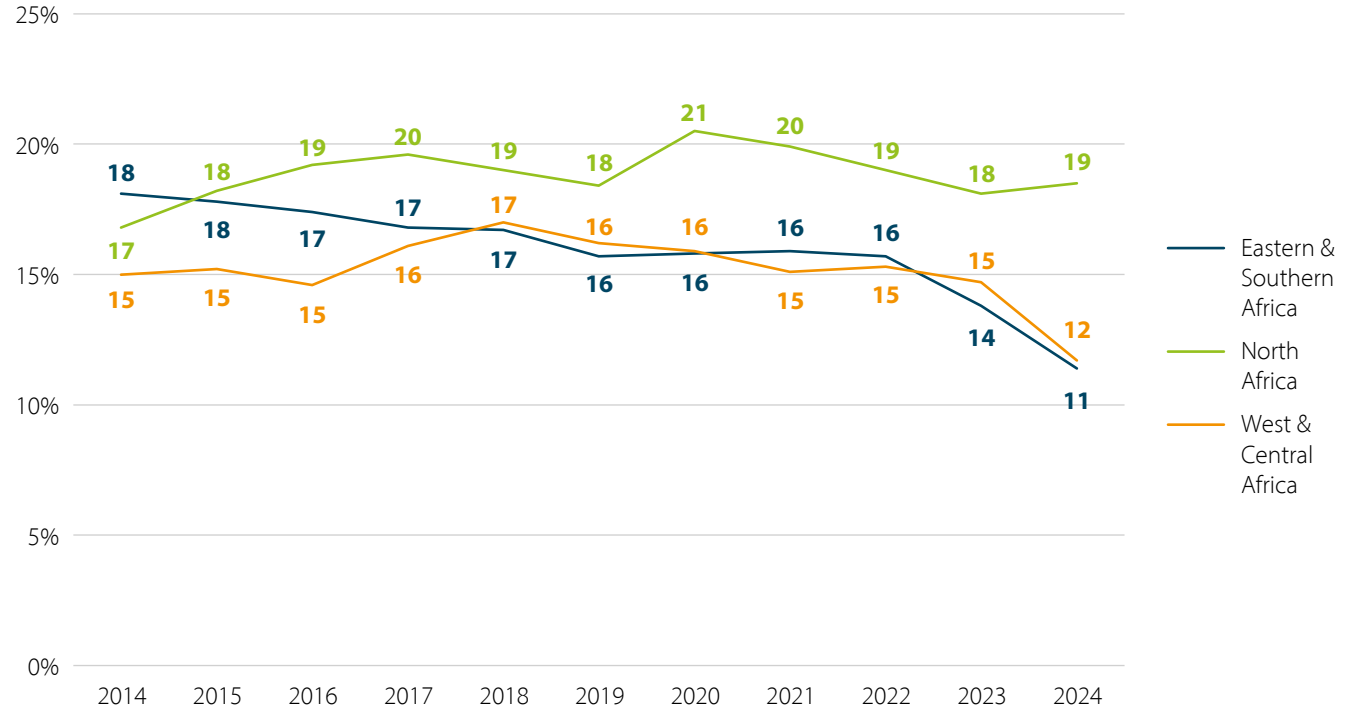
[321] UNESCO. (2022c). *Tashkent Declaration and Commitments to Action for Transforming Early Childhood Care and Education.*

Figure 31: Education expenditure as a % of national expenditure, 2024 or last available year



Data source: UNESCO Institute for Statistics 2024 data release.

Figure 32: Education expenditure as a % of national expenditure in Africa, 2014-2024



Data source: UNESCO Institute for Statistics 2024 data release.

The COVID-19 pandemic had a devastating and immediate impact on education spending in Africa, and the effects continue to be felt. Insights from the AUC-UNICEF Education Financing Report[322] show that education expenditures in Africa were significantly impacted by the COVID-19 pandemic, which affected learning in virtually all countries globally. Per capita spending on education in Africa dropped sharply between 2019 and 2020, falling from 257 US dollars to 238 US dollars, amounting to an 8 per cent drop. The pandemic not only decreased per capita spending but also disrupted public budgets, leading to reallocations away from education towards emergency health and social protection measures. The pandemic's impact on education financing can be explained by multiple factors, including school closures and lockdowns. With schools closed and learning largely halted, governments scaled back certain operational expenses and delayed infrastructure projects. This disruption scaled back education expenditure by a decade, with the per capita spending in 2021/2022 having been seen only in 2011/2022. Moreover, the disruption worsened the already existing financial shortfall across the continent to 77 billion US dollars in 2024.[323] The post-pandemic landscape presents an even greater challenge as countries struggle to restore education budgets to pre-pandemic levels while dealing with rising debt burdens and competing fiscal priorities.[324]

In addition to underinvestment, inequitable education financing remains a serious challenge in Africa. To be truly equitable, at least 20 per cent of public education resources should go to the poorest 20 per cent of learners. However, in most African countries, the most disadvantaged learners tend to benefit disproportionately less from public education funding than their wealthier peers. Among 31 African countries with data available, none of them spend at least 20 per cent of public education resources on the poorest 20 per cent of students (Figure 33). In 11 countries, the richest students receive at least 4.5 times the amount of public education spending compared to the poorest. Additionally, education spending favours tertiary education—which only a small percentage of learners, typically from the richest families, can access—at the expense of basic and secondary education.[325] To reach the poorest, public education funding must prioritise foundational learning and the marginalised. One way to do so is by giving initial priority to lower levels of education, where foundational learning skills are developed, and the poorest are more represented. Equitable education financing is not only important in and of itself, but it is also an efficient way to reduce the number of children in learning poverty: a 1 per cent increase in the allocation of public education resources to the poorest 20 per cent could pull 35 million primary school-aged children out of learning poverty, as long as spent on proven measures.[326]

Some education systems have turned to innovative financing, such as social and development impact bonds and income-contingent loans, to fill the funding gaps. Innovative financing for education emerged from the growing recognition that traditional government and donor-based funding are insufficient to meet the global education needs, particularly in achieving SDG 4.[327] Innovative financing seeks to bridge this gap by mobilising new resources through mechanisms such as public-private partnerships, leveraging private sector expertise, and introducing new financial instruments like social and development impact bonds and income-contingent loans.[328] These mechanisms can generate additional

[322] UNICEF-AUC. (2024). *Education Spending in Africa: The impacts of COVID-19 and possible recovery pathways.* Available at: https://www.unicef.org/esa/documents/education-spending-africa.

[323] GPE. (2024a). *Making education in Africa fit for the 21st century.*

[324] UNICEF-AUC. (2024). *Education Spending in Africa: The impacts of COVID-19 and possible recovery pathways.* Available at: https://www.unicef.org/esa/documents/education-spending-africa.

[325] UNICEF – AUC. (2024). *Education spending in Africa: The impacts of COVID-19 and possible recovery pathways.* Available at: https://www.unicef.org/esa/documents/education-spending-africa.

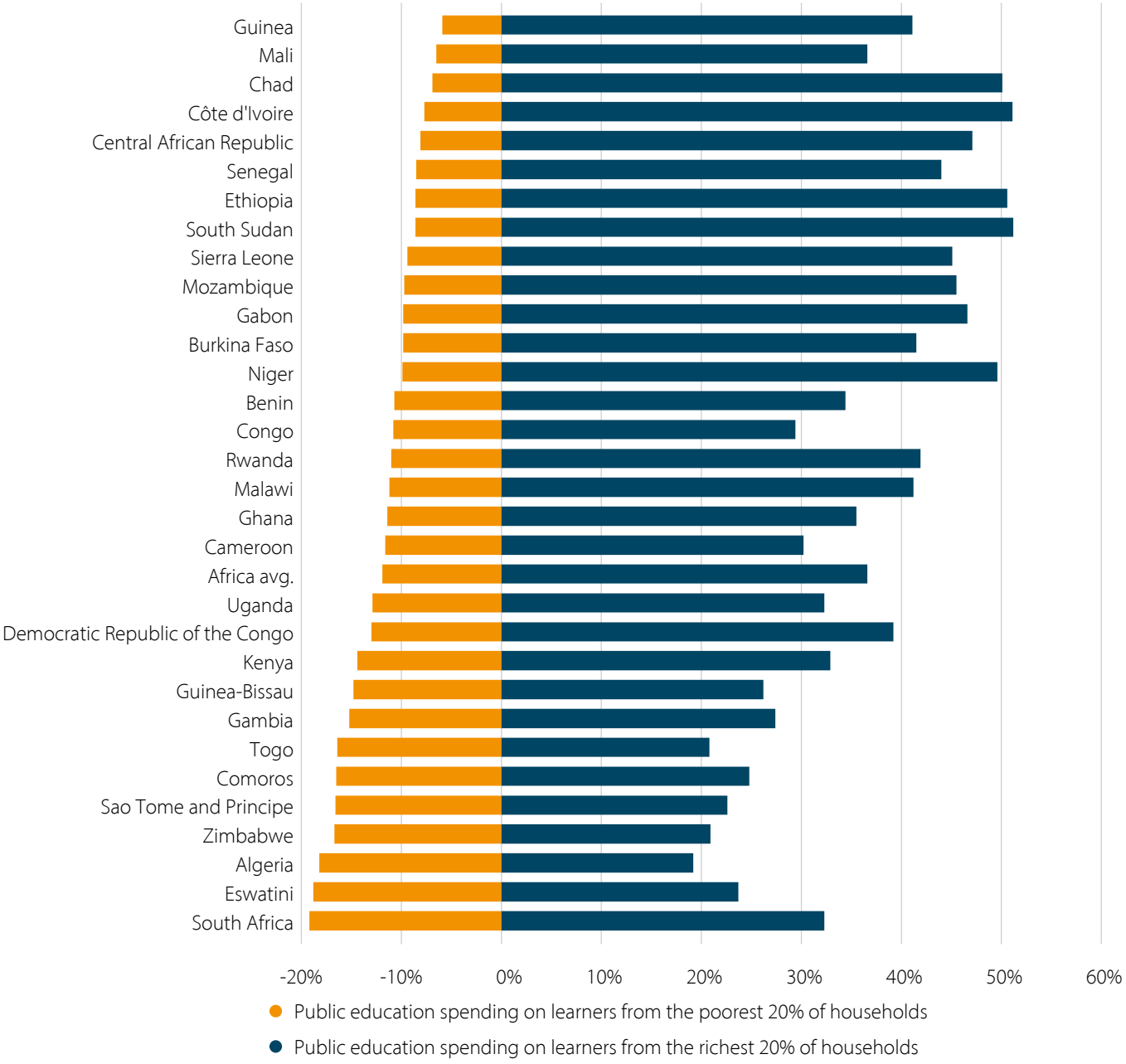
[326] UNICEF. (2023c). *Transforming Education with Equitable Financing.* Available at: https://www.unicef.org/reports/transforming-education-equitable-financing.

[327] Avelar, M., Terway, A., and Frotte, M. (2020). *Innovative Financing for Education: A Systematic Literature Review.*

[328] Education Commission. (2016). *Exploring innovative financing for global education: Early lessons from Kenya and East Africa.* Available at: https://educationcommission.org/updates/exploring-innovative-financing-global-education-early-lessons-kenya-east-africa/, Centre for Global Development. (2013). *Investing in Social Outcomes: Development Impact Bonds: The Report of the Development Impact Bond Working Group.* Available at: https://www.cgdev.org/sites/default/files/investing-in-social-outcomes-development-impact-bonds.pdf and Education Cannot Wait. (2023). *Futures at Risk: Climate-Induced Shocks and Their Toll on Education for Crisis Affected Children; Background Study for the ECW Climate Appeal.* Available at: https://www.educationcannotwait.org/sites/default/files/2023-10/f_ecw_appeals_background_paper_mech.pdf.

resources to address the declining public funding landscape. For example, social impact bonds and development impact bonds are results-based financing models where private investors provide upfront capital for educational initiatives, with repayment contingent on achieving pre-agreed educational outcomes.[329] Similarly, income-contingent loans allow students to repay their loans based on future earnings, shifting the financial burden away from immediate post-graduation periods.[330]

Figure 33: Percentage of public education resources going to learners from the poorest and richest quintiles, Africa, 2022



Source: UNICEF and AUC, 2024, p.20.

[329] Avelar, M., Terway, A., & Frotte, M. (2020). *Innovative financing for education: A systematic literature review.* Available at: https://resources.norrag.org/resource/595/innovative-financing-for-education-a-systematic-literature-review.

[330] Palacios, M. (2014). *Overemphasized Costs and Underemphasized Benefits of Income Contingent Financing.* In B. Chapman, T. Higgins, & J. E. Stiglitz (Eds.), Income Contingent Loans: Theory, Practice and Prospects.

Innovative financing approaches, however, do come with additional challenges and costs and potentially unintended negative effects on equity. While these financing models introduce new opportunities, they also present challenges. Social and development impact bonds often carry high design, transaction, and administrative costs, potentially offsetting the funds raised.[331] Furthermore, implementing these mechanisms requires robust regulatory frameworks and strong data systems to track performance, which many low-income countries lack.[332] Another critical concern is the potential negative impact on equity and social justice. Mechanisms focused on measurable outcomes may lead to the exclusion of marginalised groups or target regions where success is more likely, further exacerbating inequalities in education. Moreover, increased private sector involvement raises concerns about shifting the focus from public good to profit, as seen in instances of privatisation in the education sector.[333]

Despite related challenges, innovative financing remains an area of growth, and lessons on implementation can be learned from Uganda, Zambia, Ghana and Tunisia. These challenges notwithstanding, innovative financing remains an area of growing interest. Mechanisms like the GPE Multiplier Fund and the Education Outcomes Fund offer promising models for leveraging private capital for educational development.[334] Moving forward, the success of innovative financing for education will depend on its ability to generate additional, sustainable funding while maintaining a focus on equity and inclusivity. Several countries have experimented with innovative financing models, demonstrating the potential of these mechanisms to address education funding gaps. These include using Education Impact Bonds in Uganda, Results-based Financing in Zambia, and PPPs for School Infrastructure in Ghana and Vocational Training in Tunisia. The following examples provide valuable insights into how innovative financing can be structured, implemented, and scaled across different regions. They also highlight the successes and challenges that come with leveraging private-sector engagement in public education systems.

Legal and regulatory frameworks that clearly define the roles and responsibilities of different actors need to be in place to facilitate innovative education financing. Scaling and transferring innovative education financing models depend on several critical elements influencing their effectiveness and adaptability across different contexts, such as robust legal frameworks, efficient monitoring systems, cost management, equity considerations, and effective public-private collaboration. Regulatory frameworks play a crucial role in enabling the success of innovative financing mechanisms. For instance, laws like Uganda's Public Private Partnership Act (2015) and Ghana's Public Private Partnership Act of 2016 establish transparent processes for engaging private sector investment in education. These frameworks ensure that investors and governments have clear guidelines for risk-sharing, performance monitoring, and evaluation. Countries looking to adopt similar financing models should ensure their legal frameworks are robust and adaptable enough to facilitate such partnerships. Establishing or amending regulations that define the roles of private investors, governments, and third-party evaluators is essential to scaling these initiatives successfully.

Effective monitoring and evaluation systems that are efficient rather than cumbersome are also required to ensure accountability and robust tracking of outcomes. Monitoring and evaluation systems are another critical element influencing the transferability of innovative financing mechanisms. Results-based financing models, such as Zambia's results-based financing for literacy and numeracy, require sophisticated data systems to track educational outcomes and measure performance against pre-agreed targets. Scaling such models in other countries would require strong data systems to ensure accurate and timely data collection, particularly in rural and underserved areas. Without reliable data systems, scaling these performance-based models may be hindered by difficulties in tracking outcomes,

[331] Dalberg, Children's Investment Fund Foundation, and UBS Optimus Foundation. (2018). *World's First Development Impact Bond in Education.*

[332] Wattanga, H. (2015). *The four great challenges leaders in African education are tackling.*

[333] Education Commission. (2016). Exploring innovative financing for global education: early lessons from Kenya and East Africa.

[334] GPE. (2024b). *GPE's innovative financing leverages much-needed capital in challenging times* and UNICEF. (2024). *Education spending in Africa: The Impacts of COVID 19 and possible recovery pathways.* Available at: https://www.unicef.org/esa/media/13876/file/Education Spending in Africa The impacts of COVID-19 and possible recovery pathways.pdf.pdf.

ensuring accountability, and assessing impact. Cost management and efficiency also influence the scalability of innovative financing models. While mechanisms like impact bonds offer potential for private capital mobilisation, they often carry high design, transaction, and administrative costs. In Uganda's case, administrative burdens and complex evaluation processes became challenges to scaling the initiative. Governments and stakeholders must consider ways to streamline these processes, possibly by leveraging technology or simplifying monitoring frameworks to reduce overhead costs. For countries with limited financial and technical capacity, addressing these cost factors will be critical to ensuring that scaling does not compromise efficiency.

Equity and social justice considerations must also inform the transferability and scaling of innovative financing models. While these mechanisms can mobilise additional resources, they also risk exacerbating inequalities if not properly managed. For instance, performance-based contracts, such as impact bonds, may incentivise service providers to focus on easily achievable targets, leaving behind marginalised groups or students in difficult-to-reach areas. To transfer and scale these models equitably, countries should design inclusive frameworks that ensure marginalised populations benefit equally. This might involve setting specific targets for vulnerable groups or designing differentiated approaches prioritising underserved regions.

The creation of incentives to attract private financing is often required, but care should be taken to ensure these incentives align with national goals and public interest. Public-private collaboration and incentives are critical factors in public-private partnerships. Ghana's success in raising over 150 million US dollars for school infrastructure through its PPP model highlights the importance of creating incentives for private sector involvement, particularly in rural areas where returns are lower. Offering tax breaks, risk-sharing mechanisms, and guarantees can help attract private investment to regions where education infrastructure gaps are most acute. For scalability, countries should assess their ability to create attractive conditions for private investors, ensuring that investments align with national education goals and public interest.

3.1.3 Conclusion

The planning and management of education systems play a critical role in ensuring that national education objectives are met and sustained over the long term. The development of credible, evidence-based education sector plans is essential for addressing the unique challenges facing countries, particularly in Africa. The successful implementation of these plans is equally important. Countries such as Malawi and Namibia have made significant progress in aligning their strategies with data-driven policies. However, many others are still in the early stages of operationalising their plans, often hampered by inadequate institutional capacity and insufficient funding. To improve implementation, it is essential that countries strengthen institutional capacities, ensure sustainable financing, and establish robust monitoring and evaluation frameworks that can adapt to changing needs.[335] Furthermore, engaging key stakeholders, from government ministries to local communities, remains critical in ensuring that education reforms are inclusive and responsive to the diverse needs of learners.[336] Finally, integrating risk mitigation strategies into sector plans will help countries build resilient education systems capable of withstanding crises and ensuring continuity of quality education, even in challenging environments.

Education financing plays a fundamental role in implementing plans and developing sustainable and equitable education systems. However, education financing remains inadequate and inequitable in Africa, with governments, on average, dedicating fewer resources over the past 10 years. Adequate equips countries with the resources needed to build infrastructure, train teachers, and provide essential learning materials and technology, all of which are critical to achieving national

[335] IIEP-UNESCO. (2015). *Guidelines for the Development of Education Sector Plans.*

[336] GPE. (2020). *Improving Learning and Equity Through Stronger Education Systems.* Available at: https://www.globalpartnership.org/node/document/download?file=document/file/2018-05-gpe-2020-strategic-plan.pdf.

education goals. However, many low-income countries face significant financial shortfalls, making it difficult to meet these needs. Global commitments, such as the Incheon Declaration (2015) and the Addis Ababa Action Agenda (2015), have set ambitious targets, urging countries to allocate 4-6 per cent of GDP or 15-20 per cent of public expenditure towards education. Yet, despite these goals, many African nations fall short with declining average expenditures and considerable disparities in funding across the continent and within countries. While countries like Sierra Leone and Namibia demonstrate strong investment by exceeding the 20 per cent benchmark, others, such as Nigeria and Somalia, fall below the 15 per cent threshold, highlighting underfunding that deepens existing educational inequalities.

Innovative financing in education is increasingly common in Africa. While it offers significant additional revenue streams, it also presents new challenges to efficiently achieve equitable education targets. In response to financing gaps, innovative financing mechanisms are gaining traction as alternative solutions. RBF, PPPs, and Education Impact Bonds are increasingly being utilised to mobilise additional resources and improve the efficiency of education financing. These approaches leverage private sector involvement to supplement government funding, as seen in Ghana's and Tunisia's success with PPPs, which have generated significant investments in educational infrastructure and vocational training. Similarly, Uganda's Education Impact Bonds have tied private capital to measurable educational outcomes, incentivising both public and private actors to focus on improving literacy rates. Despite their potential, innovative financing models present challenges, including high design, transaction, and administrative costs. To ensure these models are successful, countries must develop adaptable and transparent regulatory systems that facilitate partnerships and support the sustainable integration of private capital into education funding. Furthermore, monitoring and evaluation systems must be robust to track educational outcomes and assess the success of these models. Governments must also focus on cost efficiency, as the high costs associated with some models, such as impact bonds, may hinder their broader adoption. Lastly, ensuring equity in the deployment of these mechanisms is critical to avoid exacerbating existing inequalities and ensuring that all populations, including marginalised groups, benefit from these innovations.

