



Report Synopsis

SECONDARY EDUCATION IN AFRICA: PREPARING YOUTH FOR THE FUTURE OF WORK

JULY 2019



Secondary Education in Africa:

**PREPARING YOUTH
FOR THE FUTURE
OF WORK**



WHY SECONDARY EDUCATION, WHY NOW?

The global workforce will largely be African. Africa is currently the youngest continent in the world and will continue to be for the next several decades. By 2100, almost half of the world's young people will be African.¹

Secondary education will be a key platform for young people in Africa to enter the world of work. Only nine percent of African youth attend university or other tertiary-level education.² As access is broadened, most youth who leave secondary education, whether during their lower or upper secondary years, will enter the world of work. While preparing students for tertiary education remains critical, secondary education systems will increasingly be depended upon to prepare youth to earn an income and lead meaningful lives as citizens of a global world. Now is the time to rethink what skills young people require, and to intentionally design secondary education systems with those skills in mind.

Ensuring that Africa's young people secure employment or can create their own livelihoods is arguably the single most significant task facing African policymakers today. Putting in place the conditions for economic growth and job creation in Africa will be critical. But young people will also need to be prepared with the knowledge and skills sought by employers and to succeed as entrepreneurs.

Digitization, automation, and technological advances are changing the nature of work globally, including in Africa. These trends will increase uncertainty and the pace of change, raising the premium on skills that help young people be adaptable, resilient, and creative problem solvers.

Reimagining secondary education as a platform for work is a paradigm shift. Until now, secondary education in Sub-Saharan Africa has served primarily as a stepping-stone to tertiary. The current system, which has foundations inherited from the colonial era, often serves as a winnowing device that selects an elite set of students to complete upper secondary and transition to university. It is at this formative level that there is great potential to help build the knowledge, skills and attitudes needed for a skilled, effective, and adaptable workforce.

Secondary Education in Africa: Preparing Youth for the Future of Work is a collaborative effort between multiple donors, partners, and research organizations.

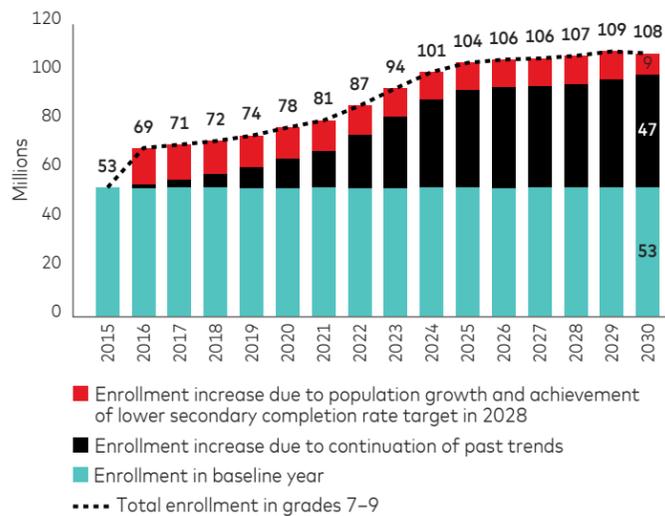
The report focuses on the role of secondary education in ensuring youth acquire the skills, knowledge, and competencies necessary to succeed in a dynamic and globalized labour market. The Secondary Education in Africa (SEA) report examines progress and provides policymakers and other education stakeholders with practical options and examples of promising practices as they seek solutions that are relevant and implementable in their contexts. It is not intended to be a blueprint. Rather, the objective is to highlight the urgency of the challenge and to contribute to the dialogue on how to ensure Africa benefits from the potential of its growing youth demographic.

A Ugandan student records measurements in science class in a rural secondary school.

Secondary education is central to achieving Africa's Vision 2063 and the 2030 Sustainable Development Goals. Investments to improve education and to stimulate employment will allow this generation of youth to play a pivotal role in realizing the vision of economic transformation laid out by today's leaders in the African Union's Agenda 2063 — a vision of inclusive growth driven by investments in human capital, science, technology, and innovation. Accessible, quality, and relevant secondary education also contributes to meeting the Sustainable Development Goals. The benefits of education have been linked to poverty reduction, improved health, lower fertility rates, sustainable farming practices, better energy conservation, and greater participation in political and civic life, particularly for women.³

Identifying promising approaches to expanding access to high-quality, relevant secondary education in Sub-Saharan Africa is an urgent priority. The rate of increase in demand for secondary education is unprecedented. Due to widespread success at increasing enrollment in and completion of primary school, a growing share of a growing population is reaching a stage where they will be ready to transition to secondary. The World Bank projects that demand for lower secondary education will reach 108 million by 2030, double the demand in 2015.⁴

FIGURE 1: DEMAND FOR LOWER SECONDARY EDUCATION WILL DOUBLE BY 2030



Sources: Based on projections of the World Bank Living Standards Measurement Study (LSMS) datasets and the UNESCO Institute for Statistics (UIS.Stat) database (accessed July 18, 2016), <http://data.uis.unesco.org>. Note: "Lower secondary" refers to grades seven through nine.