3.2 Evidence generation and uptake in education policymaking and implementation

3.2.1 Introduction

Both the SDG 4 Framework for Action and CESA identify the importance of data and evidence for education policymaking and outline how their use can be improved. The importance of data and evidence to inform policymaking to achieve SDG 4 is clearly articulated in the Education 2030 Framework for Action, which outlines a 'resolve to develop comprehensive national monitoring and evaluation systems' for evidence-informed policy formulation, education system management, and accountability. A similar intention is articulated in CESA's Strategic Objective 11: "Improve management of education system as well build and enhance capacity for data collection, management, analysis, communication, and use". This strategic objective is accompanied by four action areas, including support to EMIS, supporting evidence production and dissemination and, most importantly, use. Research supports this planned strengthening of data systems. It has been found that every 1 US dollar invested in strengthening

data systems delivers an average return of 32 US dollars through improved efficiency, better resource allocation, and the ability to design policies that directly impact learning outcomes and equity.[337]

Despite the undoubted importance of data for informed decision-making and the longstanding efforts to improve them, many countries' education information ecosystems are not at the desired levels. LASER is an initiative of the UNESCO Institute for Statistics to help assess whether a country's education data ecosystem is collecting and utilising the variety of data sources required for policymaking and overall governance of the education sector. It rates education data ecosystems on five main dimensions:

- **L**earning assessment system meets international standards.
- **A**dministrative data on key indicators is regularly collected and covers major education issues and dimensions of inequality.
- **S**urvey population system collects education indicators and dimensions of inequality regularly.
- **E**xpenditure is reported regularly for all sources of private and public expenditure.
- **R**eview and Monitor Progress looks at accountability through the publication of indicators reports, elaborating national plans and monitoring progress through benchmarks.[338]

Its assessment of the education information ecosystems in Africa is presented in Figure 34 below. The figure shows that no country gets the maximum rating on any of the five dimensions, while a number get close to the minimum. Areas of common weakness are learning assessment and expenditure data, while administrative data systems tend to be relatively strong. Once again, the country-level data demonstrates the range of contexts and education systems that exist in Africa.

Evidence from research has a key role to play in achieving SDG 4 and CESA. However, its lack of use, rather than a lack of research, is the biggest barrier limiting its impact. Although a precise definition of evidence in education is highly contested, it commonly encompasses a wide range of sources and types, including sector-generated data and evidence from research and practice-informed advice from individuals and organisations.[339] Recent research suggests that only a small proportion of education-related research papers get cited in SDG 4 policies and that factors other than research quality affect their influence.[340] Although relatively plentiful, existing education research is rarely translated into actionable guidance to be used by policymakers and practitioners, suggesting that it is not the lack of new research that is the greatest obstacle to progress but the failure to use what is already known.[341] There is a clear need to create comprehensive and systematic syntheses of existing education research evidence and to develop collaborative networks that ensure research is designed and used to address the identified needs of policymakers and practitioners to reinforce and strengthen core education system functioning.[342]

[337] Global Partnership for Sustainable Development Data. (2022). *Investment Case: Multiplying Progress Through Data Ecosystems.* Available at: https://www.data4sdgs.org/resources/investment-case-multiplying-progress-through-data-ecosystems.

[338] UNESCO. (2024e). *LASER for Education Information Ecosystem.* Available at: https://tcg.uis.unesco.org/laser/.

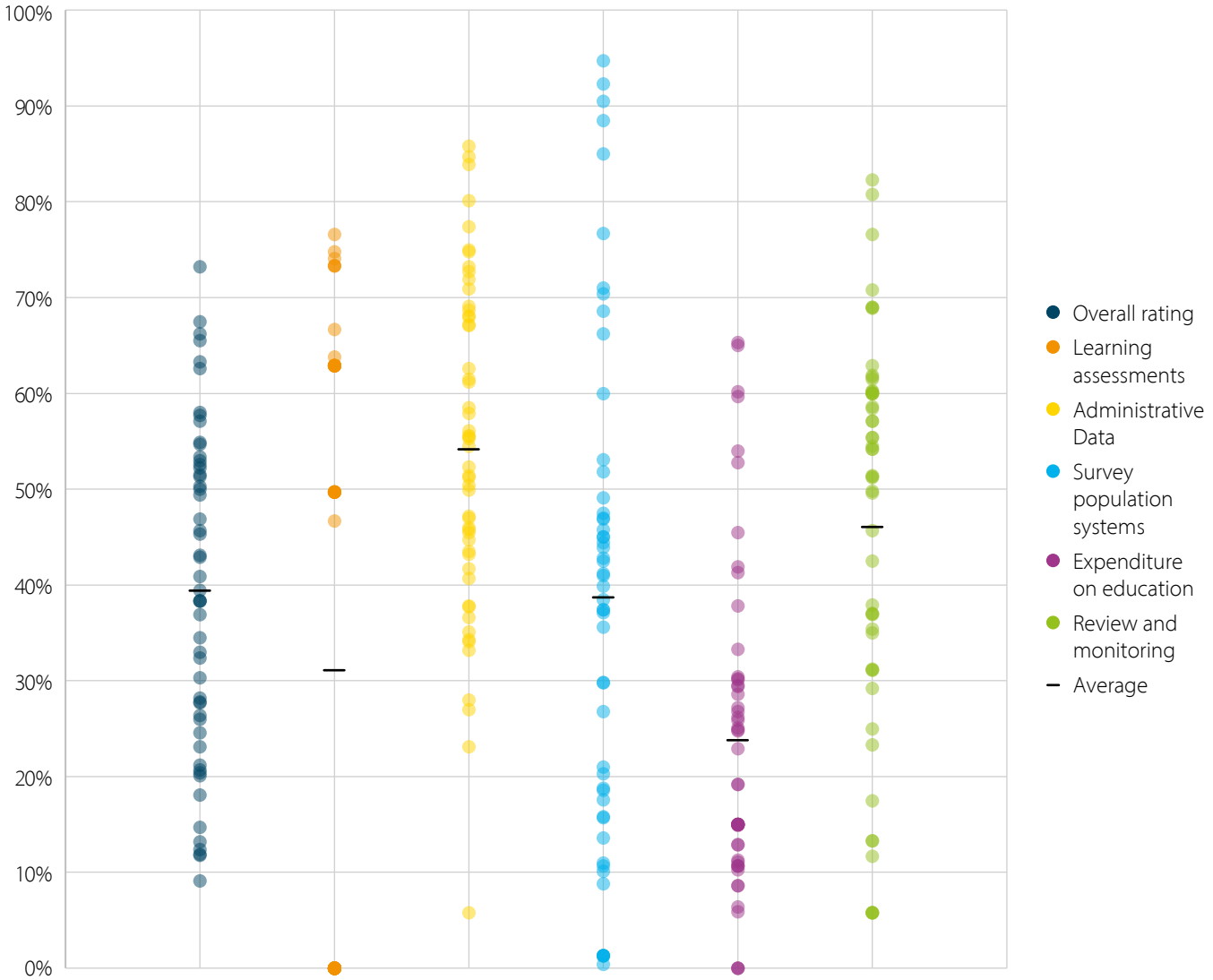
[339] Jacobs Foundation. (2023). *Review: Policy Labs and Evidence Use in Education.* Available at: https://jacobsfoundation.org/wp-content/uploads/2023/10/JF_Policy-labs-and-evidence-use-in-education_rev-2024.pdf.

[340] Mahfouz, B., Capra, L., & Mulgan, G. (2024). 'Assessing the influence of research quality on policy citations: Quantitative analysis finds non-academic factors more likely to influence how papers get cited in SDG policy', *Sustainable Development*, 32(7), pp. 1234–1250. Available at: https://onlinelibrary.wiley.com/doi/full/10.1002/sd.3214.

[341] Education.org. (2021). *Calling for an Education Knowledge Bridge: A White Paper to Advance Evidence Use in Education.* Available at: https://whitepaper.education.org/download/white_paper.pdf.

[342] Ibid.

Figure 34: UIS LASER Education Information Ecosystem ratings by country and category



Data source: UIS LASER for Education Information Ecosystem country summary reports. Note: Data values by country and year are provided in the Annex 2.

3.2.2 Challenges and responses

3.2.2.1 Production and utilisation

Despite the widespread recognition of the importance of data and evidence to achieving education goals in Africa, key evidence and data are often lacking and when they do exist, they are often underutilised. The Global Education Evidence Advisory Panel identifies the provision of information on the benefits, costs, and quality of education as a Great Buy while also acknowledging that there are many important education interventions lacking consistent and actionable evidence.[343] National education systems often struggle to produce and effectively manage the required information due to shortages of skilled human capital and high turnover of related staff. Many countries lack the sustained domestic

[343] Global Education Evidence Advisory Panel. (2023). *Cost-Effective Approaches to Improve Global Learning - What does recent evidence tell us are "Smart Buys" for improving learning in low- and middle-income countries?* Available at: https://www.globalpartnership.org/node/document/download?file=document/file/2024-02-educate-africans-21st-century-seizing-moment-rev2.pdf.

financing required to conduct regular, detailed data collection and analysis, often relying on external financial and technical support.[344] The data that do exist are often underutilised or utilised poorly due to a number of reasons: i) a lack of a strategic vision leading to collection for the sake of collection and stakeholders focusing on consolidating and reporting data rather than on analysing and using them; ii) a lack of confidence in the data,[345] which can contribute to a vicious cycle between data use and data quality;[346] iii) a lack of time to process too much data, often countries collect a large amount of repetitive and unusable data with heavy reporting burdens meaning there is insufficient capacity to make effective use of the useful data that does exist;[347] and iv) fragmented data systems and lack of coordination and collaboration across actors[348] resulting in duplication of effort and datasets that cannot be easily combined therefore limiting the overall utility of the existing data collection.[349]

3.2.2.2 Administrative data

Administrative data, often managed through a centralised EMIS, is a common source of education data for policymakers. However, they are frequently underutilised. Administrative data refers to that managed and sourced through the providers of education services, and it typically includes information on students, teachers and schools. This is often managed through a centralised EMIS that collects data via an annual census questionnaire completed by educational institutions. However, despite millions of dollars being invested annually to strengthen EMIS—ranging from 1 million US dollars to 7 million US dollars per project as highlighted by World Bank studies[350] — inefficiencies remain widespread. A 2018 review of GPE[351] partner countries in Sub-Saharan Africa found persistent issues with data collection, analysis, and usage, signalling that these investments are not yielding the expected returns. A recent analysis of 19 ESPs in Africa found that only two were deemed to have a functioning EMIS that is used in decision-making.[352] In both cases, data accessibility and harmonisation were the principal reasons given for the usability of the EMIS. In the other 17 countries, EMIS data were largely unused, even in cases where the EMIS systems were functioning well. This echoes the 2019 findings of ADEA following their support of EMIS systems in 45 African countries.[353] Underutilisation should not be mistaken for no utilisation, as in most contexts, some utilisation of EMIS data does often exist for sector plan monitoring or resource management, for example, the Gambia and Togo, where EMIS are used to allocate human resources, or in Zambia and the United Republic of Tanzania, where enrolment data are used to calculate school grant allocations. However, these examples also illustrate how the existing data could be used more effectively, for example, by including equity dimensions in school grant allocation formulae to address inequalities in resources or learning outcomes.

[344] UNESCO-IIEP. (2024). *Data for Education.* Available at: https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2024/01/Data-for-Education-PDF-1.pdf.

[345] UNESCO-IIEP. (2023). *Support for education quality management programme Policy brief #1 Assessing student learning: Yes, but what next?*

[346] UNESCO-IIEP. (2024). *Data for Education.* Available at: https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2024/01/Data-for-Education-PDF-1.pdf.

[347] UNESCO-IIEP. (2023). *Support for education quality management programme Policy brief #1 Assessing student learning: Yes, but what next?*

[348] White paper on education. Available at: https://whitepaper.education.org/download/white_paper.pdf

[349] UNICEF. (2023). *How to unleash the power of data to transform education policies*. Available at: https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2024/01/Data-for-Education-PDF-1.pdf.

[350] Lessons learned from World Bank education management information system operations: portfolio review, 1998-2014 (The World Bank, 2017).

[351] See 2018 Annual portfolio review (GPE, 2018).

[352] Carr-Hill, R. (2023). Education Sector Plans and their Implementation in Developing Countries: A Comparative Analysis (1st ed.). Routledge. Available at: https://doi.org/10.4324/9781003264002.

[353] GPE. (2019). *How can education management information systems facilitate better planning and policy dialogue in Africa?* Available at: https://www.globalpartnership.org/blog/how-can-education-management-information-systems-facilitate-better-planning-and-policy.

Box 14

Data Driven Districts programme in South Africa

The Data Driven Districts programme in South Africa provides over 14,000 teachers and education decision-makers with user-friendly data dashboards, helping them to better support the learning of nearly 12 million students. The Data Driven Districts (DDDs) programme in South Africa was launched in 2014 to support education actors and decision-makers at all levels to better understand and utilise the large amounts of data being regularly collected. A pilot study in 2015 covered 2 million learners across two provinces, with 97 per cent of schools submitting data. The pilot demonstrated the potential of the dashboard and its utility to education managers, and its success accelerated the national scale-up with four more provinces joining in 2016. Since then, the DDD dashboards have continued to expand their reach and have been updated to introduce new features and graphical representations and improve mobile functionality. By 2024, the DDD programme covered 8 of 9 provinces, 67 of 75 districts, and nearly 12 million learners[354] and had over 14,000 active users in one term in 2024.[355]

The dashboards combine data of multiple types and from several sources, allowing users at different levels, from provincial to school, to tailor the analysis and presentation of information to their needs. The dashboards allow users to analyse data on attendance, school assessments, promotion, and national examination pass rates per term and tracked over time. Users at different levels can analyse the data from differing viewpoints, for example, province, region, district, circuit, cluster, and school. Schools and selected users can even view it from the individual learner and educator levels. This allows planners to view planning and operation information in relation to performance while also allowing teachers and head teachers to instigate and monitor term-to-term goal tracking.[356]

The benefits of the system have been observed and documented by staff at school and decentralised levels, and the majority of staff are likely to recommend it to a colleague. The impacts of such a comprehensive tool vary and depend significantly on the usability and the end users' capacity to engage with and act on the information provided. The programme has documented that for some users, the benefits were obvious and immediate, but for many others, it took time and perseverance. The tool has allowed headteachers to instantly compile reports that previously would have been extremely time-consuming, for example, checking subject performance, doing term-by-term comparisons, and monitoring absenteeism. It facilitates headteachers' conversations with parents and teachers to identify learners and subjects of weakness who need greater support. It has also been found to support district education officers in monitoring the learning performance among their schools and informing their school visits and subsequent planning sessions. The dashboard also enables educators and education managers to track their schools and districts' comparative performance over time and has served as motivation when efforts made have led to observable improvements in performance. The latest annual user survey in October 2024 found high levels of satisfaction, with 78 per cent of respondents 80-100 per cent likely to recommend the DDD dashboards to a colleague,[357] and the 2020 independent evaluation found that 96 per cent of district officials interviewed believed the dashboard had improved efficiency.[358]

The programme utilises a wide range of communication techniques to inform and empower staff and to learn from them in order to continually adjust and improve the dashboard. All first-time users are encouraged to attend an orientation webinar, and online courses are also available to all registered users via a dedicated DDD Online Learning Hub. The learning hub also contains self-help video clips and PDF guides. The DDD website contains posts on user insights and success stories, and a regular newsletter

[354] Michael & Susan Dell Foundation. (2024). 'Data Driven Districts: Improving South African Student Outcomes'. Available at: https://www.dell.org/ideas/data-driven-districts/

[355] News and insights for DDD Dashboard users available at: https://createsend.com/t/d-F93384A8459954DF2540EF23F30FEDED.

[356] See Education Data Dashboard. Available at: https://www.dbedashboard.co.za/dashboard.

[357] News and insights for DDD Dashboard users available at: https://createsend.com/t/d-FEBF166CBEA120942540EF23F30FEDED.

[358] See education report on performance indicators. Available at: https://www.dbedashboard.co.za/_files/ugd/6beb6f_c5ce7e26e71543dca128875ebd4f9e4b.pdf.

including new features and user experiences has been published every two weeks since 2022.[359] Many of the new features and enhancements come from the users directly who are encouraged to suggest changes and report any issues experienced with the dashboards. The most significant changes to the platform are then published in a bi-annual "What's new on DDD" document.[360]

An independent evaluation identified key success enablers, including role models, meaningful training, support and options for those lacking connectivity, shared vision and partnerships. To inform the scale-up of the DDD dashboards, an independent evaluation of the initial phase was conducted in 2020.[361] The evaluation identified a number of specific enablers of success and opportunities for future growth. The first of these was the importance of local influencers and role models, especially people with differing competencies and perspectives, in driving participation and adoption. Providing the tool or dashboard is insufficient; it must be accompanied by meaningful training to promote effective usage. The training can also provide broader professional skill development beyond the use of the dashboard, which is valued by participants. Users, through training and adaptations in the dashboard, should be supported to identify solutions and next steps; the use of the dashboard should not end with problem identification. Nearly one-third of users were in less-than-ideal contexts, for example, lacking devices or connectivity. The clear added value of the dashboard and the offline options offered by the programme allowed all schools to submit data and access their reports. The programme, from the outset, was a close collaboration between diverse actors, including the Department of Basic Education, NGO partners, the private sector, and educators throughout the country. This allowed for flexible and scalable approaches to stakeholder engagement, school onboarding and capacity building.

3.2.2.3 Learning assessment data

Learning assessments and examinations, though less common and comprehensive than EMIS, do exist in some form in most countries, but utilisation in national planning is often limited. Learning assessments refer to measurements of the outcomes of the education process, and they generally take the form of end-of-cycle or selective examinations or diagnostic assessments. Examinations are generally administrated to an entire year group, whereas assessments can be either census-based or sample-based. As discussed in the brief on foundational learning skills 2.3, there is a paucity of regular and robust learning assessments, especially at the foundational stages across Africa. However, nearly all countries have at least one functional and regular learning assessment process. Once again, as with EMIS data, underutilisation is a bigger challenge than the complete lack of data. A 2022 comparative analysis[362] of the use of learning assessment data for educational planning in six African countries found that learning assessments were used in sector analyses but generally only for describing low learning levels rather than identifying their causes. Similarly, ESPs appear to be only superficially informed by learning assessment data, for example, used for monitoring and reporting rather than specific policy development. The analysis identified several common causes of this underutilisation: a lack of a practical regulatory framework to coordinate and specify the objectives of the assessments; limited communication of assessment data both in form and specified audiences; a lack of collaboration and communication between actors working on the assessments and those in planning and policy development and implementation. The recommendations for international partners, who often heavily support learning assessments, included investing in local capacities rather than outsourcing, aligning efforts, not national plans and policies, and relying as much as possible on existing national assessments rather than creating new ones.[363]

[359] See news and updates on data driven districts. Available at: https://www.dbedashboard.co.za/news/categories/newsletter.
[360] See education sector performance review. Available at: https://www.dbedashboard.co.za/_files/ugd/6beb6f_cbf95dbd4ef04f359549d6f1c91394c3.pdf.
[361] See education report on performance indicators. Available at: https://www.dbedashboard.co.za/_files/ugd/6beb6f_c5ce7e26e71543dca128875ebd4f9e4b.pdf.
[362] See a comparative analysis on learning assessment data. Available at: https://doi.org/10.54675/ONGP4058.
[363] See a comparative analysis on learning assessment data. Available at: https://doi.org/10.54675/ONGP4058.

Box 15

The use of learning assessment data in the Gambia

The Gambia replaced selective school examinations at the end of the primary cycle with several diagnostic assessments at different grade levels. In 2002, the Gambia Primary School Leaving Certificate was replaced by the National Assessment Test (NAT) for students in Grades 3, 5, and 8. The NAT brought with it a change of perspective from assessment as a sanctioning tool (the previous examinations) to a diagnostic tool to strengthen the system and guide the improvement of learning of students.[364] In addition to the NAT, an Early Grade Reading Assessment (EGRA) and an Early Grade Mathematics Assessment (EGMA) in Grades 1, 2, and 3 were also introduced, meaning a great deal of information on student learning outcomes was available in Gambia. In contrast to the NAT, which is census-based, the EGRA and EGMA are sample-based. This means NAT data comes from and is immediately applicable to all primary schools. In contrast, EGRA and EGMA data can only be used at the higher levels, for example, national or regional, for which the sample is representative.

Learning assessment data is shared with and utilised at all levels, from national policymakers to parents and school communities. The two different forms of assessment are generally used at various levels and for different purposes. Due to its complete coverage, as census-based, the NAT lends itself to school-level utilisation, whereas EGRA and EGMA are used to inform policy and decision-making at the central level. The use of learning data (from NAT) is institutionalised at the school and community level through School Participatory Performance Monitoring, an annual meeting where parents and communities come together to discuss their school's performance. This is facilitated by the production and distribution of school scorecards that present students' learning performance and the schools' available resources compared to the available resources and performance of other schools in the region/district/nationally. These meetings and the data provided by these scorecards feed into the development of School Improvement Plans. The plans are then used to inform the strategic management of resources and introduce targeted interventions, such as remedial classes for struggling students. The plans and their use of NAT data are also required to obtain school improvement grants. Providing parents and educators with specific and context-relevant information on the quality of education, as in this example from the Gambia, is identified as a Great Buy by the 2023 Global Education Evidence Advisory Panel.[365] NAT results have also been used to inform teacher postings at decentralised levels, with teachers with strong skills in a subject area who have transferred to schools where there are lower levels of learning. In contrast, EGRA and EGMA data have played an important role in informing national policies and standards, for example, promoting the use of national language in early-grade instruction and developing teaching methods, materials, and teacher training.[366]

The effective utilisation of learning assessment data results from dedicated policy and organisational structures at multiple levels, maximising the utility of what data exists by combining datasets and making the data understandable to its different end-users, all within the context of strong national leadership and complementary external support. The utilisation of learning assessment data in the Gambia is directed and supported by a dedicated Assessment Policy, within which provisions for information flow and responsibilities are established. It identifies a coordinating Assessment Unit that works collaboratively with a range of actors, including the Ministry Planning Unit, to ensure that the learning assessment data is captured, analysed, disseminated and used correctly. The dissemination of the data to the sub-national level is institutionalised in Coordinating Committee Meetings. These meetings are held at least once a year in each of the six regions to share and discuss the latest learning assessment data with a wide range of stakeholders in a process described by local actors as comprehensive, relevant,

[364] UNESCO IIEP. (2020). The use of learning assessment data: The Gambia. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000372532.