Source: Facing Forward: Schooling for Learning in Africa, World Bank (2018)

This expansion of the secondary education system will take place in a context where there are still gaps in enrollment and low learning levels at the primary level, significant population growth, and increasingly constrained fiscal space due to economic headwinds in the region. These factors underline the urgency of identifying promising approaches to expanding access to high-quality, relevant secondary education in Sub-Saharan Africa.

SECONDARY EDUCATION AND THE FUTURE OF WORK: KEY FACTS

- The primary gross enrollment ratio (GER) in Sub-Saharan Africa rose to 98 percent in 2015, up 30 percentage points from 1990, with enrollment more than doubling, rising from 63 million to 152 million over the same period (World Bank, 2018).
- Globally, Sub-Saharan Africa has seen the greatest gains in girls' access to education. At the primary level, girls' enrollment has risen more than 50 percentage points since 1970, compared to a global average of about 30 percentage points (UIS, 2018).
- Thirty-seven percent of young people in Sub-Saharan Africa complete lower secondary education, while 27 percent complete upper secondary education, well below other regions globally (UNESCO GEMR, 2018).
- There are 63 million children out of secondary school in Sub-Saharan Africa (UNESCO GEMR, 2018).
- Twenty-two Sub-Saharan African countries have eliminated fees for 12 years of secondary education (UNESCO GEMR, 2018).
- Since 2000, 27 countries have initiated reforms to curricula and teacher training (Fleisch et al., 2019).
- By 2020, one in four students in Sub-Saharan Africa will be attending a non-state secondary school, up from one in five in 2016 (Education Commission, 2016).
- It is estimated that in low- and middle-income countries, on average two percent of a country's GDP is spent each year on education costs that do not lead to learning (Education Commission, 2016).
- At the secondary education level, Sub-Saharan Africa must recruit 10.8 million teachers by 2030 (UNESCO UIS, 2016).
- A survey of secondary schools in 19 Sub-Saharan countries found that fewer than five percent of rural students had access to textbooks in core subjects (Fredriksen and Brar, 2015).

ENSURING YOUTH RECEIVE RELEVANT KNOWLEDGE AND SKILLS FOR THE FUTURE OF WORK

Employers in both the formal and informal sectors increasingly demand workers with 21st-century skills such as critical thinking, communication, creative problem solving, resilience, and teamwork.⁵

In contrast to certain technical skills, 21st-century skills cannot easily be taught on the job. Digital skills and fluency in an international language or the language of business are similarly important.⁶ Entrepreneurship skills such as knowledge of local markets, finance, cultivating a business mindset, and marketing are also crucial for the millions of youth who will need to create their own livelihoods. Developing these skills will have positive effects for society overall: it is increasingly the case that the skills needed for work, and those required for learning, personal empowerment, and active citizenship, are converging.⁷

Despite progress, many youth in Sub-Saharan Africa currently lack the foundational, digital, and 21st-century skills needed to succeed in a changing world of work. The World Bank reports that

fewer than 20 percent of students meet minimum proficiency requirements in reading and math during late primary, well below scores in other regions.⁸ This means that secondary systems will increasingly need to provide remedial learning to help students gain the foundational skills of numeracy and literacy, particularly in the language of instruction, upon which additional learning can be built.



A secondary school student in Senegal who participated in skills training classes as part of Mastercard Foundation's partnership with Education Development Center.

³ UNESCO, 2016.
⁴ World Bank, 2018.

⁵ Results for Development, 2013.
⁶ World Bank, 2018.
⁷ UNICEF, 2017.
⁸ World Bank, 2018.



Active, learner-centred pedagogies are important for helping youth to acquire 21st-century skills.

Methods of teaching that encourage young people to ask questions, apply their knowledge to solve practical problems, work in groups, speak up in class, and critically analyze information help to build the types of skills that will increasingly be needed to adapt and thrive in a changing world of work. Importantly, a new set of courses to teach these skills is not needed: this type of pedagogy can be applied within existing curricula. However, many teachers in Sub-Saharan Africa are unprepared to utilize such techniques. Studies of teacher competencies have found that many secondary-level teachers in Sub-Saharan Africa lack basic proficiency in the subjects they teach, and even fewer are trained in or use pedagogies that help to impart these skills.⁹

Investing in quality initial teacher training is critical to helping prepare young people for the future of work. Over 10 million additional secondary school teachers will be needed by 2030 to meet demand for secondary education on the continent, including 7.1 million for new teaching positions and 3.7 million to replace those who leave.¹⁰ Teachers need to be better prepared not just in subject matter knowledge, but also in the types of pedagogies that are shown to impart the kinds of 21st-century and other skills needed for work.

Governments can catalyze a virtuous teaching circle that will drive quality learning, skills acquisition, and cost savings.

This virtuous circle starts with recruiting top students into teacher training institutions, providing excellent initial teacher training by quality instructors, thereby increasing student learning in schools, and reaping cost savings as fewer youth repeat grades.¹¹ This boosts the status of the teaching profession and inspires a new generation of excellent students to become teachers themselves. To capitalize on this virtuous circle, governments must make investments in quality initial teacher training.

Shifting their focus from access to quality, many governments have initiated reforms to curricula and teacher training, but more needs to be done.

Since 2000, 27 countries for which data were available have introduced competence-based curricula.¹² Yet the full potential of these reforms has been hampered in many cases by a lack of aligned learning materials, a lag in training teachers to teach the new curricula, and the fact that students continue to be assessed through high-stakes national exams rather than formative assessments and other ways of measuring skills and competencies. More concerted effort is also needed to adjust the balance of subjects, with more weighting on indigenous knowledge, STEM and digital skills needed in the changing economy, and specialist courses in areas such as business and entrepreneurship. Extra-curricular activities including sports and clubs can also help consolidate learning of 21st-century skills.

Swisscontact U-LEARN graduate Reginah from Uganda has been employed as a mechanic since 2014.

⁹ Taylor, et al., 2019.
¹⁰ UNESCO, 2016.
¹¹ Taylor, et al., 2019.
¹² Fleisch et al., 2019.



Maxwell Kayesi encourages group work and discussion as part of skills training in a Kenyan secondary school. The school is part of a Mastercard Foundation partnership with Global e-Schools and Communities Initiative.

¹³ Aslam et al., 2018.

DIVERSE YOUNG PEOPLE NEED FLEXIBLE PATHWAYS FOR THEIR EDUCATION

Many secondary-school-age youth do not transition through the education system to the world of work in a linear manner. Late entry, repetition, and dropout are all challenges prevalent in many Sub-Saharan African countries. As they reach secondary school age, young people who face economic disadvantages often experience significant pressure to leave the education system to seek work and help support their families. Young people affected by conflict or climate change often must interrupt their education to seek safety or new livelihoods. Young women face additional pressures that can inhibit their ability to complete school.

Secondary education systems, including technical streams, should better accommodate non-linear pathways to make education more accessible to youth facing competing pressures. Public education systems as well as private providers can offer alternative pathways for out-of-school youth and for those who need to leave and re-enter the system or access alternative training programs. Youth who leave secondary education to work need flexible systems that can provide skills training in adaptable ways and alternative forms of education that are recognized. Accelerated learning programs that bring students back into formal systems, or flexible, modular, and accredited programs providing discrete skills are important options to promote accessible lifelong learning.