[365] Great Buys are interventions that are highly cost-effective and are supported by a strong body of evidence. Available at: https://documents1.worldbank.org/curated/en/099420106132331608/pdf/IDU1977f73d7122b1147771980c1c5a14598eef8.pdf.

[366] See a comparative analysis on learning assessment data. Available at: https://doi.org/10.54675/ONGP4058.

participatory, and inclusive. The utility of the existing data has also been enhanced by linking NAT data to EMIS data, education sector human resources data, and data from regional education departments, facilitating evidence-based sector reviews and the development of data-led interventions. It also allows decision-makers at all levels to analyse learning performance in the context of the available resources. The ever-present tension and debate between data completeness and usability of data appears to have favoured usability and is best illustrated in the community scorecards, where simple icons and imagery present learning assessment data and resources of the school compared to schools elsewhere. An assessment of the Gambia experience found that positive utilisation of learning assessment data was partly thanks to the strong national leadership and desire to develop the system, together with an aligned commitment from external partners to building national capacities rather than imposing their own vision.[367]

Areas for improvement remain and could inform similar efforts in other countries, including understanding data usage and its impact, ensuring timely dissemination of data, enhancing national capacities, and managing the balance between accountability and unfair blaming. Studies on the utilisation of learning assessment data in the Gambia have pointed to several areas that remain in need of improvement, many of which are recognised by actors within the system. One key area is the need to understand how the data are being used at different levels, whether they are being understood and used as intended, and to what degree related school improvement plans are being implemented. Although a common issue facing the entire sector, technical and financial capacity relating to the assessments needs to be enhanced as many aspects rely on external support. Similarly, the utilisation of learning assessment data has led to enhanced problem identification and solution development. However, without the sufficient capacity to implement these changes, the assessment data can have no impact; this has been particularly common at cluster and school levels. Finally, widely disseminating and encouraging the use of data that relates to the performance of individuals and institutions can have unintended negative consequences, for example, there were cases where NAT results were used to dismiss school heads or increase undesirable competition among schools. Therefore, the dissemination of learning assessment data needs to be carefully managed to ensure it is used positively and to introduce fair accountability, accompanied by additional support provided where it is most needed.[368]

3.2.2.4 Financial data

Many countries suffer from inadequate tracking and reporting of education spending, and unrealistic capital expenditure budgeting contributes to available resources being underutilised. Financial and expenditure data refers to details about the allocation and utilisation of financial resources within the education system. Public spending data on education generally comes from the Ministry of Finance and the Ministry of Education, whereas private household spending on education is generally derived from household surveys. These data are crucially important to understand the efficiency, equity and sustainability of education provision and inform decisions on resource allocation and financial planning of the education sector.[369] The openness and transparency of the public spending data is also an important consideration. It refers to the utilisation of funds that the public has provided to achieve stated and agreed upon national education and development goals and international and regional goals such as SDGs and those of CESA. However, a 2024 analysis by the AU and UNICEF[370] on education spending in Africa found that many African governments had inadequate routine tracking and reporting mechanisms

[367] See a comparative analysis on learning assessment data. Available at: https://doi.org/10.54675/ONGP4058.

[368] UNESCO-IIEP. (2020). The use of learning assessment data: The Gambia. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000372532.

[369] UNESCO Institute for Statistics. (2024). *Data for Education: Monitoring progress towards SDG 4.* Available at: https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2024/01/Data-for-Education-PDF-1.pdf.

[370] UNICEF. (2024). *Education spending in Africa: The Impacts of COVID-19 and possible recovery pathways.* Available at: https://www.unicef.org/esa/media/13876/file/Education%20Spending%20in%20Africa%20%20The%20impacts%20of%20COVID-19%20and%20possible%20recovery%20pathways.pdf.pdf.

for education sector spending. It found that this lack of budget transparency in the education sector was symptomatic of broader budget challenges, as only two out of 42 African countries were generating and publishing sufficient information throughout the budget cycle. It also found that African countries generally struggled with accurate capital expenditure budgeting and execution. This often leads to delays in the construction of vital infrastructure, for example, schools, classrooms and the procurement of key resources such as desks and chairs. In 14 countries, almost a third of approved budgets for capital items were not utilised due to low absorption capacity, late disbursements and other implementation bottlenecks.

3.2.2.5 Household surveys and census

Household surveys can potentially provide a wealth of important complementary information to education policymakers, and accurate population census data and projections are fundamental to robust long-term education sector planning. Although not directly managed by education sector actors, both household surveys and population censuses can greatly impact the quality and usability of education sector data. Household survey data and population censuses provide potentially crucial information to education policymakers. They can provide data on education outcomes, for example, literacy, levels of education attained, information on equity dimensions through households and individual level socioeconomic indicators, and they can provide information on labour market involvement. Despite this potential wealth of information, household surveys are often underutilised in education sector analyses or in informing policy development and implementation. For example, socioeconomic indicators could be used to add contextual equity dimensions to school grant allocations or teacher salaries or targeting TVET provision to particularly relevant local trades and industries. Population censuses have a more direct, if generally invisible, impact on the most commonly used education indicators, for example, enrolment rates. The underlying population data is generally provided to Ministries of Education by central statistics offices. However, as censuses are not conducted yearly, population projections are most often the basis for enrolment rate calculations. The population projections provided to the Ministry of Education can sometimes have several underlying issues, as detailed in the Education Sector Analysis Methodological guidelines,[371] and these can be exacerbated if a recent population census is unavailable. It is crucial that any projections are robust and realistic to inform long-term education planning, for example, projecting future teacher and school construction needs or ongoing monitoring of system performance, such as targets based on enrolment rates.

3.2.3 Conclusion

Data and evidence are widely recognised as being essential to achieving education goals in Africa. However, despite significant longstanding national and international investments, essential data gaps exist, and where data and evidence do exist, they are often under or poorly utilised.

Effective use of data and evidence can be supported by having a clear strategic vision or policy that focuses on data use and guides data collection accordingly. National data and evidence generation systems and processes tend to focus on data collection and reporting rather than data utilisation. Given the perceived importance of data and evidence, existing national data systems are often pressured to collect more and more, which negatively affects data utilisation and, ultimately, data quality. The recommendations of the Mid-Term Review (MTR) of CESA's own results framework are relevant to many country contexts: 1) the amount of data being collected should be prioritised and reduced; 2) greater emphasis should be placed on data utilisation at all levels. The best practices identified illustrate this approach by having a strategic vision or policy that clearly identifies the required information and places data utilisation at the centre.

[371] UNESCO. (2021e). *Global education monitoring report 2021/2: Non-state actors in education: Who chooses? Who loses?* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000230532.

Coordination and collaboration are necessary to maximise the utility of different data systems and evidence-generation efforts. Currently, most countries collect some data on education spending, human resources, system capacity and student flows, and learning outcomes. However, in most cases, these systems are separate. By linking these data, as in the examples of the Gambia and South Africa, education stakeholders can be empowered to make much more informed decisions. A strategic vision or policy on evidence generation and use should clearly outline how existing data collection processes and systems can be combined to enhance their overall utility. Maximising the utility of data systems is particularly relevant in resource-constrained contexts where technical staff capacity and financial resources are limited. By systematically linking education system inputs to the expected outcomes, it creates greater possibilities for evidence generation on the effectiveness of new policies or initiatives.

End-user utilisation can be maximised by ensuring data relevance, user-friendly accessibility and related capacity building to understand and effectively use the available information. End-users need to be supported to maximise the utility of available data and evidence. Simply making this information available is insufficient. The first step in this is ensuring that the data and information are relevant to and easily accessible to end-users and presented in a user-friendly format. Such tools should be designed and continually refined based on user-feedback; the DDD dashboards of South Africa are a great example of a constantly evolving tool with an active and well-supported user community. Users must be able to understand the data they are presented with and how they are expected to respond to it. It is also important that the users have a prescribed and meaningful system role in which to use the information, such as the school improvement plans developed by school communities in the Gambia.

Section 4

Conclusions and recommendations

4.1 Summary

At a continental level, the trend analysis of the targets and goals of CESA and SDG 4 suggests extremely limited progress. It appears that access to education in Africa, including basic, TVET, and higher education, is not increasing significantly and is certainly not at the hoped-for rates. Generally, gender gaps disadvantaging girls in terms of access are slowly closing. In contrast, significant gender gaps with disadvantaged boys are widening in primary completion in Sub-Saharan Africa and lower and upper secondary completion in Northern Africa.

Perhaps of even more concern is that the quality of education is also not improving, whether measured in terms of basic infrastructure and inputs or learning outcomes. The average school student in Africa today is about as likely to have a qualified teacher and have access to basic facilities such as water and electricity as their peers from 10 years ago. In terms of learning outcomes, the limited evidence available suggests that levels of learning are very low and actually decreasing rather than increasing.

This lack of significant progress can be partly explained by three contextual factors, the first being the rapid population growth across the continent. Stagnating enrolment rates and pupil-to-teacher ratios mask significant expansions of education systems in absolute numbers as they struggle to keep pace with increasing numbers of children and youth. In addition, expanding coverage at all levels and reaching the most disadvantaged children includes students whose personal and socioeconomic backgrounds are less favourable to learning, which in turn is likely to contribute to lowering—or slowing the improvement of—average learning achievements. In many cases, education systems are running to a standstill. The education of learners in Africa continues to be severely impacted by humanitarian crises, including manufactured conflicts and climate disasters. An estimated 80 million African children are currently affected by conflict, representing one in three children on the continent.[372] Over the past decade, 42 million school-aged children in Sub-Saharan Africa alone have faced climate shocks amplified by climate change.[373] The lack of progress in education access and learning can also be explained by the inadequate financing of education systems. Rather than increasing investments in education, in line with international commitments and population growth, countries in Africa are now generally investing less in education than they did in 2020 or 2015.

It is clear that something needs to change if the ambitious targets of SDG 4 and CESA are to be achieved and the fundamental human right to education is to be fulfilled for all in Africa. It is likely that difficult choices will need to be made as it appears impossible to rapidly expand access to education across multiple levels while simultaneously improving quality for an ever-larger target population in contexts of limited or reducing national budgets.

Although the continental-level trend analysis describes slow or stagnating progress, the reality underneath, within countries, regions, and education settings is much more complex and varied. Continental generalisations mask huge levels of variation and inequity in terms of access, quality and learning outcomes. The apparent stagnation also masks the dynamic realities, and the reality of the child overcoming barriers to attend school, the reality of the effective teacher in a poorly resourced and overcrowded classroom. The apparent stagnation masks millions of victories and successes that occur daily in education systems across Africa. While not shying away from the overall context, this report has attempted to highlight a number of promising responses to the identified challenges, highlighting specific solutions in specific contexts. The aim is not to identify these interventions as "silver bullets" to be transplanted and replicated in all contexts but rather to examine and learn from them, to identify and promote them so that education actors may also investigate them in greater detail and in relation to their own specific contexts and needs. An attempt has also been made (in Section 4.3) to analyse these interventions as a whole and to identify common characteristics or principles of success so that their lessons may inform the design and implementation of other successful interventions.

[372] African Union. (2024). *Armed conflict emerges as a major barrier to education access in Africa, Continental Conference reveals.* Available at: https://au.int/sites/default/files/pressreleases/44320-pr-Press_Release_-_Armed_Conflict_Emerges_as_a_Major_Barrier_to_Education_Access_in_Africa_Continental_Conference_Reveals.pdf.

[373] Education Cannot Wait. (2023). *Futures at Risk: Climate-Induced Shocks and Their Toll on Education for Crisis-Affected Children; Background Study for the ECW Climate Appeal.* Available at: https://www.educationcannotwait.org/sites/default/files/2023-10/f_ecw_appeals_background_paper_mech.pdf.

4.2 Selected promising policies and programmes[374]

4.2.1 Inclusive education policies

Developing and implementing inclusive education policies is fundamental to expanding equal access. However, they should be accompanied by proactive plans to maintain quality. Increasing access to education often involves abolishing school fees to eliminate financial barriers for low-income families. Supporting both formal and non-formal education systems is also crucial, and effective policies recognise and integrate alternative learning pathways to accommodate the diverse needs of previously excluded learners. Additionally, enacting and implementing inclusive education legislation that promotes gender equality, supports students with disabilities, and protects the rights of marginalised groups helps create a more equitable educational environment. The implementation of a policy to abolish primary school fees in the Democratic Republic of the Congo led to 2.5 million more children enrolled, reducing the gender gap in primary education. However, the sudden increase in students led to overcrowding, prompting the government to prioritise classroom construction and teacher shortages as the demand outpaced the supply. Morocco's strategic combination of extending compulsory education, expanding a conditional cash transfer programme, and integrating inclusion and decentralisation of education governance to local levels resulted in increases in enrolment and reductions in regional disparities. However, persistent gaps in infrastructure, such as the need for more classrooms and better facilities in rural areas and a shortage of trained teachers, continue to hinder the full realisation of equitable access to education. Both examples emphasise the need to proactively plan for maintaining quality when rapidly expanding access to education.

4.2.2 Alternative learning pathways

Alternative learning pathways with flexible options and compressed curricula are providing some of the most marginalised children and youth with essential foundational skills or a route to continue their education in the formal system. Successful examples of alternative learning pathways are found in many countries in the continent—some examples include Burkina Faso, Egypt, Ethiopia, Mali, and Niger. The most effective programmes are those contextualised to the specific needs of their target populations, but they generally involve a combination of: i) condensed and more focused curricula, ii) flexible class schedules or learning modalities to accommodate learners who may have other obligations during traditional school times, iii) significant community involvement, for example, identifying and supporting learners' enrolment or running the learning space; and iv) supportive and contextualised learning materials. Such programmes have been particularly effective in reducing inequalities among rural and female learners.

4.2.3 Structured pedagogy and tailored teaching approaches

Consistent with global evidence, structured pedagogy, often using the Teaching at the Right Level approach, is proving to be highly effective in improving foundational learning across Africa. Structured pedagogy, where teachers are provided with structured lesson plans, continuous training, and the necessary support to deliver high-quality, tailored instruction, has been demonstrated to be highly effective in increasing foundational learning globally and in Africa. In Zambia, for instance, a structured

[374] This is not intended to be an exhaustive list, merely to summarise and illustrate the variety of promising interventions contained within the body of the report.

pedagogy programme has reached over 160,000 Grade 3 to 5 students, leading to a 60 per cent increase in students able to read and an 89 per cent increase in those performing subtraction. A programme in Botswana also demonstrated its efficacity and how quickly meaningful results can be achieved. After only 3-6 weeks of implementation, the percentage of students unable to perform basic numeracy operations dropped from 34 per cent to 8 per cent. Morocco and Ghana have also utilised the approach effectively to reduce learning gaps among marginalised populations.

4.2.4 Continuous professional development through professional learning communities

Examples of professional learning communities have demonstrated how education systems can effectively and sustainably enhance teaching quality from within. Global evidence and best practices have demonstrated that context-specific continuous professional development is much more effective than traditional, generic, one-off training, and more and more African countries are utilising this for effective teacher training. Examples of effective continuous professional development through professional learning communities in Africa include Ethiopia, where peer-teacher communities have contributed to increased student learning outcomes. In Egypt, they have been demonstrated to be more effective than traditional training for implementing curriculum and pedagogy reforms. In Rwanda, professional learning communities have been successfully utilised to enhance the quality of school leadership. They have also demonstrated how effective and motivated teachers and leaders are in sharing their expertise with their peers and how providing space for peer-based collaboration contributes to teacher morale and, therefore, retention.

4.2.5 Community centred life skills and literacy

Community-centred life skills and literacy programmes, such as the initiative in Uganda to improve the quality of adult learning and education, have demonstrated positive results in improving levels of literacy and broader indicators of equity. The Integrated Community Learning for Wealth Creation programme, in all districts of Uganda, proved successful in enhancing the literacy skills of youth and adult learners by combining literacy teaching with the acquisition of relevant life skills, adapted to each context and in alignment with the national development agenda. The programme operates through community empowerment groups taught by a trained educator from the local community who is, in turn, supported by the programme supervisors. The trained educator may only serve for one teaching cycle (two years) to allow other community members to take on the role. Local facilitators and learners take a leading role in the development of curricula and learning materials (supported by other stakeholders). Learning materials are therefore developed in the majority language of the given community and respond to the educational goals and situations of learners, generally including the acquisition of other skills, such as agriculture, crafting, or entrepreneurship. In addition to impressive gains in literacy rates, the programme also led to increased equity in participation in governance and decision-making, with female learners taking up community leadership positions.

4.2.6 Results-based financing of education provision

Results-based financing of TVET provision in Ethiopia managed to satisfy trainees, training providers, and eventual employers while enhancing equity and the alignment between TVET and the economy. The project in Ethiopia utilised performance-based contracts and financial incentives to motivate both public and private TVET service providers to improve training quality and support offered to students in finding gainful, long-term employment. The project achieved this by working with a broad range of actors, including TVET providers, private sector and employer representatives, and government partners, to design and implement the shift. The TVET providers were paid for training delivery (30 per cent), successful passing of the official assessment (50 per cent), and for the gainful employment of the graduates (20 per cent). The incentive-based system, combined with differential pricing, was used to enhance equity outcomes by associating female trainees and trainees with special needs with higher

remuneration packages for TVET providers. The project demonstrated that the quality and nature of TVET provision can be changed quite quickly when adequate incentives and capacity building are in place. Regarding the incentives, it was found that wide and collaborative stakeholder engagement was necessary to determine the correct values. Effective capacity building was supported through partnership formation. The different partners supported the project's success in different ways; public (government providers) were important partners in anchoring and institutionalising the approach, while private, profit-oriented providers were more flexible and motivated to adapt in line with payment incentives.

4.2.7 Data driven districts

The Data Driven Districts initiative in South Africa effectively synthesises and communicates data to a range of educators and decision-makers while maintaining an active community of users that support ongoing peer learning and system development. The Data Driven Districts initiative of South Africa combines data from existing administration, assessment and school-level data sources and summarises and presents them on digital dashboards. The dashboards contain a variety of views and levels of analysis customised to specific user roles, from classroom teachers to regional planners. It is used by over 14,000 teachers and education decision-makers and has maintained high levels of users for some years. Throughout its lifetime, it has constantly evolved in response to user feedback garnered through dedicated surveys and open communication fora, for example, emails and newsletters. Users have pointed to the wide range of communication techniques, for example, videos, webinars, newsletters and the presence of role models and peer learning, as being key to their effective use of the dashboards and, therefore, the wealth of education data that is collected in South Africa. The flexible and effective approaches to stakeholder engagement, school onboarding and capacity building are seen as the result of close collaboration between diverse actors, including the Department of Basic Education, NGO partners, the private sector, and educators throughout the country.

4.3 Common principles of success

The promising solutions identified above and discussed throughout this report contain a number of common characteristics that point to broader principles which can be used to inform the design and implementation of a wide variety of interventions. These principles include: i) Make better use of what already exists; ii) Make better use of data and evidence; iii) Involve local communities more, including through decentralisation; iv) Enhance coordination and collaboration. These principles are explored in greater detail below.

Make better use of what already exists

Education systems everywhere are resource-constrained and are likely to be so in the foreseeable future. Even if efforts to increase education financing are successful, it is vital that better use is made of the limited available resources. This principle can refer to physical infrastructure, which is more cost-effective to maintain, repair, and renovate rather than construct something completely new. It can refer to vital support services offered by the school, such as home-grown school feeding programmes that utilise local resources and capacities. It can refer to using already existing teaching and learning materials by improving distribution and providing teachers with structured pedagogy support. It can be applied to teachers themselves by ensuring their more equitable distribution and by providing practical and continuous professional development. It can also be applied to providing teachers' professional development by utilising and supporting outstanding teachers and school leaders to facilitate professional learning communities. It can be applied to the use of technology in education, which does not have to be advanced to be effective but can be as simple and common as a humble radio. The principle can also be applied to data and evidence.

Make better use of data and evidence

Regardless of the sub-sector or the thematic area, nearly all education interventions and guidance call for more and better data and for plans and decision-making to be anchored in evidence. However, much data and evidence already exist within the education systems of Africa. Unfortunately, this information is often underutilised or used poorly. Ironically, one of the factors limiting existing data's effective use is excessive amounts of data collection and poorly designed and/or exploited reporting. Better use of data and evidence can be achieved by having a clear strategic vision of the end users and the end uses of data; data with no planned use should not be collected. The effective use can also be encouraged by ensuring that it is relevant, accessible and understandable to its intended audiences, from high-tech solutions like online dashboards in South Africa to the paper-based simplified community scorecards in the Gambia. The intended usage, audience and sustainability should determine the appropriate format. Linked to this, end-users need to be supported in their utilisation through related capacity building and have the appropriate organisational authority to act upon it. The potential use of already existing data can be greatly enhanced by connecting and integrating separate databases and data collection systems. Data has the power to significantly improve the efficacy and efficiency of education interventions across their entire lifecycle, from design, targeting, implementation and monitoring and evaluation.

Involve local communities more, including decentralisation

Related to the principle of making better use of what exists is enhancing the role of communities, including through decentralisation. Educators, parents, and local actors have crucial roles to play to ensure education systems more effectively consider local realities and needs. Communities represent one of the most powerful resources within an education system, and it is not surprising that their involvement in programmes is regularly identified as a key driver of success. Promising solutions relating to topics as diverse as school infrastructure, accelerated learning, education for health and well-being, adult literacy, and TVET provision all point to the importance of community involvement in their success from the design phase to implementation.

Enhance coordination and collaboration

None of the successful responses and promising solutions discussed in this report resulted from one set of actors working in isolation. In fact, the opposite is true—high levels of coordination and collaboration were frequently pointed to as a key driver of change and success. In many cases, it was a defining feature of the particular intervention, for example, multi-sectoral approaches to supporting learners' enrolment and retention, peer-learning and communities of practice among teachers and school leaders, results-based financing of TVET education involving public and private providers and representative of employers and the private sector, and regional centres of excellence in Higher Education. The need for effective collaboration is a consequence of the complex and multi-faceted reality of education systems in Africa and a recognition of the fact that achieving SDG 4 is an extremely complicated goal with many interconnected challenges. This principle is an overarching one which is ultimately necessary to i) make better use of what already exists, ii) make better use of data and evidence, and iii) involve local communities more.

4.4 Scaling and the broader environment

For a promising education intervention to be taken up and implemented at scale, it is not enough for it to be an effective education solution in isolation. It must be effective and fit the particulars of multiple, specific contexts; it must align with the local actors', policy makers' and political leaders' priorities; it must be feasible in terms of human and financial resources, and it must have a promising scaling strategy in place that can succeed. If it relies on significant donor input and support, it must also simultaneously satisfy the donor and local priorities and needs.

Lessons learned from a journey to scale

The Learner Guide Program was established by the Campaign for Female Education (CAMFED) in the United Republic of Tanzania in 2005 to improve education outcomes among marginalised children while supporting young women in transitioning from school to the workforce. Learner Guides are recent female secondary school graduates who receive training and support to volunteer in their communities and schools to keep vulnerable children in school and learning. In return, Learner Guides receive skills training, interest-free loans to start small-scale enterprises, and an internationally recognised qualification to provide a stepping stone to formal teacher training and employment.

The programme has supported the education of more than 2 million students, and by 2023, 6,576 schools were implementing the programme, and 15,336 Learner Guides were active across Ghana, Malawi, the United Republic of Tanzania, Zambia and Zimbabwe. The Learner Guide Program has successfully progressed through three phases of scaling—pilot, adaptation, and expansion. Lessons from the previous phases can inform efforts to expand the programme's reach further, that is, to that of a national scale and the successful scaling of other education interventions.

The lessons learned fall under three key themes: i) embedding the programme in the formal education system, which requires actors to focus on how the programme contributes to government policies and priorities while utilising a suitable co-ordination structure to plan for and manage evolving roles of government and innovation actors; ii) securing flexible and long-term programme financing which requires robust costing analysis and knowledge of government budgetary processes and timelines, including how costs will alter due to scaling and potential cost efficiencies; and iii) implementing a continuous learning process to support expansion, for example, through testing and learning from model adaptations as the programme scales and applying a collaborative learning approach to support broader education systems change.

https://www.brookings.edu/wp-content/uploads/2021/10/Improving-learning-and-life-skills_Tanzania_FINAL.pdf
https://camfed.org/what-we-do/our-programs/learner-guides/?gad_source=1

Effectively scaling successful interventions such as those discussed in Section 4.2 while also shaping system-wide change in line with the principles outlined in Section 4.3 will require working simultaneously and efficiently at all levels of the education system. A vision of a nested education ecosystem with collaborative relationships can deepen and broaden support for necessary changes while making interventions more equitable and of higher quality. At its core, it must be the actual classroom or the site of learning; if an educational reform does not reach this level, its impact on learning will likely be minimal. The immediate context above, for example, the school/institution and the community, is increasingly being recognised as having a pivotal and dynamic role in how education interventions are designed and implemented. Above this, the sub-national governance and support structures likely form a crucial part of the ecosystem but are not always well understood or capitalised on. A nested ecosystem of varying degrees of proximity from the instructional core of the classroom, such as this, can benefit from the contributions of both "insiders" and "outsiders" alike. Insiders can provide context-specific local knowledge and direct access to system elements and personnel. However, their familiarity with the location or topic can produce blind spots or prejudices based on historical or personal reasons. Outsiders, in contrast, can offer knowledge of other systems and contexts and see a situation with fresh eyes. However, they usually lack a rich and nuanced contextual understanding and can bring externally formed agendas and biases.[375]

[375] See research on enacting deep change in education; Scaling and systems transformation are engaged-should they marry? Available at: https://www.brookings.edu/articles/enacting-deep-change-in-education/.

Glossary

A

- **Adult Learning and Education (ALE)** – Programmes aimed at improving adult literacy and skills development.
- **African Charter on Human and Peoples' Rights (ACHPR)** – A regional human rights instrument promoting and protecting human rights in Africa.
- **African Charter on the Rights and Welfare of the Child (ACRWC)** – A legal framework for children's rights in Africa, emphasising education and protection.
- **African Higher Education Centers of Excellence (ACE)** – A network of African higher education institutions focused on research, innovation, and capacity building.
- **African Union Commission (AUC)** – The administrative body of the African Union that oversees education initiatives such as CESA.
- **African Youth Charter (AYC)** – A legal framework recognising the rights and responsibilities of young people in Africa.
- **Association for the Development of Education in Africa (ADEA)** – A forum for education policy development and implementation across African countries.

C

- **Child, Early, and Forced Marriage (CEFM)** – A harmful practice where children, especially girls, are married off before adulthood, impacting education and well-being.
- **Community-Based Childcare Centres (CBCCs)** – Locally managed centres providing early childhood care and education in underserved areas.
- **Comprehensive Sexuality Education (CSE)** – Age-appropriate, culturally relevant education on sexual and reproductive health and rights.
- **Continental Education Strategy for Africa (CESA)** – The African Union's strategic framework for transforming education and training systems.

D

- **Data Driven Districts (DDD)** – An approach using data analytics to enhance educational planning and decision-making at the district level.
- **Disability-Adjusted Life Years (DALYs)** – A measure of overall disease burden, reflecting years lost due to ill health or disability.
- **Disbursement Linked Results (DLRs)** – A funding mechanism where financial support is tied to achieving specific educational outcomes.

E

- **Early Childhood Care and Education (ECCE)** – Programmes that support the cognitive, emotional, and physical development of young children.
- **Early Childhood Development (ECD)** – A holistic approach to early learning, including health, nutrition, and social-emotional development.
- **Early Childhood Education (ECE)** – Formal and informal education programmes for children before they enter primary school.
- **Early Grade Mathematics Assessment (EGMA)** – A tool to measure foundational numeracy skills in early primary school.
- **Early Grade Reading Assessment (EGRA)** – A standardised assessment for evaluating early literacy skills.
- **Education for Health and Well-Being (EHW)** – A policy framework integrating health services, well-being, and education.
- **Education Sector Plan (ESP)** – A strategic plan outlining national education goals and policies.
- **Education Sector Strategic Plan (ESSP)** – A country-level framework for implementing education policies.

F

- **Foundational Learning Action Tracker (FLAT)** – A tool monitoring foundational learning progress across African countries.
- **Foundational Learning Exchange (FLEX)** – A platform promoting knowledge sharing on foundational education strategies.

G

- **General Education Quality Improvement Programme for Equity (GEQIP-E)** – A programme focused on improving equitable access to quality education.
- **Global Education Monitoring Report (GEM)** – A UNESCO-led initiative tracking global education progress.
- **Global Partnership for Education (GPE)** – A multilateral funding initiative supporting education in low-income countries.
- **Gross Domestic Product (GDP)** – The total value of goods and services produced in a country, influencing education funding.

H

- **Home Grown School Feeding (HGSF)** – School meal programmes utilising locally sourced food to enhance nutrition and attendance.
- **Hybrid Education, Learning and Assessment (HELA)** – A blended learning approach combining digital and traditional education methods.

I

- **Integrated Community Learning for Wealth Creation (ICOLEW)** – A framework combining literacy, skills development, and economic empowerment.
- **Internally Displaced Persons (IDPs)** – Individuals forced to flee their homes due to conflict or disasters but remain within their country.

L

- **Learning Counts Report** – A research report emphasising the role of textbooks and learning materials in improving education.
- **Literacy Assessment and Monitoring Programme (LAMP)** – An initiative measuring adult literacy skills and progress.

M

- **Measuring Early Learning Quality and Outcomes (MELQO)** – A framework assessing early learning environments and child development.
- **Mental Health and Psychosocial Support (MHPSS)** – Services addressing students' emotional and psychological well-being.

P

- **Professional Learning Communities (PLCs)** – Groups of educators collaborating to improve teaching practices and student outcomes.
- **Progress in International Reading Literacy Study (PIRLS)** – A large-scale reading comprehension assessment in primary education.
- **Public-Private Partnership (PPP)** – A collaborative approach between governments and private entities to fund and implement education programmes.

R

- **Recognition, Validation, and Accreditation (RVA)** – A process assessing and certifying informal and non-formal learning.

S

- **School-Related Gender-Based Violence (SRGBV)** – Any form of violence occurring in educational settings due to gender norms.
- **Science, Technology, Engineering, and Mathematics (STEM)** – Educational fields promoting critical thinking and innovation.
- **Sexual and Reproductive Health and Rights (SRHR)** – A human rights-based approach to health and reproductive education.
- **Speed School programme** – An accelerated learning initiative for out-of-school children in Africa, helping them reintegrate into formal education.

T

- **Teaching at the Right Level (TaRL)** – An instructional strategy that groups students by learning ability rather than age or grade.
- **Technical and Vocational Education and Training (TVET)** – Education programmes that provide practical skills for employment.
- **Transforming Education Summit (TES)** – A global initiative accelerating education reform and SDG 4 progress.

U-W

- **UNESCO Institute for Lifelong Learning (UIL)** – A global research institute focused on adult and continuing education.
- **UNESCO Institute for Statistics (UIS)** – An entity collecting and analysing global education data.
- **Water, Sanitation, and Hygiene (WASH)** – Programmes ensuring access to clean water and sanitation in schools.
- **Women in Learning Leadership (WiLL)** – An initiative promoting female leadership in education.

References

Abduvahobov, P., Cameron, S.J., Ibraheem, A., Herat, J. and Castle, C. (2024). The need for stronger international support to integrate health and well-being and transform education: a perspective on developing countries, Frontiers in Public Health. Available at: https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2024.1415992/full.

Accelerated Education Working Group. (2022). *Accelerated Education Programme (AEP) Evidence Synthesis.* Available at: https://img1.wsimg.com/blobby/go/104fc727-3bad-4ff5-944f-c281d3ceda7f/20222615_AEP%20Evidence%20Synthesis-6468aa1.pdf.

Actuia. (2022). *Carnegie Mellon University and Mastercard Foundation Partner with Rwandan Government to Expand Engineering and Technology Programs.* Available at: https://www.actuia.com/actualite/la-carnegie-mellon-university-et-la-fondation-mastercard-sassocient-au-gouvernement-rwandais-pour-developper-des-programmes-dingenierie-et-de-technologie/.

African Center for Economic Transformation. (2023). *How Technical and Vocational Education Can Help Close Skills Gaps in Africa.* Available at: https://acetforafrica.org/research-and-analysis/reports-studies/reports/how-technical-and-vocational-education-can-help-close-skills-gaps-in-africa/.

African Journal of Education and Practice. (2024). *Effectiveness of Mother Tongue Instructions on Literacy rates in Primary Education in Kenya, Examining the Transition from Indigenous Languages to English in Urban and Rural Settings.* Available at: https://www.researchgate.net/publication/385266463_Effectiveness_of_Mother_Tongue_Instruction_on_Literacy_Rates_in_Primary_Education_in_Kenya_Examining_the_Transition_from_Indigenous_Languages_to_English_in_Urban_and_Rural_Settings.

African Union. (2016). *The Continental Education Strategy for Africa (CESA 16-25).* https://au.int/sites/default/files/documents/29958-doc-cesa_-_english-v9.pdf.

—. (2021). *African Union Biennial Report on Home-Grown School Feeding (2019-2020).* Addis Ababa, African Union.

—. (2022). Digital Education Strategy and Implementation Plan. Available at: https://au.int/sites/default/files/documents/42416-doc-1._DES_EN_-_2022_09_14.pdf.

—. (2023). *Continental Strategy for Education, Health and Well-Being of Young People.* Available at: https://healtheducationresources.unesco.org/library/documents/au-continental-strategy-education-health-and-well-being-young-people.

—. (2024a). *Armed conflict emerges as a major barrier to education access in Africa: Continental conference reveals.* Available at: https://au.int/sites/default/files/pressreleases/44320-pr-Press_Release_-_Armed_Conflict_Emerges_as_a_Major_Barrier_to_Education_Access_in_Africa_Continental_Conference_Reveals.pdf.

—. (2024b). *Concept note with roadmap: African Union Theme of the Year.* Available at: https://au.int/sites/default/files/documents/43425-doc-EX_CL_1476_XLIV_Rev._1_-_CONCEPT_NOTE_with_Roadmap_AU_Theme_E.pdf.

—. (2024c). The Conference on Foundational Literacy and Numeracy (FLN) marked the launch on the End Learning Poverty for all in Africa (ELPAF) Campaign. Available at: https://au.int/en/pressreleases/20240910/launch-end-learning-poverty-all-africa-elpaf-campaign.

African Union (AU) (n.d.) PAENDU Report. Available at: https://au.int/sites/default/files/documents/43890-doc-PAENDU_REPORT_-_English.pdf.

African Union Commission (AUC). (2015). *Agenda 2063: The Africa We Want.* Available at: https://au.int/en/agenda2063/overview

African Union Commission and African Union Development Agency - NEPAD. (2022). *AUDA-NEPAD Guidelines for the Design and Implementation of Home-Grown School Feeding Programmes in Africa. AUDA NEPAD, Midrand, South Africa.* Available at: https://www.nepad.org/sites/default/files/resourcefiles/Guidelines%20for%20HGSF%20Implementation_EN.pdf.

AFRO Barometer. (2023). *Africa's youth are more educated, less employed, and less politically engaged than their elders.* Available at: https://www.afrobarometer.org/wp-content/uploads/2023/11/News-release_Africas-youth-more-educated-less-employed-less-engaged-Afrobarometer-16Nov2023-.pdf.

Aitchison, J. and Alidou, H. (2009). *The State and Development of Adult Learning and Education in Sub-Saharan Africa: Regional Synthesis Report.* Hamburg: UNESCO Institute for Lifelong Learning. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000182924.

Arup. (2023). Low-cost prototype could be the model for 17,000 new schools. Available at: https://www.arup.com/projects/malawi-schools/.

Asim, S., Chimombo, J., Chugunov, D. and Gera, R. (2019). Moving teachers to Malawi's remote communities: A data-driven approach to teacher deployment. *International Journal of Educational Development,* 65, pp.26-43. DOI: 10.1016/j.ijedudev.2018.12.002.

Association of African Universities. *Continental Education Strategy for Africa.* Available at: https://aau.org/current-projects/continental-education-strategy-for-africa/.

Atlantic Council. (2023). *Why US technology multinational are looking to Africa for AI and other emerging technologies: Scaling tropical-tolerant R&D innovations.* Available at: https://www.atlanticcouncil.org/blogs/geotech-cues/why-us-technology-multinationals-are-looking-to-africa-for-ai-and-other-emerging-technologies/.

Avelar, M., Terway, A., & Frotte, M. (2020). *Innovative financing for education: A systematic literature review.* Available at: https://resources.norrag.org/resource/595/innovative-financing-for-education-a-systematic-literature-review.

Binaoui, A., Moubtassime, M., & Belfakir, L. (2023). The Effectiveness of the TaRL Approach on Moroccan Pupils' Mathematics, Arabic, and French Reading Competencies. Available at: https://www.researchgate.net/publication/371280660_The_Effectiveness_of_the_TaRL_Approach_on_Moroccan_Pupils'_Mathematics_Arabic_and_French_Reading_Competencies.

Bold, T., Kimenyi, M., Mwabu, G., Ng'ang'a, A., & Sandefur, J. (2013). *Scaling up what works: Experimental evidence on external validity in Kenyan education.* Available at: https://www.cgdev.org/sites/default/files/Sandefur-et-al-Scaling-Up-What-Works.pdf.

Business Tech. (2024). New R3.8 billion fund for South Africa's 'missing middle. Available at: https://businesstech.co.za/news/government/742319/new-r3-8-billion-fund-for-south-africas-missing-middle/.

Carr-Hill, R. (2023). Education Sector Plans and their Implementation in Developing Countries: A Comparative Analysis (1st ed.). Routledge. https://doi.org/10.4324/9781003264002.

Centre for Global Development. (2013). *Investing in Social Outcomes: Development Impact Bonds: The Report of the Development Impact Bond Working Group.* Available at: https://www.cgdev.org/sites/default/files/investing-in-social-outcomes-development-impact-bonds.pdf.

—. (2023). *Reading Skills Transfer Best from Home Language to a Second Language: Policy Lessons from Two Field Experiments in South Africa.* Available at: https://www.cgdev.org/sites/default/files/reading-skills-transfer-best-home-language-second-language-policy-lessons.pdf.

Commit4YoungPeople. (2013). *Engagement de l'AOC.* Available at: https://commit4youngpeople.org/sites/default/files/2023-04/EN%20Engagement%20de%20l%27AOC%202023-06-04.pdf.

Curtiss Wyss, M., Qargha, G. O., Arenge, G., Mukoyi, T., Elliott, M., Matsheng, M., & Clune, K. (2023). *Adapting, Innovating, and Scaling Foundational Learning: Four Lessons from Scaling Teaching at the Right Level in Botswana.* Available at: https://www.brookings.edu/wp-content/uploads/2023/05/Scaling-TaRL-in-Botswana-_-Report-_-Web.pdf.

Dalberg, Children's Investment Fund Foundation, and UBS Optimus Foundation. (2018). *World's First Development Impact Bond in Education.* Available at: https://golab.bsg.ox.ac.uk/documents/Educate-Girls-DIB_results_brochure_final-2.pdf.

Education Cannot Wait . (2018). *Education Cannot Wait's approach to innovative financing.* Available at: https://dalberg.com/wp-content/uploads/2018/10/Dalberg-report_EG.pdf.

—. (2023). *Futures at Risk: Climate-Induced Shocks and Their Toll on Education for Crisis Affected Children; Background Study for the ECW Climate Appeal.* Available at: https://www.educationcannotwait.org/sites/default/files/2023-10/f_ecw_appeals_background_paper_mech.pdf.

Education Commission. (2016). *Exploring innovative financing for global education: Early lessons from Kenya and East Africa.* Available at: https://educationcommission.org/updates/exploring-innovative-financing-global-education-early-lessons-kenya-east-africa/.

Expert Group for Aid Studies. (2016). *Education in Developing Countries: A Summary of Evaluations and Research 2010–2015.* Available at: https://eba.se/wp-content/uploads/2016/05/Rapport-201602-Education-in-developing-coutries.pdf.

Education.org. (2021). *Calling for an Education Knowledge Bridge: A White Paper to Advance Evidence Use in Education.* Available at: https://whitepaper.education.org/download/white_paper.pdf.

—. (2023). *Accelerated Education Programmes: An Evidence Synthesis for Policy Leaders.* Available at: https://img1.wsimg.com/blobby/go/104fc727-3bad-4ff5-944f-c281d3ceda7f/20222615_AEP%20Evidence%20Synthesis-6468aa1.pdf.

FAO and WFP. (2018). *Home-Grown School Feeding: Resource Framework Synopsis.* Available at: https://www.wfp.org/stories/comment-africa-day-school-feeding-reminds-us-why-scaling-school-meals-so-important.

Frontiers in Psychiatry. (2024). *Substance use among young people in sub-Saharan Africa: a systemic review and meta analysis.* Available at: https://www.frontiersin.org/journals/psychiatry/articles/10.3389/fpsyt.2024.1328318/full.

Ghana Statistical Service. (2018). Ghana Multiple Indicator Cluster Survey 2017/18. Available at: https://www.unicef.org/ghana/media/576/file/Ghana%20Multiple%20Cluster%20Indicator%20Survey.pdf.

Global Campaign for Education. (2023). *Continental vs Global Education Benchmarks: Bridging CESA 16-25 and SDG 4.* Available at: research-brief-1-continental-vs-global-education-benchmarksbridging-cesa-1625-and-sdg-finalenglish-.pdf.

Global Education Evidence Advisory Panel. (2023). *Cost-Effective Approaches to Improve Global Learning: What Does Recent Evidence Tell Us Are Smart Buys for Improving Learning in Low and Middle Income Countries?* Available at: https://www.globalpartnership.org/node/document/download?file=document/file/2024-02-educate-africans-21st-century-seizing-moment-rev2.pdf.

Global Education Monitoring Report. (2024). *GEMR Database.* UNESCO. Available at: https://www.education-progress.org (Accessed: 20 August 2024).

Government of Lesotho. (2015). *National School Feeding Policy.* Available at: http://www.gov.ls.

Government of Sierra Leone. (2021). *Policy on Radical Inclusion in Schools and 2024 National Guidelines on Accelerated Education for Out-of-School Children and Youth.*

Global Partnership for Education (GPE). (2018). *Financing conference: An investment in the future.* Available at: https://www.globalpartnership.org/events/gpe-financing-conference-investment-future-dakar-2018.

—. (2019). *How can education management information systems facilitate better planning and policy dialogue in Africa?* Available at: https://www.globalpartnership.org/blog/how-can-education-management-information-systems-facilitate-better-planning-and-policy.