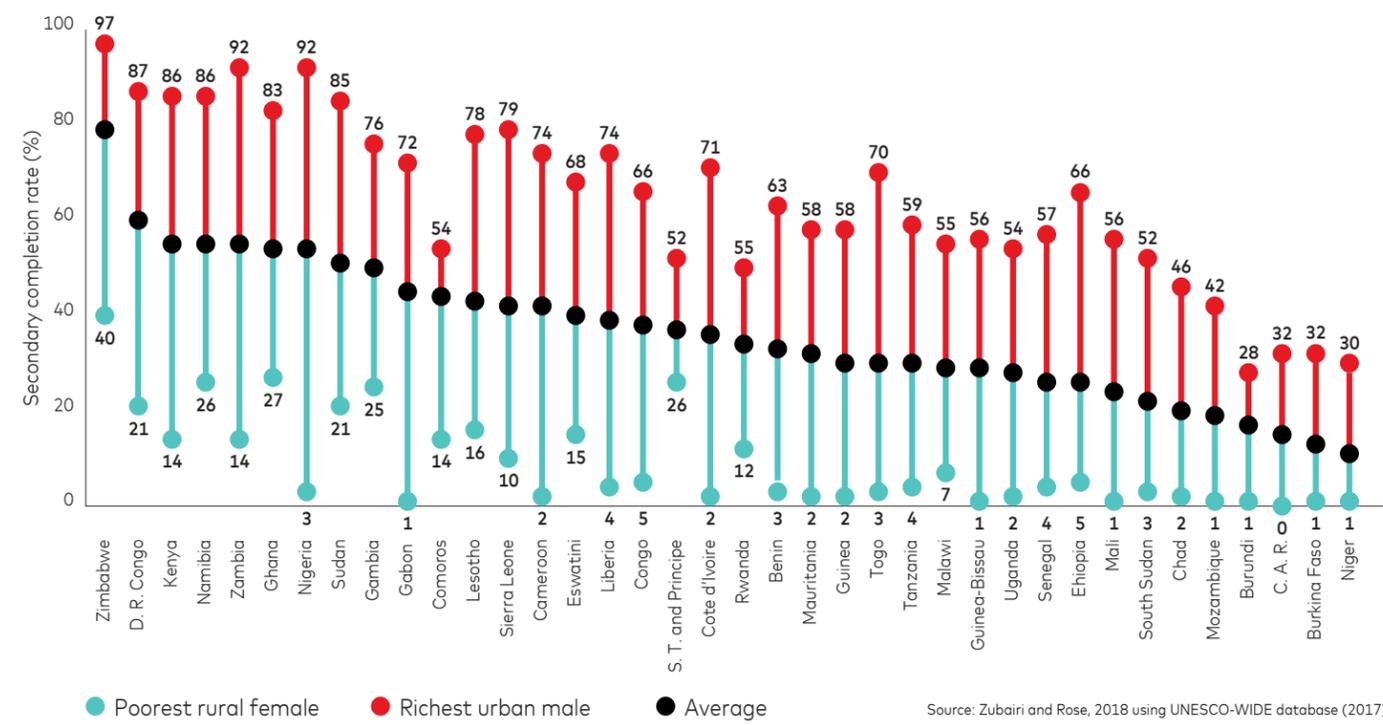
The private sector and education technology can both help secondary education be more adaptive and responsive to youth needs. Education technology can help bring the promise of secondary education to more young people, particularly those who are hard to reach, and can help reduce growing digital divides. The private sector can be an important partner in delivering innovative and adaptive secondary education that provides flexibility and better links young people to work opportunities.¹³ Technical and vocational programs in many countries are offered by small operators, providing opportunities for consolidation and quality improvements by non-state actors, but this will require effective regulatory policies and frameworks that facilitate private investments.



FINANCING FOR EQUITY MUST BE A PRIORITY

In Sub-Saharan Africa, 63 million youth of secondary school age are currently out of school.¹⁴ National averages on secondary enrollment and completion rates mask significant inequities within countries due to income, geographic location, disability, and gender. Secondary education completion rates for the most disadvantaged, including poor, rural girls, remain very low. These inequities are likely to be exacerbated by the unprecedented challenge of population growth, stagnating per capita economic growth in some countries, and the lack of full enrollment and completion in primary education.