—. (2020). *Improving Learning and Equity Through Stronger Education Systems.* Available at: https://www.globalpartnership.org/node/document/download?file=document/file/2018-05-gpe-2020-strategic-plan.pdf.

—. (2024a). *Making education in Africa fit for the 21st century.* Available at: https://www.globalpartnership.org/blog/making-education-africa-fit-21st-century.

—. (2024b). *GPE's innovative financing leverages much-needed capital in challenging times.* Available at: https://www.globalpartnership.org/blog/gpes-innovative-financing-leverages-much-needed-capital-challenging-times.

Global Partnership for Sustainable Development Data. (2022). *Investment Case: Multiplying Progress Through Data Ecosystems.* Available at: https://www.data4sdgs.org/resources/investment-case-multiplying-progress-through-data-ecosystems.

GSM Association. (2019). The Mobile Economy West Africa 2019. Available at: https://www.telepin.com/gsma-report-the-mobile-economy-west-africa-2019/.

Guterres, A. (2022). *Transforming Education Summit Address, 19 September.* United Nations. Available at: https://www.un.org/en/transforming-education-summit.

Hanushek, E.A. (2013). *"The Failure of Input-Based Schooling Policies,". Economic Journal, Royal Economic Society, vol. 113(485).* Available at: https://ideas.repec.org/a/ecj/econjl/v113y2003i485pf64-f98.html.

Hanushek, E. A., and Woessmann, L. (2020). *The economic impacts of learning losses.* OECD Education Working Papers. Available at: https://hanushek.stanford.edu/sites/default/files/publications/The Economic Impacts of Learning Losses_final_v1.pdf.

Heckman, J. J. (2006). *Skill formation and the economics of investing in disadvantaged children,* Barnett, W. S. (2011). *Effectiveness of early educational intervention. Science, 333*(6045), 975-978, and UNICEF. (2021). *The State of the World's Children 2021*.

Human Sciences Research Council. (2024). *The implications of fee-free higher education.* Available at: The implications of fee-free higher education - HSRC.

hundrED (n.d.) *Speed Schools: an innovative 9-month accelerated education model for Out of School Children* (OOSC). Available at: https://hundred.org/en/innovations/speed-schools-an-innovative-9-month-accelerated-education-model-for-out-of-school-children-oosc.

Innovation for Poverty Action. (2014). *Speed School for Out-of-School Children in Mali.* Available at: https://poverty-action.org/study/speed-school-out-school-children-mali.

Innovative Finance for Education. (2021). *Helveta's Skills and Knowledge for Youth Project: A Case Study of Results-based Financing for Vocational Education and Training.* Available at: https://resources.norrag.org/resource/view/636/367.

Inter-American Development Bank. (2020). Altruism or Money?: Reducing Teacher Sorting Using Behavioral Strategies in Peru. Available at: http://dx.doi.org/10.18235/0002625.

Institute for Health Metrics and Evaluation. (2021). *Global Burden of Disease (GBD) Compare Tool.* Available at: https://vizhub.healthdata.org/gbd-compare/ Accessed on 29-11-2024. Available under CC BY-NC-ND 4.0.

International Journal of Educational Research. (2018). *#FeesMustFall and the decolonized university in South Africa: tensions and Opportunities in a globalized world.* Available at: https://philarchive.org/archive/GRIFAT-9v1/1000.

International Labour Organization. (2020). *At Mbera refugee camp, in Mauritania, the ILO is training young people in building trades.* Available at: https://www.ilo.org/resource/article/mbera-refugee-camp-mauritania-ilo-training-young-people-building-trades.

—. (2021). *A resource Guide for Sector Skills Bodies.* Available at: https://www.ilo.org/publications/resource-guide-sector-skills-bodies.

—. (2022). *Global Employment Trends for Youth 2022: Africa.* Available at: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/@ed_emp/documents/briefingnote/wcms_853322.pdf.

—. (2023a). *African youth face pressing challenges in the transition from school to work.* Available at: https://ilostat.ilo.org/fr/blog/african-youth-face-pressing-challenges-in-the-transition-from-school-to-work/.

—. (2023b). *Building better Formal TVET Systems – Principles and Practice in Low- and Middle Income Countries.* Available at: https://www.ilo.org/publications/building-better-formal-tvet-systems-principles-and-practice-low-and-middle.

—. (2023c). *Building pathways to sustainable growth: Strengthening TVET and productive sector linkages in Africa.* Available at: https://www.ilo.org/publications/building-pathways-sustainable-growth-strengthening-tvet-and-productive.

—. (2023d). *Financing mechanisms for promoting social inclusion in skills and lifelong learning systems: Global overview of current practices and policy options.* Available at: https://www.ilo.org/publications/financing-mechanisms-promoting-social-inclusion-skills-and-lifelong.

—. (2023e). *Learning Brief: Strengthening Skills Anticipation Systems and Processes.* Available at: https://www.ilo.org/sites/default/files/wcmsp5/groups/public/%40africa/%40ro-abidjan/%40sro-harare/documents/publication/wcms_881331.pdf.

—. (2023f). *Satellite vocational training center brings hope to displaced and local communities in Ethiopia.* Available at: https://www.ilo.org/resource/article/satellite-vocational-training-center-brings-hope-displaced-and-local.

—. (2023g). *R208 – recommendation (No. 208) on quality apprenticeships, 2023.* Available at: https://normlex.ilo.org/dyn/nrmlx_fr/f?p=1000:12100:0::NO::P12100_INSTRUMENT_ID,P12100_LANG_CODE:4347381,en:NO.

—. (2024a). *Global Employment trends for Youth 2024: Decent work, brighter futures.* Available at: https://www.ilo.org/sites/default/files/2024-11/GET_2024_EN_web4.pdf.

—. (2024b). *Kenya's Journey to recognizing Informal Skills: The making of the Recognition of Prior Learning Policy.* Available at: https://www.ilo.org/resource/article/kenyas-journey-recognizing-informal-skills-making-recognition-prior.

International Task Force on Teachers for Education 2030. (2013). *Effective approaches to attract and retain teachers and ensure equitable deployment: A contribution from the Teacher Task Force to the discussions of the High-Level Panel on the Teaching Profession.* Available at: https://teachertaskforce.org/sites/default/files/2023-07/effective-approaches-attract-retain-teachers_0.pdf.

Jacobs Foundation. (2023). *Review: Policy Labs and Evidence Use in Education.* Available at: https://jacobsfoundation.org/wp-content/uploads/2023/10/JF_Policy-labs-and-evidence-use-in-education_rev-2024.pdf.

Jörns-Presentati A., Napp, A.K., Dessauvagie, A.S., Stein, D.J., Jonker, D., et al. (2021). *The prevalence of mental health problems in sub-Saharan adolescents: A systematic review.* PLOS ONE 16 (5). Available at: https://doi.org/10.1371/journal.pone.0251689.

Kandala N-B, Ezejimofor MC, Uthman OA et al. (2018). *Secular trends in the prevalence of female genital mutilation/cutting among girls: a systematic analysis.* BMJ Glob Health 2018; 3: e000549. https://doi.org/10.1136/bmjgh-2017-000549.

Kebede, T. (2018). *Speed School Program in Burkina Faso, Mali and Niger*. Fafo Report. Available at: https://www.fafo.no/images/pub/2018/20676.pdf.

Languille, S. (2020). *African universities and the rise of public-private partnerships: Illustrations from Senegal.* In Gideon, J. and Unterhalter, E., eds.

Luminos Fund. (2018). *Sussex Evaluation of the Luminos Fund's Speed School Program.* Available at: https://luminosfund.org/wp-content/uploads/2018/11/Sussex-Evaluation-Full.pdf.

Mahfouz, B., Capra, L., & Mulgan, G. (2024). 'Assessing the influence of research quality on policy citations: Quantitative analysis finds non-academic factors more likely to influence how papers get cited in SDG policy', *Sustainable Development,* 32(7), pp. 1234–1250. Available at: https://onlinelibrary.wiley.com/doi/full/10.1002/sd.3214

Makerere University. (2023). *VC launches mentorship program for female students in STEM.* Available at: https://news.mak.ac.ug/2023/04/vc-launches-mentorship-program-for-female-students-in-stem/.

Makramalla, M., Stylianides, A. J. (2024). *The role of teacher professional networks in Egypt's mathematics education reform.* Available at: https://www.researchgate.net/publication/380177823_The_role_of_teacher_professional_networks_in_Egypt's_mathematics_education_reform.

Mansoura University. (2024). *Mansoura University wins UNESCO Confucius Prize for Literacy.* Available at: https://www.mans.edu.eg/mans-news/6616-mansoura-university-wins-unesco-confucius-prize-for-literacy.

Martinez, S., Naudeau, S., & Pereira, V. (2012). *The promise of preschool in Africa: A randomized impact evaluation of early childhood development in rural Mozambique.* Available at: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/819111468191961257/the-promise-of-preschool-in-africa-a-randomized-impact-evaluation-of-early-childhood-development-in-rural-mozambique.

Mcmanus, J., Rudasingwa, M., Nijhof, E., Mokobi, K., Deme, s. f., Kiawoin, J., … Pignon, C. (2024). *Improving learning outcomes for out-of-school children: evidence from a randomized evaluation of an accelerated learning program in Liberia.* Available at: https://www.tandfonline.com/doi/full/10.1080/09645292.2024.2410773#abstract.

Michael & Susan Dell Foundation. (2024). 'Data Driven Districts: Improving South African Student Outcomes'. Available at: https://www.dell.org/ideas/data-driven-districts/

MINEDUC. (2022). Education Sector Strategic Plan (ESSP) 2018-2023.

Ministry of Basic and Senior Secondary Education, Sierra Leone. (2024). *National Guidelines on Accelerated Education for Out-Of-School Children and Youth.* Available at: https://mbsse.gov.sl/wp-content/uploads/2024/07/National-Guidelines-on-Accelerated-Education-for-Out-Of-School-Children-and-Youth-June-2024.pdf.

Ministry of Education, Rwanda. (2016). *National School Health Policy.* Retrieved from https://www.mineduc.gov.rw.

Ministry of Education, Tunisia. (2016). *National Strategy for the Improvement of School Infrastructure and Student Retention.* Available at: http://www.education.tn.

Ministry of National Education, Vocational Training, and Higher Education. (2015). *Strategic Vision for Reform 2015–2030.* Available at: https://www.men.gov.ma/Fr/Documents/Vision_strateg_CSEF16004fr.pdf.

Ministry of Gender, Labour and Social Development (MGLSD) of Uganda. (2020). *Integrated Community Learning for Wealth Creation (ICOLEW) programme: ICOLEW Implementation Guidelines.* Available at: https://mglsd.go.ug/wp-content/uploads/2021/09/ICOLEW-IMPLEMENTATION-GUIDELINES-2-2.pdf.

Mundy, K. and Proulx, K. (2019). *Making Evaluation Work for the Achievement of SDG 4 Target 5: Equality and Inclusion in Education.* UNESCO, NORAD, World Bank Group, UNICEF.

National Statistical Office. (2021). *Malawi Multiple Indicator Cluster Survey 2019-20, Survey Findings Report.* Zomba, Malawi: National Statistical Office.

Nwokeocha, S., E. D., Kah, H., Njora, S., Nwokeocha, A. S., and Wodon. Q. (2023). *West Africa – Investing in Teachers and School Leaders: Professional Standards, Working Conditions, and Teacher Education.* Addis Ababa, Ethiopia: UNESCO International Institute for Capacity Building in Africa.

Oketch, O., M. (2009). *The tension of elite vs. massified higher education systems: how prospective students perceive public and private universities in Kenya.* Available at: https://journals.uclpress.co.uk/lre/article/2936/galley/17662/view/.

Oketch, M. and Rolleston, C. (2007). 'Policies on free primary and secondary education in East Africa: Retrospect and prospect', *Review of Research in Education,* 31, pp. 131-158. Available at: http://www.jstor.org/stable/20185104.

Olse, B. (2024). *Lessons informing the next phase of Research on Scaling the Impact of Innovations in Education.* Available at: https://www.brookings.edu/articles/lessons-informing-the-next-phase-of-research-on-scaling-the-impact-of-innovations-in-education/.

Palacios, M. (2014). Overemphasized costs and underemphasized benefits of income-contingent financing. In B. Chapman, T. Higgins, & J. E. Stiglitz (Eds.), *Income contingent loans: Theory, practice and prospects.*

PASEC. (2019). *Quality of education systems in French-speaking Sub-Saharan Africa: teaching/learning performance and environment in primary education.*

Perakis, R. and Savedoff, W. (2015). *Translating results-based financing from theory to operational reality: Lessons from practitioners.* Center for Global Development. Available at: https://www.cgdev.org/publication/translating-results-based-financing-theory-operational-reality-lessons-practical.

Piper, B., Simmons Zuilkowski, S., Dubeck, M., Jepkemei, E., and King, S. J. (2018). *Identifying the essential ingredients to literacy and numeracy improvement: Teacher professional development and coaching, student textbooks, and structured teachers' guides. World Development, 106,* 324–336.

Plan International. (2020). *Free to be online? Girls' and young women's experiences of online harassment* Available at: https://plan-international.org/publications/freetobeonline.

Psacharopoulos, G, and Patrinos, H.A. (2018). *Returns to investment in education: A decennial review of the global literature.* Policy Research Working Paper No. 8402. Washington, DC: World Bank. Available at: https://hdl.handle.net/1098629672.

Results for Development (R4D). (2016). *A landscape analysis of the global literacy sector.* Results for Development. Available at: https://r4d.org/wp-content/uploads/R4D_Project-Literacy-Landscape-Analysis.pdf.

RTI International. (2020). *Tapping the Potential of Kenyan Youth Through Skills Empowerment.* Available at: https://www.rti.org/impact/tapping-potential-kenyan-youth-through-skills-empowerment.

Republic of Kenya. (2017). *National School Infrastructure Program.* Available at: https://www.education.go.ke.

Sardinha, L. et al. (2024). *Intimate partner violence against adolescent girls: regional and national prevalence estimates and associated country-level factors.* The Lancet Child & Adolescent Health, 8: 636-46. Available at: https://www.thelancet.com/journals/lanchi/article/PIIS2352-4642(24)00145-7/fulltext.

Sarr, B., Fernandes, M., McMahon, B., Peel, F., and Drake, L. (2017). The Evolution of School Health and Nutrition in the Education Sector 2000–2015 in sub-Saharan Africa. *Frontiers in Public Health,* January 30. Available at: https://www.frontiersin.org/journals/public-health/articles/10.3389/fpubh.2016.00271/full.

Shonkoff, J. P., and Phillips, D. A. (2000). *From neurons to neighborhoods: The science of early childhood development* and Yoshikawa, H., Weiland, C., Brooks-Gunn, J., Burchinal, M., Espinosa, L. M., Gormley, W. T., Ludwig, J., Magnuson, K. A., Phillips, D., & Zaslow, M. J. (2013). *Investing in our future: The evidence base on preschool education.*

Singh, M. and Duvekot, R. (2013). *Linking Recognition Practices and National Qualifications Frameworks: International Benchmarking of Experiences and Strategies on the Recognition, Validation and Accreditation (RVA) of Non-Formal and Informal Learning.* Hamburg: UNESCO Institute for Lifelong Learning. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000224694.

The Global Goals. Available at: https://www.globalgoals.org/goals/4-quality-education/.

Theunynck, S. (2009). *School construction strategies for universal primary education in Africa: Should communities be empowered to build their schools?* Washington, DC: World Bank.

Tournier, B., and Chimier, C. (2019). *Teacher Career Reforms: Learning from Experience.* Paris, IIEP-UNESCO. https://unesdoc.unesco.org/ark:/48223/pf0000372505.

United Nations. (2015a). *Addis Ababa action agenda of the Third International Conference on Financing for Development.* Available at: https://www.un.org/en/development/desa/population/migration/generalassembly/docs/globalcompact/A_RES_69_313.pdf.

—. (2015b). *Transforming Our World: The 2030 Agenda for Sustainable Development.* Available at: http://www. un.org/ga/search/view_doc.asp?symbol=A/RES/70/1&Lang=E.

—. (2022). *Report on the 2022 Transforming Education Summit.*

—. (2023). *Report on the 2022 Transformation Education Summit.* Available at: https://www.un.org/sites/un2.un.org/files/report_on_the_2022_transforming_education_summit.pdf.

United Nations. (2024). *The Urgency of Now: AIDS at a Crossroads.* Available at: https://www.unaids.org/sites/default/files/media_asset/2024-unaids-global-aids-update_en.pdf.

UNAIDS. (2023). *Global AIDS Data Book 2023.* Available at: https://www.unaids.org/sites/default/files/media_asset/data-book-2023_en.pdf.

—. (2024). *The Urgency of Now: AIDS at a Crossroads.* Available at: https://www.unaids.org/sites/default/files/media_asset/2024-unaids-global-aids-update_en.pdf.

UNDP. (2024). Human Development Index (HDI). Available at: https://hdr.undp.org/data-center/human-development-index#/indicies/HDI.

UNESCO (n.d) *Transforming Education Summit,* SDG 4 Education 2030. Available at: https://www.unesco.org/sdg4education2030/en/transforming-education-summit.

—. (n.d.). *Women in Learning Leadership – WiLL.* Available at: https://dakar.iiep.unesco.org/en/women-in-learning-leadership-will.

—. (2007). Mother tongue matters: local language as a key to effective learning. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000161121.

—. (2013). *Education for All Global Monitoring Report 2013/4.* Availabe at: https://unesdoc.unesco.org/ark:/48223/pf0000235003.locale=en.

—. (2013). *Education in Africa: Placing Equity at the Heart of Policies.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000389481.

—. (2014). *Teaching and learning: Achieving quality for all.* Education for all Global Monitoring Report 2013/4. Paris: UNESCO Publishing.

—. (2015). *'Education 2030: Incheon Declaration and Framework for Action for the Implementation of Sustainable Development Goal 4'.*

—. (2018a). *International technical guidance on sexuality education: an evidence-informed approach.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000260770.

—. (2018b). *School Violence and Bullying. Global Status and trends, drivers and consequences.*

—. (2019). *Behind the numbers: Ending school violence and bullying.*

—. (2020). *Global Education Monitoring Report (2020): Inclusion and Education – All Means All.*

—. (2021a). *Connect with respect: preventing gender-based violence in schools; classroom programme for learners in upper primary and early secondary school (ages 12-15); teacher guide & classroom activities.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000380633.

—. (2021b). *Continental Overview: Bridging CESA and SDG 4 in Africa.* Available at: https://uis.unesco.org/sites/default/files/documents/bridging_cesa_and_sdg4_in_africa-final.pdf.

—. (2021c). *Current state of comprehensive sexual education for young people with disabilities in the East and Southern African region: needs assessment.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000380376?locale=en.

—. (2021d). *Eastern and Southern Africa Ministerial Commitment: Fulfilling Our Promise to education, health and well-being for adolescents and young people.* Available at: https://healtheducationresources.unesco.org/library/documents/eastern-and-southern-africa-ministerial-commitment-fulfilling-our-promise.

—. (2021e). *Global education monitoring report 2021/2: Non-state actors in education: Who chooses? Who loses?* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000230532.

—. (2021f). *Project at Ain-Shams University in Egypt wins UNESCO literacy prize.* Available at: https://www.unesco.org/en/articles/project-ain-shams-university-egypt-wins-unesco-literacy-prize

—. (2022a). *Analysis of experience and outcomes of Connect with Respect violence prevention programme: a five-country study.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000380634.

—. (2022b). Ready to learn and thrive: school health and nutrition around the world; highlights. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000381965.

—. (2022c). *UIL launches technology training for literacy educators in Egypt.* Available at: https://www.uil.unesco.org/en/articles/uil-launches-technology-training-literacy-educators-egypt.

—. (2023a). *AU Continental Strategy for Education, Health and Well-Being of Young People.* Available at: https://healtheducationresources.unesco.org/library/documents/au-continental-strategy-education-health-and-well-being-young-people.

—. (2023b). *Building better formal TVET systems: principles and practice in low- and middle income countries.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000386135.

—. (2023c). *Education in Africa. Placing equity at the heart of policy. Continental report.* Available at: https://www.unesco.org/en/articles/education-africa-placing-equity-heart-policy-continental-report.

—. (2023d). *Global Education Monitoring Report 2023: Technology in education – A tool on whose terms?* Paris, UNESCO.

—. (2023e). *Hybrid Education, Learning and Assessment: A Reader.* Available at: https://www.ibe.unesco.org/en/articles/hybrid-education-learning-and-assessment-reader.

—. (2023f). *Institutional practices of implementing lifelong learning in higher education: research report.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000385434/PDF/385434eng.pdf.multi.

—. (2023g). *International trends of lifelong learning in higher education: Research report.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000385339/PDF/385339eng.pdf.multi.

—. (2023h). *Ready to learn and thrive: School health and nutrition around the world.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000384421.

—. (2023i). *South Africa: tracing good and emerging practices on the right to higher education around the world; policy initiatives on the right to higher education in South Africa.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000386117.

—. (2023j). *Women in teaching: Understanding the gender dimension.* Available at: https://teachertaskforce.org/sites/default/files/2023-03/2023_March_TTF_Fact sheet on female teachers for Women's Day_14March.pdf.

—. (2024a). *Building strong foundations: what a foundational education for health and well-being?* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000389751.

—. (2024b). *Global Education Monitoring Report, 2024/5, Leadership in Education: Lead for Learning.* Paris: UNESCO.