FIGURE 2: MAJOR EQUITY GAPS EXIST IN COMPLETION OF LOWER SECONDARY SCHOOL

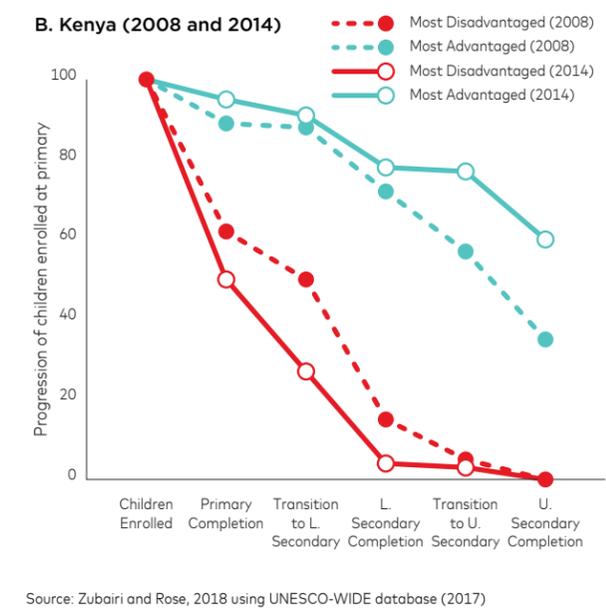
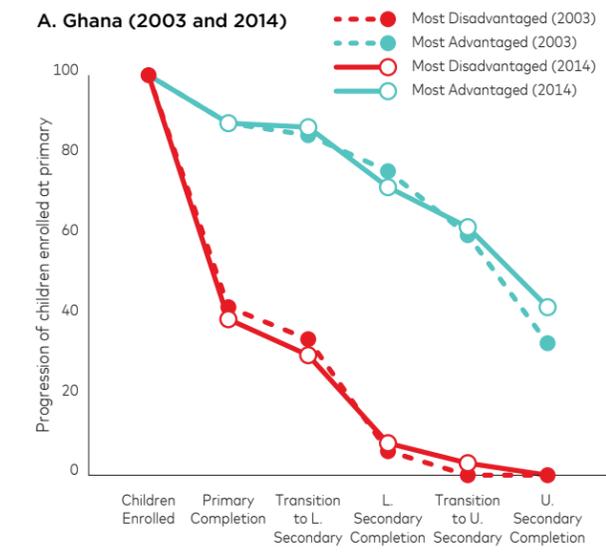


Dukizwe Rachel teaches economics to secondary students at a school in Rwanda as part of Mastercard Foundation's Leaders in Teaching initiative.

Source: Zubairi and Rose, 2018 using UNESCO-WIDE database (2017)

Many governments are moving to offer fee-free lower secondary education, yet contrary to expectations, this has often not benefitted the poorest students. Because poor and marginalized students often do not complete primary education, they do not benefit from policies offering free lower secondary education. Those who do transition out of primary often cannot afford lower secondary, even if tuition is free, due to other direct and indirect costs including school-related fees (such as parent-teacher association fees), uniforms, textbooks, and transportation, as well as the higher value of their time, given that these youth could be working, particularly for the poorest households.¹⁵ Figure 3 below demonstrates how in Ghana, fee-free secondary education has not improved completion rates for the most disadvantaged, and in Kenya, completion rates for the poorest have actually declined.

FIGURE 3: ELIMINATING SECONDARY TUITION FEES HAS NOT INCREASED THE SHARE OF DISADVANTAGED CHILDREN PROGRESSING INTO, AND COMPLETING, SECONDARY SCHOOL

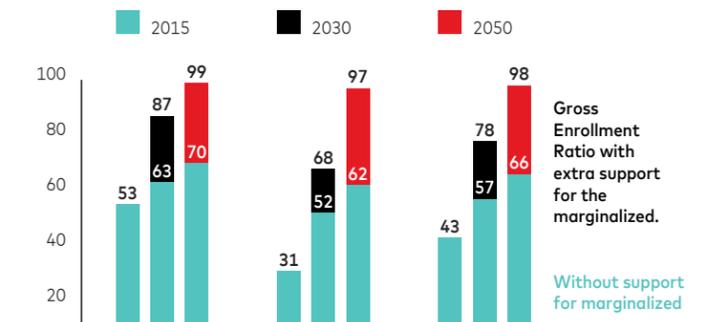


Source: Zubairi and Rose, 2018 using UNESCO-WIDE database (2017)

Research has demonstrated that equity-based funding formulas, targeted need-based scholarships, and cash transfers for the poor can remove the barriers to secondary education. These instruments can be effective in countries both with and without fee-free lower secondary education. Yet such tools must be informed by strong data, policy, and community involvement to ensure that funds are targeted to those most in need.¹⁶

Modelling by the Education Commission shows that, with extra support for the disadvantaged, it will be possible for all youth to access and complete secondary education by 2050. Using updated data through 2018 and focusing on the continent, the Commission's work indicates that by implementing reforms and targeting 30 percent more spending to marginalized students and districts for lower secondary, and 40 percent to marginalized students and districts for upper secondary, Sub-Saharan Africa can achieve universal secondary enrollment and completion by 2050.

FIGURE 4: SUB-SAHARAN AFRICA CAN ACHIEVE UNIVERSAL LOWER AND UPPER SECONDARY COMPLETION BY 2050



Source: Education Commission, 2019

The gross enrollment rate for secondary in the Vision Scenario is universal enrollment by 2050 for Sub-Saharan Africa. But if subsidies for marginalized pupils are excluded (all else holding equal), enrollment rates would only be at 70 percent for lower secondary and 62 percent for upper secondary.