—. (2024c). *Global report on Teachers: Addressing teacher shortages and transforming the profession.* Available at: https://teachertaskforce.org/knowledge-hub/global-report-teachers-addressing-teacher-shortages-and-transforming-profession.

—. (2024d). *Interview: Promoting inclusivity and female empowerment through adult and lifelong learning in Egypt.* Available at: https://www.unesco.org/en/articles/interview-promoting-inclusivity-and-female-empowerment-through-adult-and-lifelong-learning-egypt.

—. (2024e). *LASER for Education Information Ecosystem.* Available at: https://tcg.uis.unesco.org/laser/.

—. (2024f). *Monitoring progress towards SDG target 4.1 on primary and secondary education.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000391732.

—. (2024g). *Spotlight on basic education completion and foundational learning: Mauritania.* Available at: https://www.unesco.org/gem-report/en/spotlight-africa-mauritania.

—. (2024h). *Transforming education towards SDG 4: report of a global survey on country actions to transform education.*

Nwokeocha, S., Sessay, A., Njora, H., and Wodon, Q. (2024). *Professional standards and competencies for teachers and school leaders: A case study for Sierra Leone.* Journal of Teaching & Learning in Africa, 7(1): 43-63. Available at: https://www.iicba.unesco.org/sites/default/files/medias/fichiers/2024/05/4%20Professional%20Standards%20and%20Competencies%20for%20Teachers%20and%20School%20Leaders-%20A%20Case%20Study%20for%20Sierra%20Leone.pdf.

UNESCO-IIEP. (2015). *Guidelines for the development of education sector plans.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000233767.

—. (2020). The use of learning assessment data: The Gambia. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000372532.

—. (2021). *The State of the World's Children 2021: On My Mind – Promoting, protecting and caring for children's mental health,* UNICEF, New York, October 2021.

—. (2022). *Education in Africa: 5 priorities: Demographics, financing, inclusion, quality, employment.*

—. (2023). *Support for education quality management programme Policy brief #1 Assessing student learning: Yes, but what next?*

—. (2024). *Data for Education.* Available at: https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2024/01/Data-for-Education-PDF-1.pdf.

UNESCO-UIL. (2022). *Fifth Global Report on Adult Learning and Education.* Available at: https://www.uil.unesco.org/en/grale5.

UNESCO-UIS. (2024). *Data for Education: Monitoring progress towards SDG 4.* Available at: https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2024/01/Data-for-Education-PDF-1.pdf.

UNICEF (n.d) Teachers for all project: Finding effective strategies for teacher allocation across sub-Saharan Africa. Available at: https://www.unicef.org/innocenti/projects/teachers-all.

—. (2019a). *A World ready to learn: Advocacy brief.* Available at: https://www.unicef.org/media/57926/file/A-world-ready-to-learn-advocacy-brief-2019.pdf.

—. (2019b). *Minimum quality standards and indicators for community engagement.* Available at: https://www.unicef.org/mena/media/8401/file/19218_minimumquality-report_v07_rc_002.pdf.pdf.

—. (2015). *The Investment Case for Education and Equity.* Available at: https://www.unicef.org/media/50936/file/Investment_Case_for_Education_and_Equity-ENG.pdf.

—. (2019). The State of the World's Children 2019 Statistical Tables. Available at: https://data.unicef.org/resources/dataset/sowc-2019-statistical-tables/

—. (2021). *The State of the World's Children 2021. On My Mind – Promoting, protecting and caring for children's mental health*, UNICEF, New York, October 2021.

—. (2022). *Improving early grade reading and numeracy through 'Catch-Up,' a remedial learning programme.*

—. (2023a). *How to unleash the power of data to transform education policies.* Available at: https://tcg.uis.unesco.org/wp-content/uploads/sites/4/2024/01/Data-for-Education-PDF-1.pdf.

—. (2023b). *Learning where it is difficult to learn: Radio programmes help keep children learning in Cameroon.* Available at: https://www.unicef.org/media/141551/file/Learning where it is difficult to learn: Radio programmes help keep children learning in Cameroon.pdf.

—. (2023c). *Transforming Education with Equitable Financing.* Available at: https://www.unicef.org/reports/transforming-education-equitable-financing.

—. (2023d). *Unpacking Factors Influencing School Performance in Togo.* Available at: https://www.unicef.org/innocenti/media/5706/file/UNICEF-DMS-Togo-Report-2023.pdf

—. (2024a). *Adolescent Data Portal.* Available at: https://data.unicef.org/adp/, accessed 29-11-2024.

—. (2024b). *RAPID: A framework to accelerate foundational learning.* Available at: https://www.unicef.org/media/154671/file/RAPID%20Framework.pdf.

—. (2024c). *What is Foundational Education for Health and Well-being?* Available at: https://www.unicef.org/media/158026/file/BSF1. What is Foundational Education for Health and Well-being.pdf.

UNICEF and the Hempel Foundation. (2024). *Foundational Learning Action Tracker: Results for Africa,* November. Available at: https://www.unicef.org/media/164831/file/Foundational-learning-action-tracker-2024-Africa-snapshot-EN.pdf.

UNICEF-AUC. (2024). *Education Spending in Africa: The impacts of COVID-19 and possible recovery pathways.* Available at: https://www.unicef.org/esa/documents/education-spending-africa.

UNICEF Burkina Faso. (2022). 'Catch-up for out-of-school children: Modeling Koranic schools in Burkina Faso'. Available at: https://www.unicef.org/burkinafaso/en/stories/catch-out-school-children-modeling-koranic-schools-burkina-faso.

UIL. (2021). *Embracing a culture of lifelong learning: envisioning lifelong learning for sustainable futures in Southern Africa.* Available at: https://unesdoc.unesco.org/ark:/48223/pf0000378085.

UIL. (2022). *5th global report on adult learning and education: citizenship education: empowering adults for change.* p.98. Available at: https://unesdoc.unesco.org/ark:/48223/pf0000381666.

United Nations Population Fund. (2018). *International technical guidance on sexuality education.* Available at: https://www.unfpa.org/sites/default/files/pub-pdf/ITGSE.pdf.

United Nations Population Division. (2024). *World Population Prospects 2024.* Available at: https://population.un.org/wpp/Download/Standard/Population/. Last accessed 29-11-2024.

UNU-WIDER. (2024). *Smart classroom and education outcomes: Evidence from Rwanda.* Available at: https://www.wider.unu.edu/sites/default/files/Publications/Working-paper/PDF/wp2024-7-smart-classrooms-education-outcomes-Rwanda.pdf.

USAID. (2018). *Research for Effective Education Programming – Africa (REEP) Education Data Brief. Global Prevalence of School-Related Gender-based Violence (SRGBV).*

—. (2019). *Ghana Early Grade Reading Program: Impact Evaluation Endline Report.*

University of Bristol – School of Education. (2018). *Approaches to Strengthening Secondary STEM & ICT Education in Sub-Saharan Africa.* Available at: https://www.bristol.ac.uk/media-library/sites/education/documents/Binder1.pdf.

University of the Free State. (2023). Available at: https://www.ufs.ac.za/templates/news-archive/campus-news/2023/june/academic-freedom-and-institutional-autonomy-must-not-be-used-to-cover-up-poor-governance-and-lack-of-accountability-at-our-universities.

VOA. (2017). *Rwanda Ramps Up STEM Education for Girls.* Available at: https://www.voanews.com/a/rwanda-leading-way-in-girls-in-stem-field/4148108.html.

Wattanga, H. (2015). *The four great challenges leaders in African education are tackling.*

World Bank. (2018a). *Learning to Realize Education's Promise.* World Development Report 2018.

—. (2018b). *World Development Report 2018: Learning to realise education's promise.* Available at: https://www.worldbank.org/en/publication/wdr2018.

—. (2019). *Ending Learning Poverty: What Will It Take?*

—. (2020a). *Nigeria-COVID-19 Action Recovery and Economic Stimulus Program Project. Washington, D.C.: World bank Group.* Available at: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/142411608260520935/nigeria-covid-19-action-recovery-and-economic-stimulus-program-project.

—. (2020b). *Publication: Job Search and Hiring with Two-Sided Limited Information about Workseekers' Skills.* Available at: https://openknowledge.worldbank.org/entities/publication/222485a2-3b99-551d-8c4c-182e8a61bf96.

—. (2021a). *Snapshot of Basic Education Service Delivery in the Time of COVID-19 and Free Schooling: DRC Primary School Director Surveys*. Available at: http://documents.worldbank.org/curated/en/788551626108364553.

—. (2021b). *Skillcraft: free Skills Profiler for Unemployed Youth.* Available at: https://thedocs.worldbank.org/en/doc/a05d25ed27db0dd11be557d196f852e2-0380022021/original/CKEx-May-11-Work-and-Productivity-SkillsCraft.pdf.

—. (2021c). *Tanzania: World bank Supports Expanded Access to Opportunities and Services, Especially for Women and Youth.* Available at: https://www.worldbank.org/en/news/press-release/2021/05/27/tanzania-world-bank-supports-expanded-access-to-opportunities-and-services-especially-for-women-and-youth.

—. (2022a). *My Skills, My Career Superpowers: How Skillcraft Helps Jobseekers to Self-assess, Identify and Develop Skill for Jobs in South Africa.* Available at: https://documents.worldbank.org/en/publication/documents-reports/documentdetail/099520011182241119/p168508034b5480f60b33803c003af2b163.

—. (2022b). *The State of Global Learning Poverty: 2022 Update.*

—. (2023a). *Addressing Inefficient Distribution of Teachers Between Schools: The Case of Tanzania With Malawi and the Gambia – Case Studies of Successful reforms to Address the Challenges of Financing Education Systems Effectively.* Available at: https://documents.worldbank.org/pt/publication/documents-reports/documentdetail/099103123163585721/p17813509aefbe0850bf040557752fcb8ca.

—. (2023b). *Better Technical Vocational Education Training (TVET).* Available at: https://www.worldbank.org/en/topic/skillsdevelopment/publication/better-technical-vocational-education-training-TVET.

—. (2023c). *Going Beyond the Infrastructure Funding Gap - South African Perspective.*

—. (2024a). *Digital Transformation Drives Development in Africa.* Available at: https://www.worldbank.org/en/results/2024/01/18/digital-transformation-drives-development-in-afe-afw-africa.

—. (2024b). *Education: Innovative Financing in Developing Countries.* Available at: https://documents1.worldbank.org/curated/en/099042624181519346/pdf/P5009781490d0b070195ed1cd5436f2922c.pdf.

—. (2024c). *Rwanda Economic Update: Investing in Skills Development Can Spur Rwanda's Private Sector Growth and Economic Transformation.* Available at: https://www.worldbank.org/en/country/rwanda/publication/rwanda-economic-update-september-2024.

—. (2024d). *Turning Pages, Transforming Lives: Cameroon's textbook Revolution.* Available at: https://www.worldbank.org/en/results/2024/02/01/turning-pages-transforming-lives-cameroon-textbook-revolution.

World Economic Forum. (2023). *Future of Jobs Report, 2023.* Available at: https://www3.weforum.org/docs/WEF_Future_of_Jobs_2023.pdf.

World Food Programme. (2018). *Global School Feeding Sourcebook: Lessons from 14 counties.* Available at: https://docs.wfp.org/api/documents/WFP-0000073908/download/?_ga=2.223283611.1606132274.1735386347-239504721.1732008174.

—. (2024a). *Evaluation of Tsogolo la Thanzi - Healthy Future Home-Grown School Feeding Project from 2020 to 2023.*

—. (2024b). *Malawi country strategic plan (2024–2028).*

WFP, ECOWAS, CERFAM, the Research Consortium for School Health and Nutrition. (2024). *Home-Grown School Feeding in West Africa: A Landscape Analysis*.

WHO. (2024a). *Adolescent mental health.* Available at: https://www.who.int/news-room/fact-sheets/detail/adolescent-mental-health (Accessed 29-11-2019).

—. (2024b). *Maternal Mortality Fact Sheet.* Available at: https://www.who.int/news-room/fact-sheets/detail/maternal-mortality#:~:text=Sub%2DSaharan%20Africa%20and%20Southern,16%25%20(47%20000).

Statistical annexes

Annex 1: Regional Averages

Target	Indicator number	Indicator name									
Region		**Disaggregations**		**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
1.a	**1.a.2**	**Expenditure on education as a percentage of total government expenditure (%)**										
Northern Africa				16.1								
Sub-Saharan Africa				16.2	15.7	15.9	16.4	14.5	14.8	15.3	14.5	14.7
4.1	**4.1.1**	**Proportion of students at the end of primary education achieving at least a minimum proficiency level in mathematics**										
Sub-Saharan Africa		both sexes (%)		12.1	11.9	11.6	11.4	11.2				
		Proportion of students at the end of primary education achieving at least a minimum proficiency level in reading										
Sub-Saharan Africa		both sexes (%)		31.0	30.8	30.6	30.4	30.2				
Northern Africa	**4.1.2**	**Completion rate**										
	primary education		both sexes (%)	85.3	85.9	86.6	87.2	87.8	88.4	88.9	89.4	89.9
			female (%)	85.2	86.0	86.7	87.4	88.2	88.8	89.4	90.0	90.5
			male (%)	85.4	85.9	86.4	86.9	87.5	88.0	88.5	88.9	89.3
	lower secondary education		both sexes (%)	65.2	65.9	66.7	67.5	68.2	69.0	69.9	70.6	71.3
			female (%)	66.7	67.6	68.5	69.3	70.2	71.2	72.2	73.1	74.0
			male (%)	63.7	64.3	65.0	65.7	66.3	67.0	67.7	68.2	68.7
	upper secondary education		both sexes (%)	52.8	53.6	54.5	55.5	56.4	57.3	58.2	59.1	60.0
			female (%)	54.8	55.9	57.0	58.1	59.1	60.1	61.2	62.3	63.5
			male (%)	50.8	51.4	52.1	53.0	53.8	54.6	55.3	56.0	56.7

Target	Indicator number	Indicator name								
Region	Disaggregations		2015	2016	2017	2018	2019	2020	2021	2022	2023
Sub-Saharan Africa	primary education	both sexes (%)	60.1	61.0	61.8	62.7	63.6	64.6	65.5	66.4	67.3
		female (%)	61.6	62.6	63.7	64.8	65.9	67.0	68.2	69.3	70.3
		male (%)	58.7	59.3	60.0	60.7	61.4	62.1	62.9	63.6	64.3
	lower secondary education	both sexes (%)	41.5	42.0	42.6	43.3	43.9	44.6	45.2	45.9	46.7
		female (%)	39.9	40.6	41.3	42.0	42.8	43.5	44.3	45.1	46.0
		male (%)	43.1	43.5	43.9	44.4	45.1	45.6	46.2	46.8	47.4
	upper secondary education	both sexes (%)	25.1	25.5	25.9	26.2	26.5	26.9	27.3	27.6	28.0
		female (%)	22.8	23.3	23.7	24.1	24.5	25.0	25.4	25.9	26.3
		male (%)	27.4	27.7	28.0	28.3	28.5	28.8	29.1	29.4	29.6
4.3	**4.3.1**	**Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months**									
Northern Africa	15-24 years old	both sexes (%)	48.1	48.7	49.2	49.8	49.1	47.7	48.1	49.8	49.9
		female (%)	47.2	47.8	48.3		48.1	46.4	47.1	48.7	48.8
		male (%)	49.0	49.6	50.2		50.1	49.1	49.1	50.9	51.0
	15-64 years old	both sexes (%)	16.6	16.8	17.2	16.7	16.8	16.2	15.3	14.9	14.9
		female (%)	16.0	16.2	16.3	16.0	16.2	15.6	14.6	13.8	13.9
		male (%)	17.1	17.5	18.0	17.3	17.5	16.9	16.0	15.9	15.9
Sub-Saharan Africa	15-24 years old	both sexes (%)	44.9	44.6	44.4	44.6	44.4	44.3	44.6	44.4	44.5
		female (%)	40.9	40.9	40.6	40.7	40.3	40.0	40.5	40.6	40.6
		male (%)	49.3	48.6	48.6	48.6	48.7	48.8	48.9	48.5	48.7
	15-64 years old	both sexes (%)	17.4	17.2	17.1	17.0	16.8	16.9	17.1	17.3	17.3
		female (%)	15.0	15.0	14.9	14.9	14.8	14.8	15.2	15.4	15.4
		male (%)	19.9	19.7	19.4	19.2	18.9	19.1	19.3	19.3	19.3
Northern Africa	**4.3.2**	**Gross enrolment ratio for tertiary education**									
	both sexes (%)		30.9	31.8	33.3	35.5	35.9	37.5	37.5	37.5	38.7
	female (%)		32.6	34.2	35.5	38.2	38.8	39.9	40.0	40.4	41.4
	male (%)		29.3	29.6	31.1	32.8	33.2	35.3	35.0	34.6	36.1

Target	Indicator number	Indicator name								
Region		**Disaggregations**	**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Sub-Saharan Africa		both sexes (%)	8.7	8.7	8.8	9.0	9.0	9.1	9.2		
		female (%)	7.2	7.3	7.5	7.7	7.8	7.9	8.0		
		male (%)	10.1	10.1	10.2	10.3	10.2	10.3	10.3		
	4.3.3	**Proportion of 15- to 24-year-olds enrolled in vocational education**									
Northern Africa		both sexes (%)	6.0	6.2	6.3	7.3	7.4	7.6	7.5	7.6	
		female (%)	5.1	5.2	5.3	6.1	6.2	6.4	6.2	6.2	
		male (%)	6.9	7.0	7.2	8.2	8.4	8.6	8.5	8.6	
Sub-Saharan Africa		both sexes (%)	1.0	1.1	1.2	1.2	1.2	1.2			
		female (%)	0.9	1.0	1.1	1.1	1.1	1.0			
		male (%)	1.1	1.2	1.3	1.3	1.3	1.2			
4.6	**4.6.2**	**Adult literacy rate**									
Northern Africa	population 15+ years	both sexes (%)	74.3	71.6	72.3	72.9	73.4	73.8	74.3	74.7	75.1
		female (%)	66.7	64.5	65.4	66.2	66.7	67.3	67.9	68.5	68.9
		male (%)	81.9	78.6	79.1	79.6	79.9	80.2	80.6	80.9	81.2
Sub-Saharan Africa	population 15+ years	both sexes (%)	64.5	65.1	65.5	67.1	67.7	67.9	67.9	68.2	68.5
		female (%)	57.0	57.8	58.3	60.2	61.1	61.4	61.5	61.9	62.3
		male (%)	72.3	72.6	72.8	74.1	74.5	74.6	74.5	74.7	74.9
Northern Africa	population 15-24 years	both sexes (%)	90.2	87.8	88.4	88.9	89.3	89.6	89.9	90.2	90.4
		female (%)	89.2	86.8	87.7	88.3	88.8	89.2	89.6	90.0	90.3
		male (%)	91.2	88.8	89.1	89.5	89.7	90.0	90.2	90.4	90.6
Sub-Saharan Africa	population 15-24 years	both sexes (%)	75.5	76.1	76.6	77.8	78.0	78.1	78.4	78.7	78.9
		female (%)	71.5	72.4	73.2	74.6	75.0	75.2	75.6	76.0	76.2
		male (%)	79.5	79.7	80.0	80.9	81.0	81.1	81.2	81.3	81.4
4.7	**4.7.2**	**Percentage of schools providing life skills-based HIV and sexuality education**									
Northern Africa		primary schools	21.6	21.3	21.6						
		lower secondary schools	33.8	33.3	35.0						
		upper secondary schools	26.1	24.5	25.9						

Target	Indicator number	Indicator name								
Region	**Disaggregations**		**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
Sub-Saharan Africa	primary schools							43.9	43.3	44.6	
	lower secondary schools							52.3	49.5	47.0	
	upper secondary schools			46.3	49.4	53.1	56.3	59.2	59.3	57.1	
4.a	**4.a.1**	**Proportion of schools with access to ... (%)**									
Northern Africa	primary schools	electricity	88.4	88.7	88.5		88.9	89.1	89.2	88.9	89.0
		computers for pedagogical purposes	73.6	72.9	73.8	76.4	78.7	75.0	75.5	75.1	75.1
		Internet for pedagogical purposes	48.1	48.2	51.2	53.6	57.7	52.0	45.5	46.4	58.4
		basic drinking water	87.4	87.4	87.6		88.8	89.0	88.9	88.9	92.0
	lower secondary schools	electricity	81.2	81.6	80.5	79.8	79.1	78.4	77.6	77.3	
		computers for pedagogical purposes		91.5	92.3	91.7	90.5	89.9	90.8	91.5	
		Internet for pedagogical purposes		70.3	75.8	80.7	85.2	76.0	67.6	71.7	
		basic drinking water	89.7	89.6	89.9			90.0	90.0	90.6	
	upper secondary schools	electricity	92.4	99.2	97.5	95.6	93.5	91.5	89.3	90.9	91.3
		computers for pedagogical purposes	93.1	92.6	93.2	92.0	90.3	89.0	90.6	91.5	90.3
		Internet for pedagogical purposes	70.6	69.8	72.0	73.4	74.2	75.3	74.8	77.0	76.7
		basic drinking water	95.7	95.5	96.1					96.5	96.6
Sub-Saharan Africa	primary schools	electricity	32.0	33.0	32.9	32.7	32.5	33.5	33.3	34.3	34.3
		basic drinking water		43.8	44.5		46.6	48.3	49.5	52.5	
	lower secondary schools	electricity	47.4	47.1	46.6	46.1	46.4	47.5	46.5	47.5	48.2
		computers for pedagogical purposes					27.6				
		basic drinking water			53.0	54.5			54.8	56.8	57.3
	upper secondary schools	electricity	57.6	58.0	57.2	55.6	54.5	53.8	53.0	53.7	54.9
		computers for pedagogical purposes	42.0	42.0							
		Internet for pedagogical purposes	24.9	25.2							
		basic drinking water	53.5	54.9	56.6	57.3	57.8	58.6	58.3	60.8	62.8

Target	Indicator number	Indicator name								
Region	**Disaggregations**		**2015**	**2016**	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**
4.a	**4.a.1**	**Proportion of schools with facilities (%)**									
Northern Africa	primary schools	basic handwashing facilities	94.4	94.4	95.3		95.2	94.8	95.3	96.7	95.2
		single-sex basic sanitation facilities	89.8	90.0	92.2			92.5	92.5	92.2	91.2
	lower secondary schools	single-sex basic sanitation facilities	88.8	89.0	87.8	86.7	85.4	84.3	83.2	83.4	
	upper secondary schools	basic handwashing facilities	99.8	99.7	97.0	94.4	91.1	88.2	85.0	87.2	85.9
		single-sex basic sanitation facilities	99.3	99.3	96.6	94.1	90.9	88.0	84.8	87.0	86.2
Sub-Saharan Africa	primary schools	basic handwashing facilities		39.4							
	lower secondary schools	single-sex basic sanitation facilities								67.8	66.3
	upper secondary schools	basic handwashing facilities		40.8							
		single-sex basic sanitation facilities								73.5	71.4
4.c	**4.c.4**	**Pupil-qualified teacher ratio (headcount basis)**									
Northern Africa	pre-primary education		26.8	28.0	28.3	28.9	28.6	29.0	28.4	30.2	31.2
	primary education		22.4	22.8	23.3	23.2	22.9	24.3	26.1	31.3	33.7
	lower secondary		18.8	19.1	19.1	19.0	19.3	19.8	20.4	23.9	
	upper secondary		12.8	12.8	13.1	13.2	13.2	13.4	14.1	16.8	
Sub-Saharan Africa	pre-primary education		45.6	46.4	48.3	46.8	47.4	47.3	44.8	47.3	
	primary education		46.8	46.1	45.7	45.1	46.5	47.9	47.8	48.7	
	lower secondary		30.7	30.0	29.8	29.8	30.3				
	upper secondary		24.2	24.7	24.6	24.6	26.9				

Annex 2: Country data

Country	1.a.2- Expenditure on education as a percentage of total government expenditure (%)	4.1.1-Proportion of students at the end of primary education achieving at least a minimum proficiency level in …						4.1.2-Completion rate		
		Mathematics			Reading					
		both sexes (%)	female (%)	male (%)	both sexes (%)	female (%)	male (%)	Primary	Lower Secondary	Upper Secondary
Algeria	14.4 24	. .	. .	. .	. .	. .	. .	94.1 19	73.2 19	46.5 19
Angola	6.4 24	. .	. .	. .	. .	. .	. .	. .	. .	. .
Benin	19.0 23	19.1 19	19.8 19	19.1 19	45.5 19	47.4 19	44.3 19	52.0 21	25.4 21	12.5 21
Botswana	21.5 20	. .	. .	. .	. .	. .	. .	. .	. .	. .
Burkina Faso	20.3 23	25.0 19	24.1 19	26.7 19	33.0 19	33.3 19	32.6 19	60.3 21	34.4 21	16.2 21
Burundi	15.7 23	18.0 19	14.4 19	23.7 19	4.5 19	4.3 19	4.6 19	. .	. .	. .
Cabo Verde	13.4 24	. .	. .	. .	. .	. .	. .	. .	. .	55.7 20
Cameroon	13.1 23	11.1 19	12.3 19	10.4 19	30.2 19	32.6 19	28.2 19	. .	. .	. .
Central African Republic	10.0 23	. .	. .	. .	. .	. .	. .	27.1 19	12.3 19	5.6 19
Chad	16.5 23	1.8 19	2.1 19	1.7 19	7.6 19	7.4 19	7.8 19	26.9 19	13.1 19	4.5 19
Comoros	10.5 22	. .	. .	. .	. .	. .	. .	81.5 22	60.0 22	36.8 22
Congo	14.7 23	7.7 19	8.6 19	7.3 19	33.6 19	37.0 19	30.2 19	. .	. .	. .
Côte d'Ivoire	15.9 23	2.6 19	2.1 19	3.4 19	22.0 19	23.4 19	21.3 19	65.2 21	35.2 21	17.5 21
Democratic Republic of the Congo	. .	3.2 19	2.9 19	3.6 19	9.2 19	8.5 19	9.9 19	. .	. .	. .
Djibouti	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Egypt	. .	. .	. .	. .	44.6 21	47.3 21	41.9 21	. .	. .	. .
Equatorial Guinea	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eritrea	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eswatini	16.6 22	. .	. .	. .	. .	. .	. .	79.7 22	57.8 22	36.6 22
Ethiopia	23.0 22	. .	. .	. .	. .	. .	. .	55.7 19	28.5 19	15.5 19
Gabon	13.6 23	22.9 19	20.2 19	26.6 19	76.3 19	78.9 19	73.6 19	73.6 21	44.9 21	21.8 21
Gambia	17.5 23	. .	. .	. .	. .	. .	. .	63.8 20	48.6 20	28.8 20

Country	1.a.2- Expenditure on education as a percentage of total government expenditure (%)	4.1.1-Proportion of students at the end of primary education achieving at least a minimum proficiency level in …						4.1.2-Completion rate		
		Mathematics			Reading					
		both sexes (%)	female (%)	male (%)	both sexes (%)	female (%)	male (%)	Primary	Lower Secondary	Upper Secondary
Ghana	12.0 [23]	.	.	.	.	.	.	71.4 [22]	64.0 [22]	47.7 [22]
Guinea	10.0 [23]	6.8 [19]	6.2 [19]	7.9 [19]	22.2 [19]	22.6 [19]	21.9 [19]	.	.	.
Guinea-Bissau	.	.	.	.	.	.	.	44.7 [19]	30.8 [19]	19.2 [19]
Kenya	17.9 [20]	36.9 [23]	37.9 [23]	36.0 [23]	25.5 [23]	27.2 [23]	23.9 [23]	90.5 [22]	83.7 [22]	58.9 [22]
Lesotho	10.4 [24]	19.7 [23]	21.8 [23]	17.1 [23]	10.8 [23]	12.0 [23]	9.4 [23]	.	.	.
Liberia	7.4 [21]	.	.	.	.	.	.	30.5 [19]	27.4 [19]	19.4 [19]
Libya	.	.	.	.	.	.	.	.	.	.
Madagascar	18.0 [19]	6.3 [19]	6.7 [19]	5.9 [19]	6.3 [19]	7.1 [19]	5.4 [19]	49.7 [21]	23.5 [21]	14.0 [21]
Malawi	.	.	.	.	.	.	.	49.3 [20]	23.1 [20]	15.5 [20]
Mali	19.1 [23]	.	.	.	.	.	.	46.4 [20]	17.3 [20]	7.5 [20]
Mauritania	10.2 [24]	.	.	.	.	.	.	.	.	.
Mauritius	12.2 [22]	.	.	.	.	.	.	.	.	.
Morocco	23.8 [21]	.	.	.	40.6 [21]	.	.	.	.	.
Mozambique	18.8 [21]	.	.	.	.	.	.	54.4 [22]	27.9 [22]	17.8 [22]
Namibia	25.0 [23]	.	.	.	.	.	.	.	.	.
Niger	12.8 [23]	7.9 [19]	7.2 [19]	8.1 [19]	14.4 [19]	15.9 [19]	13.1 [19]	.	.	.
Nigeria	4.4 [23]	.	.	.	.	.	.	73.1 [21]	67.8 [21]	53.7 [21]
Rwanda	14.8 [23]	.	.	.	.	.	.	62.9 [20]	30.1 [20]	20.7 [20]
Sao Tome and Principe	18.3 [23]	.	.	.	.	.	.	87.2 [19]	60.0 [19]	32.2 [19]
Senegal	22.5 [23]	27.2 [19]	28.0 [19]	28.5 [19]	41.1 [19]	43.5 [19]	38.2 [19]	47.4 [19]	29.6 [19]	10.5 [19]
Seychelles	6.7 [20]	.	.	.	.	.	.	.	.	.
Sierra Leone	29.4 [22]	.	.	.	.	.	.	69.4 [19]	47.0 [19]	19.6 [19]
Somalia	4.2 [19]	.	.	.	.	.	.	49.8 [23]	47.9 [23]	.
South Africa	18.6 [22]	.	.	.	.	.	.	98.0 [21]	93.7 [21]	63.2 [21]
South Sudan	.	.	.	.	.	.	.	.	.	.

Country	1.a.2-Expenditure on education as a percentage of total government expenditure (%)	4.1.1-Proportion of students at the end of primary education achieving at least a minimum proficiency level in …						4.1.2-Completion rate		
		Mathematics			Reading			Primary	Lower Secondary	Upper Secondary
		both sexes (%)	female (%)	male (%)	both sexes (%)	female (%)	male (%)			
Sudan	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Togo	11.6 24	15.9 19	15.9 19	15.8 19	19.4 19	20.2 19	18.5 19	. .	. .	. .
Tunisia	17.8 24	. .	. .	. .	. .	. .	. .	92.7 22	75.6 22	35.6 22
Uganda	8.6 23	. .	. .	. .	. .	. .	. .	27.2 19	22.5 19	15.7 19
United Republic of Tanzania	13.4 24	. .	. .	. .	. .	. .	. .	74.5 22	28.0 22	8.9 22
Zambia	15.4 24	16.0 23	15.9 23	16.2 23	9.7 23	11.0 23	8.3 23	. .	. .	. .
Zimbabwe	15.7 20	. .	. .	. .	. .	. .	. .	88.8 19	53.9 19	14.0 19

Note: "." : No data available for the 2019-2024 period. Figures in grey indicate the year of the data (e.g., '23' = 2023).

Country	4.3.1-Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months						4.3.2-Gross enrolment ratio for tertiary education			4.3.3-Proportion of 15- to 24-year-olds enrolled in vocational education		
	15-24			15-64								
	both sexes	female	male	both sexes	female	male	both sexes	female	male	both sexes	female	male
Algeria	.	.	.	.	.	.	55.5 23	67.4 23	44.1 23	2.2 23	2.0 23	2.4 23
Angola	50.5 21	46.0 21	55.2 21	21.5 21	19.3 21	23.8 21	9.9 23	9.8 23	10.0 23	.	.	.
Benin	39.3 22	35.8 22	42.7 22	14.4 22	12.0 22	17.0 22	10.6 22	7.9 22	13.3 22	1.6 22	1.0 22	2.2 22
Botswana	46.2 19	45.7 19	46.8 19	14.9 19	19.3 19	15.6 19	21.79 23	27.05 23	16.61 23	.	.	.
Burkina Faso	42.2 23	38.2 23	47.7 23	15.4 23	14.2 23	16.9 23	10.2 23	8.2 23	12.1 23	1.2 23	0.9 23	1.5 23
Burundi	35.5 20	33.8 20	37.8 20	13.5 20	12.9 20	14.3 20	6.2 23	5.4 23	7.0 23	.	.	.
Cabo Verde	.	.	.	.	.	.	.	.	.	1.2 21	1.0 21	1.5 21
Cameroon	51.5 21	45.9 21	58.1 21	17.5 21	15.5 21	19.8 21	15.8 23	14.3 23	17.3 23	6.8 23	5.1 23	8.4 23
Central African Republic	.	.	.	.	.	.	.	.	.	.	.	.
Chad	.	.	.	.	.	.	4.5 20	2.6 20	6.5 20	0.0 23	0.0 23	0.0 23
Comoros	65.1 21	65.2 21	65.0 21	24.3 21	23.2 21	25.4 21	.	.	.	.	.	.
Congo	.	.	.	.	.	.	10.4 23	8.3 23	12.4 23	.	.	.
Côte d'Ivoire	49.4 22	45.9 22	53.0 22	16.5 22	14.9 22	18.3 22	11.1 23	10.4 23	11.8 23	2.3 23	2.2 23	2.5 23
Dem. Rep. of the Congo	37.5 20	31.1 20	44.4 20	14.5 20	11.9 20	17.1 20	6.7 20	5.0 20	8.4 20	.	.	.
Djibouti	.	.	.	.	.	.	.	.	.	.	.	.
Egypt	57.1 22	56.4 22	57.7 22	16.6 22	15.3 22	17.8 22	39.4 23	39.5 23	39.3 23	11.5 21	9.6 21	13.3 21
Equatorial Guinea	.	.	.	.	.	.	.	.	.	.	.	.
Eritrea	.	.	.	.	.	.	.	.	.	.	.	.
Eswatini	53.2 23	51.8 23	54.7 23	18.6 23	17.5 23	19.7 23	.	.	.	.	.	.
Ethiopia	49.3 21	44.0 21	54.9 21	21.1 21	17.8 21	24.5 21	.	.	.	.	.	.
Gabon	.	.	.	.	.	.	14.7 21	18.2 21	11.3 21	.	.	.
Gambia	38.7 23	42.3 23	34.7 23	16.6 23	17.3 23	15.8 23	.	.	.	.	.	.
Ghana	43.8 22	41.2 22	46.6 22	16.9 22	14.9 22	19.3 22	22.0 23	21.6 23	22.4 23	1.5 21	0.8 21	2.2 21

Country	4.3.1-Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months						4.3.2-Gross enrolment ratio for tertiary education			4.3.3-Proportion of 15- to 24-year-olds enrolled in vocational education		
	15-24			15-64								
	both sexes	female	male	both sexes	female	male	both sexes	female	male	both sexes	female	male
Guinea	43.3 19	35.3 19	53.8 19	14.9 19	11.9 19	18.7 19	6.7 21	4.2 21	9.2 21	. .	. .	. .
Guinea-Bissau	65.0 22	61.0 22	68.9 22	26.9 22	23.7 22	30.4 22	. .	. .	. .	. .	. .	. .
Kenya	58.4 21	53.9 21	63.1 21	21.0 21	18.9 21	23.4 21	10.6 19	. .	. .	. .	. .	. .
Lesotho	39.9 19	43.1 19	36.7 19	14.1 19	15.0 19	13.1 19	. .	. .	. .	. .	. .	. .
Liberia	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Libya	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Madagascar	18.4 22	16.9 22	19.8 22	7.0 22	6.4 22	7.7 22	6.4 23	6.5 23	6.3 23	0.6 21	0.4 21	0.8 21
Malawi	44.1 20	39.3 20	49.2 20	17.8 20	15.3 20	20.7 20	. .	. .	. .	0.0 19	0.0 19	0.0 19
Mali	32.8 22	30.1 22	35.5 22	11.2 22	9.6 22	13.0 22	4.7 19	3.2 19	6.3 19	. .	. .	. .
Mauritania	37.6 19	34.2 19	41.5 19	14.5 19	12.7 19	16.8 19	6.0 20	4.3 20	7.7 20	. .	. .	. .
Mauritius	52.6 22	56.6 22	48.7 22	11.1 22	12.0 22	10.2 22	44.2 22	51.1 22	37.6 22	. .	. .	. .
Morocco	. .	. .	. .	. .	. .	. .	47.7 23	51.6 23	44.0 23	8.6 23	7.7 23	9.4 23
Mozambique	. .	. .	. .	. .	. .	. .	7.3 19	6.7 19	7.9 19	. .	. .	. .
Namibia	. .	. .	. .	. .	. .	. .	28.9 22	36.0 22	21.6 22	. .	. .	. .
Niger	26.5 22	23.4 22	29.8 22	9.4 22	7.6 22	11.7 22	4.6 20	3.0 20	6.2 20	1.3 23	1.1 23	1.4 23
Nigeria	46.3 22	41.8 22	50.8 22	19.9 22	17.9 22	22.1 22	. .	. .	. .	. .	. .	. .
Rwanda	36.9 23	36.4 23	37.3 23	13.3 23	12.5 23	14.3 23	8.9 23	7.7 23	10.1 23	4.5 23	4.1 23	4.9 23
Sao Tome and Principe	. .	. .	. .	. .	. .	. .	16.7 21	18.3 21	14.9 21	. .	. .	. .
Senegal	41.9 22	43.0 22	40.6 22	16.5 22	15.8 22	17.4 22	17.3 23	17.6 23	17.0 23	2.1 23	2.1 23	2.0 23
Seychelles	36.8 19	40.8 19	32.8 19	8.9 19	10.1 19	7.5 19	14.0 23	18.6 23	10.1 23	20.8 23	22.3 23	19.5 23
Sierra Leone	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Somalia	48.0 19	44.2 19	52.2 19	23.5 19	21.3 19	25.9 19	. .	. .	. .	. .	. .	. .
South Africa	55.8 23	56.2 23	55.5 23	15.7 23	16.0 23	15.4 23	27.2 22	34.2 22	20.3 22	4.2 22	5.3 22	3.1 22
South Sudan	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .

Country	4.3.1-Participation rate of youth and adults in formal and non-formal education and training in the previous 12 months						4.3.2-Gross enrolment ratio for tertiary education			4.3.3-Proportion of 15- to 24-year-olds enrolled in vocational education		
	15-24			15-64								
	both sexes	female	male	both sexes	female	male	both sexes	female	male	both sexes	female	male
Sudan	33.8 22	32.5 22	35.3 22	12.8 22	12.3 22	13.4 22	. .	. .	. .	. .	. .	. .
Togo	61.1 22	55.9 22	66.7 22	21.1 22	18.4 22	24.4 22	15.1 20	10.9 20	19.1 20	3.8 23	3.0 23	4.6 23
Tunisia	63.2 23	69.9 23	56.9 23	14.0 23	15.0 23	12.9 23	38.5 23	49.2 23	28.0 23	. .	. .	. .
Uganda	50.8 21	46.0 21	56.1 21	20.1 21	18.5 21	21.9 21	. .	. .	. .	. .	. .	. .
United Republic of Tanzania	30.2 20	27.5 20	33.1 20	11.0 20	9.9 20	12.2 20	4.0 24	3.6 24	4.4 24	. .	. .	. .
Zambia	43.9 22	40.8 22	47.1 22	18.2 22	16.6 22	19.9 22	. .	. .	. .	. .	. .	. .
Zimbabwe	34.8 22	32.7 22	37.0 22	12.5 22	11.4 22	13.9 22	9.7 20	9.5 20	9.9 20	. .	. .	. .

Note: "." : No data available for the 2019-2024 period. Figures in grey indicate the year of the data (e.g., '23' = 2023).

Country	4.6.2-Adult literacy rate						4.7.2-Percentage of schools providing life skills-based HIV and sexuality education		
	15-24			15+					
	both sexes	female	male	both sexes	female	male	Primary	Lower Secondary	Upper Secondary
Algeria	74.0 19	98.0 19	64.8 19	. .	74.2 19	. .	0.0 21	0.0 21	0.0 21
Angola	83.3 22	80.7 22	85.9 22	72.4 22	62.5 22	82.8 22	. .	. .	. .
Benin	66.4 22	59.1 22	73.6 22	47.1 22	36.4 22	57.9 22	. .	. .	. .
Botswana	. .	. .	. .	. .	. .	. .	39.6 22	29.5 22	39.8 22
Burkina Faso	53.6 22	51.7 22	55.6 22	34.5 22	29.1 22	40.1 22	2.0 23	18.8 23	13.9 23
Burundi	93.6 22	93.2 22	94.0 22	75.5 22	69.4 22	81.8 22	98.1 19	. .	. .
Cabo Verde	98.7 22	99.3 22	98.3 22	91.0 22	87.6 22	94.5 22	. .	100.0 19	100.0 19
Cameroon	86.2 20	83.8 20	88.6 20	78.2 20	73.1 20	83.4 20	70.9 22	81.7 23	82.3 23
Central African Republic	38.3 20	29.1 20	47.5 20	37.5 20	26.2 20	49.2 20	. .	. .	. .
Chad	36.1 22	30.6 22	41.4 22	27.3 22	18.9 22	35.8 22	0.0 21	. .	. .
Comoros	82.0 22	83.1 22	80.9 22	61.7 22	56.9 22	66.6 22	. .	. .	. .
Congo	82.4 21	79.5 21	85.2 21	80.6 21	75.4 21	85.9 21	. .	. .	. .
Côte d'Ivoire	66.8 21	58.3 21	76.2 21	50.0 21	40.3 21	60.2 21	27.7 23	58.2 23	69.2 23
Democratic Republic of the Congo	88.1 22	85.4 22	90.8 22	80.5 22	71.7 22	89.6 22	76.9 21	33.9 21	59.8 21
Djibouti	. .	. .	. .	. .	. .	. .	0.0 23	0.0 23	0.0 23
Egypt	92.2 22	91.7 22	92.7 22	74.5 22	68.9 22	80.0 22	. .	. .	. .
Equatorial Guinea	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eritrea	. .	. .	. .	. .	. .	. .	100 22	100 22	100 22
Eswatini	98.7 22	98.8 22	98.6 22	90.7 22	90.4 22	91.1 22	100.0 23	15.5 23	15.5 23
Ethiopia	. .	70.3 19	. .	. .	40.4 19	. .	. .	. .	. .
Gabon	90.6 22	92.6 22	88.7 22	85.7 22	85.0 22	86.3 22	. .	. .	. .
Gambia	74.7 22	79.9 22	69.6 22	58.7 22	52.3 22	65.3 22	. .	. .	. .
Ghana	85.9 22	82.8 22	89.9 22	80.4 20	76.2 20	84.5 20	. .	. .	45.8 19
Guinea	60.3 21	49.1 21	71.3 21	45.3 21	31.3 21	61.2 21	0.0 20	. .	. .