REFORM OF SECONDARY EDUCATION SYSTEMS IS A COMPLEX, LONG-TERM PROCESS, BUT IT CAN BE DONE

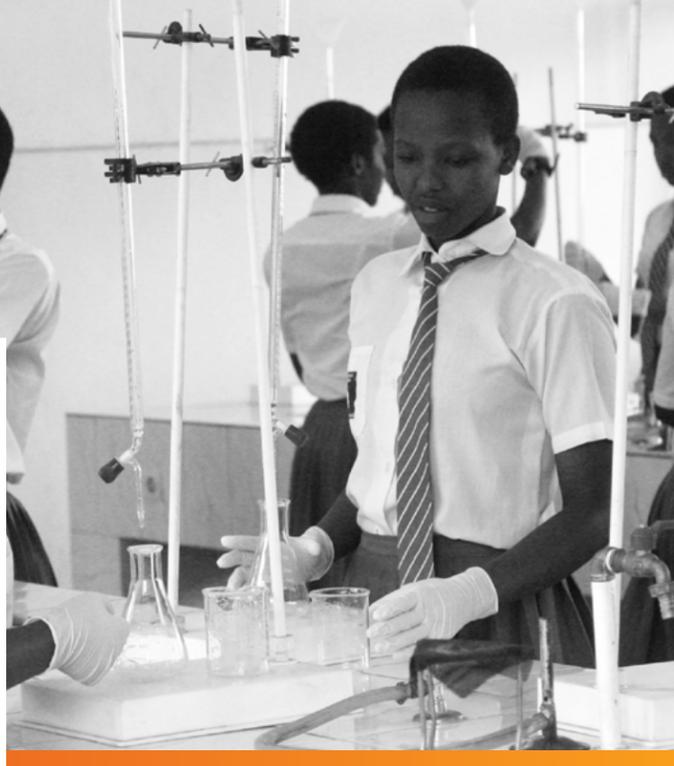
Strengthening and reimagining education systems to achieve the promise of quality education for all is a complex, long-term process requiring sustained commitment and investment. Yet, while difficult, it can be done. There are numerous examples of countries, such as Sierra Leone, Senegal, Rwanda, Kenya, and Ghana, that have begun impressive reforms that are already bearing fruit in the form of improved attendance, completion, equity, and learning, at the secondary level.

Several practices are crucial for facilitating successful reform.

These practices include setting clear goals and targets in national education sector plans and at all levels of government, using accurate data and sharing it transparently, building coalitions for reform, and ensuring coherence and accountability between key actors (including public and private schools, parents, teachers, and education officials).

Innovation and new thinking will be needed to realize the potential of secondary education as a platform for work.

In addition to steady investment and political commitment over several decades, finding ways to embed experimentation and innovation to promote scalable, catalytic interventions within the system will also be necessary to meet these objectives. Innovations by the private sector or NGOs can be brought into public secondary education systems and scaled up by governments, as in Rwanda, which introduced an entrepreneurship training program piloted outside the system into all secondary schools beginning in 2017. Governments can foster experimentation by cultivating an “innovation ecosystem” that promotes governmental openness to — or leadership of — innovation in education.¹⁷



Secondary school students practice a science experiment at a secondary school in Rwanda. The school focuses on STEM for girls and is part of a Mastercard Foundation partnership with Forum for African Women Educationalists.

About the Secondary Education in Africa Report:

Secondary Education in Africa: Preparing Youth for the Future of Work focuses on the role of secondary education in preparing African youth for the future of work. Background papers covering a range of topics relevant to secondary education in Africa inform the Report and can be accessed here: <https://mastercardfdn.org/secondary-education-in-africa/>. The full report will be released in 2020.

About the Mastercard Foundation

The Mastercard Foundation seeks a world where everyone has the opportunity to learn and prosper. The Foundation’s work is guided by its mission to advance learning and promote financial inclusion for people living in poverty. One of the largest foundations in the world, it works almost exclusively in Africa. It was created in 2006 by Mastercard International and operates independently under the governance of its own Board of Directors. The Foundation is based in Toronto, Canada. For more information and to sign up for the Foundation’s newsletter, please visit www.mastercardfdn.org. Follow the Foundation at @MastercardFdn on Twitter.

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