Country	4.6.2-Adult literacy rate						4.7.2-Percentage of schools providing life skills-based HIV and sexuality education		
	15-24			15+					
	both sexes	female	male	both sexes	female	male	Primary	Lower Secondary	Upper Secondary
Guinea-Bissau	68.9 22	62.5 22	75.3 22	53.9 22	41.0 22	67.6 22	. .	. .	. .
Kenya	95.7 22	95.3 22	96.1 22	82.9 22	80.3 22	85.6 22	. .	. .	. .
Lesotho	89.7 22	95.6 22	83.8 22	82.0 22	89.8 22	73.9 22	. .	. .	. .
Liberia	77.5 19	71.8 19	86.2 19	. .	. .	. .	51.5 21	56.5 21	58.7 21
Libya	. .	. .	. .	. .	. .	. .	. .	. .	. .
Madagascar	80.7 22	80.7 22	80.8 22	77.5 22	76.0 22	78.9 22	. .	. .	. .
Malawi	76.8 22	79.8 22	73.7 22	68.1 22	65.1 22	71.4 22	100.0 23	100.0 23	100.0 23
Mali	46.0 20	38.0 20	55.0 20	31.0 20	22.0 20	40.0 20	0.8 23	2.0 23	. .
Mauritania	76.5 21	75.0 21	77.9 21	67.0 21	62.2 21	71.8 21	0.0 19	0.0 19	0.0 19
Mauritius	99.3 21	99.6 21	99.0 21	92.2 21	90.5 21	93.9 21	0.0 23	0.0 23	0.0 23
Morocco	98.5 22	98.4 22	98.6 22	77.4 22	69.1 22	85.6 22	. .	. .	. .
Mozambique	70.0 20	65.0 20	76.0 20	60.0 20	49.0 20	72.0 20	. .	. .	. .
Namibia	95.6 21	96.6 21	94.5 21	92.3 21	92.3 21	92.2 21	. .	. .	. .
Niger	48.2 22	40.4 22	55.8 22	38.1 22	29.7 22	46.3 22	4.1 23	94.3 23	84.6 23
Nigeria	73.7 21	69.0 21	77.8 21	63.2 21	53.3 21	73.7 21	. .	. .	. .
Rwanda	90.0 22	92.0 22	88.0 22	79.0 22	77.0 22	81.0 22	100.0 23	100.0 23	100.0 23
Sao Tome and Principe	98.2 22	98.4 22	98.0 22	93.8 22	91.1 22	96.5 22	. .	. .	. .
Senegal	78.1 22	75.2 22	81.0 22	57.7 22	47.1 22	69.1 22	60.2 23	. .	. .
Seychelles	. .	. .	. .	. .	. .	. .	83.9 23	81.3 23	87.5 23
Sierra Leone	73.5 22	71.7 22	75.2 22	48.6 22	41.3 22	56.0 22	17.1 23	32.5 23	38.0 23
Somalia	71.0 22	65.0 22	76.0 22	54.0 22	44.0 22	65.0 22	. .	. .	. .
South Africa	97.0 21	97.0 21	96.0 21	90.0 21	89.0 21	91.0 21	. .	. .	. .
South Sudan	. .	. .	. .	. .	. .	. .	. .	. .	. .
Sudan	. .	. .	. .	. .	. .	. .	. .	. .	. .
Togo	88.0 19	84.0 19	92.0 19	67.0 19	55.0 19	80.0 19	. .	1.2 21	1.3 21

Country	4.6.2-Adult literacy rate						4.7.2-Percentage of schools providing life skills-based HIV and sexuality education		
	15-24			15+					
	both sexes	female	male	both sexes	female	male	Primary	Lower Secondary	Upper Secondary
Tunisia	98.2 22	98.1 22	98.2 22	85.2 22	78.3 22	92.6 22	. .	. .	. .
Uganda	91.8 22	93.0 22	90.6 22	80.6 22	76.5 22	84.8 22	. .	. .	. .
United Republic of Tanzania	87.1 22	85.1 22	88.8 22	82.0 22	78.7 22	85.5 22	66.5 21	67.7 21	67.7 21
Zambia	93.2 20	92.8 20	93.5 20	87.5 20	84.3 20	91.0 20	. .	. .	. .
Zimbabwe	90.9 22	94.7 22	86.8 22	89.8 22	91.2 22	88.2 22	60.5 20	56.7 20	67.3 20

Note: "." : No data available for the 2019-2024 period. Figures in grey indicate the year of the data (e.g., '23' = 2023).

Country	4.a.1-Proportion of schools with access to ... (%)											
	Electricity			Computers for pedagogical purposes			Internet for pedagogical purposes			Basic drinking water		
	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary
Algeria	99.8 [23]	100.0 [23]	100.0 [23]	61.9 [23]	99.4 [23]	98.7 [23]	57.9 [23]	93.2 [23]	85.0 [23]	100.0 [23]	93.8 [23]	96.9 [23]
Angola	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Benin	33.7 [22]	81.0 [22]	94.6 [22]	. .	28.5 [22]	37.2 [22]	. .	3.6 [22]	4.7 [22]	53.0 [22]	83.2 [22]	92.3 [22]
Botswana	97.9 [22]	100.0 [22]	98.9 [22]	51.4 [22]	95.2 [22]	94.3 [22]	62.1 [22]	99.5 [22]	96.6 [22]	100.0 [22]	100.0 [22]	100.0 [22]
Burkina Faso	31.2 [23]	43.3 [23]	32.7 [23]	0.9 [23]	6.0 [23]	5.0 [23]	0.4 [23]	1.9 [23]	1.6 [23]	74.3 [23]	43.3 [23]	31.5 [23]
Burundi	8.7 [19]	. .	. .	0.0 [39]	0.0 [39]	. .	0.0 [39]	0.0 [39]	. .	38.9 [19]	. .	. .
Cabo Verde	90.3 [21]	100.0 [24]	100.0 [24]	51.5 [21]	100.0 [24]	100.0 [24]	32.1 [21]	100.0 [24]	100.0 [24]	100.0 [24]	100.0 [24]	100.0 [24]
Cameroon	35.7 [22]	36.3 [23]	84.9 [23]	16.7 [22]	55.7 [23]	79.5 [23]	. .	7.5 [23]	34.3 [23]	44.8 [22]	52.8 [23]	82.2 [23]
Central African Republic	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Chad	4.2 [23]	22.5 [23]	39.5 [23]	1.5 [23]	10.2 [23]	16.2 [23]	0.7 [23]	2.9 [23]	4.7 [23]	25.7 [21]	43.9 [21]	49.9 [21]
Comoros	48.4 [21]	69.5 [21]	71.2 [21]	. .	. .	. .	21.4 [21]	24.6 [21]	25.1 [21]	74.5 [21]	88.8 [21]	87.9 [21]
Congo	34.0 [19]	. .	. .	. .	. .	. .	. .	. .	. .	54.3 [19]	. .	. .
Côte d'Ivoire	66.6 [23]	73.0 [23]	91.3 [23]	7.3 [20]	46.8 [20]	86.1 [19]	. .	. .	87.1 [19]	68.0 [23]	50.0 [23]	69.4 [23]
Dem. Rep. of the Congo	10.0 [23]	11.7 [23]	11.7 [23]	. .	. .	. .	. .	. .	. .	37.3 [23]	36.6 [23]	36.6 [23]
Djibouti	81.5 [23]	95.1 [23]	91.4 [23]	43.1 [23]	78.0 [23]	91.4 [23]	43.1 [23]	78.0 [23]	91.4 [23]	88.4 [23]	98.8 [23]	91.4 [23]
Egypt	. .	85.7 [21]	75.1 [21]	84.1 [21]	89.1 [21]	84.2 [21]	71.3 [19]	91.0 [19]	58.6 [21]	. .	81.9 [21]	. .
Equatorial Guinea	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eritrea	28.6 [22]	45.5 [22]	72.5 [22]	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eswatini	98.8 [23]	98.2 [23]	98.2 [23]	27.1 [23]	36.9 [23]	36.9 [23]	12.0 [23]	22.6 [23]	22.6 [23]	. .	. .	. .
Ethiopia	27.4 [23]	75.2 [21]	75.2 [21]	. .	78.9 [21]	78.9 [21]	. .	22.9 [21]	22.9 [21]	19.8 [23]	45.8 [21]	45.8 [21]
Gabon	73.0 [21]	. .	. .	. .	. .	. .	. .	. .	. .	97.0 [21]	. .	. .
Gambia	39.5 [21]	57.8 [21]	66.7 [21]	22.5 [21]	40.8 [21]	56.8 [21]	. .	. .	. .	85.7 [21]	86.8 [21]	65.7 [21]
Ghana	38.8 [21]	65.0 [21]	92.5 [20]	. .	. .	. .	. .	. .	47.3 [19]	. .	. .	58.1 [19]

Country	4.a.1-Proportion of schools with access to ... (%)											
	Electricity			Computers for pedagogical purposes			Internet for pedagogical purposes			Basic drinking water		
	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary
Guinea	18.4 [21]	.	.	.	.	2.3 [21]	.	.	.	.	.	.	.	.	.	30.9 [20]	.	.	.	.
Guinea-Bissau	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Kenya	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Lesotho	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Liberia	24.3 [22]	37.6 [22]	48.2 [22]	8.2 [20]	17.0 [20]	30.1 [20]	.	.	.	.	.	.	63.3 [22]	75.7 [22]	83.4 [22]
Libya	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Madagascar	11.9 [24]	40.5 [24]	65.8 [24]	3.9 [24]	18.4 [24]	43.0 [24]	0.1 [19]	5.3 [19]	8.0 [19]	33.6 [24]	61.2 [24]	85.9 [23]
Malawi	34.0 [23]	82.0 [23]	82.0 [23]	1.8 [23]	86.8 [19]	86.8 [19]	1.8 [23]	.	.	.	.	95.3 [23]	86.5 [23]	86.5 [23]
Mali	18.0 [23]	38.7 [23]	97.7 [23]	6.2 [23]	24.6 [23]	70.0 [23]	1.4 [23]	4.6 [23]	57.2 [23]	.	.	.	.	.	.
Mauritania	44.0 [19]	.	.	.	.	.	.	.	.	.	.	.	.	.	.	50.7 [19]	.	.	.	.
Mauritius	100.0 [28]	100.0 [28]	100.0 [28]	97.8 [23]	100.0 [28]	100.0 [28]	100.0 [26]	100.0 [28]	100.0 [28]	100.0 [28]	100.0 [28]	100.0 [28]
Morocco	97.6 [23]	98.9 [22]	98.9 [22]	69.7 [23]	80.0 [23]	77.5 [23]	71.0 [23]	78.9 [23]	76.8 [23]	81.9 [23]	95.1 [23]	96.7 [23]
Mozambique	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Namibia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Niger	7.6 [23]	40.5 [23]	74.5 [23]	3.1 [23]	30.2 [23]	58.7 [23]	0.4 [23]	5.7 [23]	17.3 [23]	23.3 [23]	62.1 [23]	87.7 [23]
Nigeria	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Rwanda	77.7 [23]	86.5 [23]	92.9 [23]	57.9 [23]	79.7 [23]	87.9 [23]	56.5 [23]	74.4 [23]	84.9 [23]	53.7 [23]	61.3 [23]	69.1 [23]
Sao Tome and Principe	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
Senegal	53.4 [23]	85.4 [22]	96.1 [22]	23.4 [23]	98.3 [23]	90.0 [22]	26.6 [23]	80.0 [23]	73.6 [22]	80.3 [23]	94.7 [22]	98.7 [22]
Seychelles	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]
Sierra Leone	15.2 [23]	38.6 [22]	52.0 [22]	1.5 [23]	6.9 [23]	12.5 [23]	1.5 [23]	4.0 [23]	7.3 [23]	49.8 [23]	78.6 [21]	84.7 [21]
Somalia	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.
South Africa	.	.	.	.	.	10.1 [21]	.	.	.	.	.	.	.	.	.	.	.	.	.	.
South Sudan	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.	.

Country	4.a.1-Proportion of schools with access to ... (%)														
	Electricity			Computers for pedagogical purposes			Internet for pedagogical purposes			Basic drinking water		
	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary
Sudan	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Togo	35.6 23	64.6 23	85.7 23	2.0 23	37.5 23	61.2 23	1.2 23	11.7 23	22.3 23	56.5 23	66.7 23	85.1 23
Tunisia	100.0 23	100.0 30	100.0 32	93.5 23	100.0 27	100.0 23	81.2 23	100.0 27	98.9 23	90.0 23	100.0 30	100.0 30
Uganda	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
United Republic of Tanzania	61.3 23	74.9 21	74.9 21	93.1 21	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Zambia	38.8 20	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Zimbabwe	66.3 22	58.9 20	95.5 20	35.6 22	31.5 20	85.6 20	22.6 20	21.2 20	70.7 20	61.0 20	54.5 20	74.2 20

Note: "." : No data available for the 2019-2024 period. Figures in grey indicate the year of the data (e.g., '23' = 2023).

Country	4.a.1-Proportion of schools with facilities (%)						4.c.4-Pupil-qualified teacher ratio (headcount basis)				
	Basic handwashing facilities			Single-sex basic sanitation facilities							
	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Pre-Primary	Primary	Lower Secondary	Secondary	Upper Secondary
Algeria	95.6 23	98.2 23	100.0 23	100.0 23	100.0 23	100.0 23	351.2 23	193.4 23	. .	. .	. .
Angola	. .	. .	. .	. .	. .	. .	125.5 22	66.6 21	33.1 21	33.6 21	34.6 21
Benin	50.6 20	97.8 22	97.2 22	. .	77.7 22	82.6 22	42.8 21	51.9 21	. .	17.2 22	. .
Botswana	. .	. .	. .	100.0 22	100.0 22	100.0 22	14.7 22	23.3 22	11.7 22	22	22
Burkina Faso	44.3 23	38.2 23	29.3 23	34.4 23	19.5 23	14.3 23	22.1 23	33.9 23	25.5 23	25.0 23	23.5 23
Burundi	20.4 19	. .	. .	34.7 19	. .	. .	55.5 20	47.4 20	34.0 19	25.6 19	26.5 20
Cabo Verde	100.0 23	100.0 24	100.0 24	92.9 21	100.0 24	100.0 23	56.7 20	20.2 21	17.9 21	16.5 21	14.7 21
Cameroon	82.1 22	67.3 23	80.1 23	38.5 22	58.4 23	82.6 23	64.8 23	156.6 23	73.9 23	41.8 23	23.9 23
Central African Republic	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Chad	22.1 23	49.3 23	91.9 23	12.9 23	36.7 23	75.0 23	125.7 23	158.5 23	89.1 23	58.0 23	33.6 23
Comoros	96.1 21	99.3 21	96.7 21	73.3 21	80.4 21	80.0 21	. .	37.0 23	. .	. .	. .
Congo	. .	. .	. .	. .	. .	. .	13.4 23	76.5 23	. .	. .	. .
Côte d'Ivoire	48.1 23	72.4 23	59.4 23	. .	72.6 22	61.2 23	23.4 23	43.9 23	. .	32.0 23	. .
Democratic Republic of the Congo	. .	. .	. .	72.8 23	77.5 23	77.5 23	152.5 23	43.5 23	. .	. .	. .
Djibouti	88.4 23	95.1 23	91.4 23	88.4 23	92.7 23	91.4 23	23.8 23	25.4 23	24.4 23	19.5 23	14.2 23
Egypt	. .	81.9 21	65.4 21	. .	82.0 21	65.4 21	25.1 23	37.3 23	20.2 21	18.1 21	23.8 23
Equatorial Guinea	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .
Eritrea	. .	. .	. .	. .	. .	. .	41.9 22	38.8 22	35.4 22	31.3 22	25.6 22
Eswatini	66.2 23	64.0 23	64.0 23	. .	. .	. .	. .	. .	. .	. .	. .
Ethiopia	14.1 23	28.7 23	28.7 23	29.7 23	49.5 23	. .	77.1 23	46.0 23	68.4 23	. .	. .
Gabon	44.3 19	. .	. .	. .	. .	. .	25.9 19	35.0 19	. .	28.7 19	. .
Gambia	. .	. .	. .	. .	. .	. .	41.9 21	37.8 21	20.6 21	41.1 21	78.0 21
Ghana	. .	. .	32.4 19	. .	. .	63.4 19	46.9 21	41.8 21	18.0 21	20.7 21	25.9 21
Guinea	81.1 20	. .	. .	75.2 20	. .	. .	41.7 21	46.7 21	. .	23.7 21	. .

Country	4.a.1-Proportion of schools with facilities (%)						4.c.4-Pupil-qualified teacher ratio (headcount basis)				
	Basic handwashing facilities			Single-sex basic sanitation facilities							
	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Pre-Primary	Primary	Lower Secondary	Secondary	Upper Secondary
Guinea-Bissau	.	.	.	.	.	.	.	.	.	.	.
Kenya	.	.	.	.	.	.	.	.	.	.	.
Lesotho	.	.	.	.	.	.	.	31.1 [23]	.	.	.
Liberia	54.9 [20]	69.8 [20]	82.7 [21]	.	.	81.1 [22]	55.1 [20]	29.9 [20]	16.8 [20]	.	.
Libya	.	.	.	.	.	.	.	.	.	.	.
Madagascar	.	.	.	37.9 [24]	61.1 [24]	80.3 [23]	74.4 [23]	198.4 [23]	20.0 [19]	.	27.4 [19]
Malawi	.	36.8 [19]	36.8 [19]	.	.	.	.	54.3 [23]	.	117.6 [19]	.
Mali	64.9 [23]	52.5 [23]	.	.	.	.	44.9 [23]	210.0 [23]	81.1 [23]	40.4 [23]	22.1 [23]
Mauritania	.	.	.	27.5 [19]	.	.	.	.	.	.	.
Mauritius	100.0 [27]	100.0 [27]	100.0 [27]	100.0 [28]	100.0 [28]	100.0 [28]	13.5 [23]	15.8 [23]	.	10.7 [20]	.
Morocco	97.7 [23]	85.9 [23]	83.9 [23]	84.7 [23]	89.8 [23]	88.3 [23]	20.2 [23]	25.9 [23]	23.8 [23]	20.4 [23]	16 [23]
Mozambique	.	.	.	.	.	.	.	57.3 [22]	.	.	.
Namibia	.	.	.	.	.	.	.	31.0 [22]	.	.	.
Niger	48.7 [23]	40.6 [23]	57.9 [23]	27.2 [23]	61.6 [23]	67.8 [23]	34.4 [23]	44.3 [23]	41.4 [23]	38.7 [23]	30.5 [23]
Nigeria	.	.	.	.	.	.	.	34.8 [19]	.	.	.
Rwanda	100.0 [26]	100.0 [26]	100.0 [26]	99.9 [23]	100.0 [23]	100.0 [23]	58.7 [23]	42.0 [23]	29.2 [23]	26.6 [23]	22.9 [23]
Sao Tome and Principe	.	.	.	.	.	.	.	.	.	.	.
Senegal	76.6 [23]	83.5 [23]	.	30.7 [23]	.	.	54.4 [23]	46.9 [23]	37.2 [21]	24.1 [23]	13.9 [21]
Seychelles	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	100.0 [23]	23.1 [23]	15.5		11.4 [23]	
Sierra Leone	52.5 [23]	53.9 [23]	60.4 [23]	72.8 [23]	80.0 [23]	87.6 [23]	40.3 [23]	64.1 [23]	39.5 [21]	.	76.8 [19]
Somalia	.	.	.	.	.	.	.	37.2 [23]	.	16.6 [23]	.
South Africa	.	.	.	.	.	.	.	.	.	.	.
South Sudan	.	.	.	.	.	.	.	.	.	.	.
Sudan	.	.	.	.	.	.	.	.	.	.	.
Togo	83.7 [23]	86.6 [23]	88.0 [23]	26.6 [23]	15.9 [23]	14.0 [23]	88.6 [23]	84.5 [23]	49.5 [21]	37.6 [21]	22.4 [21]

Country	4.a.1-Proportion of schools with facilities (%)						4.c.4-Pupil-qualified teacher ratio (headcount basis)					
	Basic handwashing facilities			Single-sex basic sanitation facilities								
	Primary	Lower Secondary	Upper Secondary	Primary	Lower Secondary	Upper Secondary	Pre-Primary	Primary	Lower Secondary	Secondary	Upper Secondary	
Tunisia	97.6 23	100.0 27	100.0 27	97.6 23	100.0 27	100.0 27	. .	15.8 23	14.6 22	. .	. .	
Uganda	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	
United Republic of Tanzania	. .	. .	. .	. .	. .	. .	127.4 23	56.1 23	. .	21.6 21	. .	
Zambia	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	. .	
Zimbabwe	68.3 20	72.6 20	79.5 20	92.8 20	93.6 20	97.1 20	58.5 20	38.3 20	. .	. .	. .	

Note: "." : No data available for the 2019-2024 period. Figures in grey indicate the year of the data (e.g., '23' = 2023).

unesco
United Nations
Educational, Scientific
and Cultural Organization

African Union

unicef
for every child

Transforming learning and skills development in Africa

2nd Continental report

This second continental monitoring report on the United Nations Sustainable Development Goal on Education (SDG 4) and the Continental Education Strategy for Africa (CESA 16-25) focuses on accelerating the transformation of learning and skills development to boost economic and social development on the continent.

Produced jointly by UNESCO, UNICEF and the African Union, it assesses progress made towards SDG 4 and CESA targets, identifies gaps and challenges, and features tested solutions that are achieving positive and often scalable results. It is designed to provide African governments with concrete guidance and advice to support them in attaining ambitious educational goals and equipping their citizens with the competencies they need to thrive.

9 789231 007552

4 QUALITY EDUCATION

Sustainable Development Goals