USING EMERGING TECHNOLOGIES TO PROVIDE TRAINERS TO MODERATE THE CRISES IN EDUCATION IN WEST AFRICA

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The world is in a crisis with regards to education. According to United Nations Secretary-General António Guterres, this crisis is having a devastating impact on the futures of children and youth worldwide. The response to this global crisis in education must focus on mobilising all stakeholders to support the transformation of education across the world (UNESCO, 2021).

A good quality education is one that provides all learners with the capabilities they require to become economically productive citizens, develop sustainable livelihoods, contribute to peaceful and democratic societies and enhance individual well being - a well being of equity and inclusion, quality and relevance.

By the middle of this century, there will be one billion children and adolescents under 18 years of age in Africa. This is almost 40 percent of all children and adolescents in the 0-18 age group worldwide. In 2020, three out of five Africans were under the age of 25. By 2050, one in every two under 25s globally will be African. As education is a critical means for the development of human capital, this large young population can become a powerful source of growth and progress in Africa and the world if children and adolescents receive the right opportunities to thrive and develop their full potential. Indeed, the right investments in education can help to break intergenerational cycles of poverty and aid socio-economic development in Africa. Investments in education can turn the unemployed youth into a qualified and employable workforce that meets the demands of the labour market.

105 million children not in school in Africa

Since the early 2000s, African countries have made significant efforts to improve access to education. The results of these activities have been astonishing. For example, the proportion of primary school-age children who are not in school has halved – from 35 percent in 2000 to 17 percent in 2019. Similarly, the proportion of children of lower secondary school age who are not in school dropped from 43 percent to 33 percent in the past two decades; for children of upper secondary school age, it dropped from 63 percent to 53 percent (UN DESA, 2020).

In spite of these achievements however, approximately 105 million children of primary and secondary school age were out of school in Africa in 2019. This represents 41 percent of the global number. In addition, many children leave school without completing their education. One of three children in a cohort does not complete primary school. Only 41 percent of a cohort completes lower secondary education and only 23 percent complete upper secondary education. Poor learning outcomes remain a key challenge in sub-Saharan Africa. Nearly 87 percent of children lack adequate literacy skills. This means that they are unable to read and understand a simple text by the age of 10. This stems from the combined effects of large numbers of children crammed into one classroom and the

poor quality of teaching. Other critical factors that contribute to the crisis in education include the quality of the educational facilities, the availability of teaching and learning materials and more importantly, the quality and availability of teachers.

The technical and vocational education and training (TVET) sub-sector requires more focus and investment. Regrettably, stigmatisation and discrimination of society against this sub-sector contributes to low patronage of the overall system. The perception of those learners who choose the TVET path is that they are less intelligent or are inferior to those who attend traditional universities - this attitude compounds the challenge.

121 million sub-Saharan students lack technology to learn online

Another shortcoming is that African education systems are not sufficiently prepared to ensure non-formal education. Few individuals adopt continuity of learning outside of educational facilities. For instance, an estimated 121 million students, i.e. about half of the students, in sub-Saharan Africa are excluded from distance learning due either to a lack of policies supporting distance learning, or because they lack the household equipment needed to participate in distance education. The incorporation of new technologies into education constitutes a new barrier for exclusion to many. Indeed, ICT is a major constraint to integration of technology in education in Africa. The data indicates that only 64 percent of primary school teachers and 50 percent of their counterparts in secondary schools have received the minimum training in basic digital literacy in sub-Saharan African countries. Surprisingly, even in countries with considerable connectivity and infrastructure, most educators did not have prerequisite ICT skills, implying that they would have difficulties in their own ICT skills development (UNESCO, 2020).

Africa needs to overhaul and transform its development agenda if

it is ever going to be able to generate sufficient jobs on the continent to stem the tide of unemployment, and the growing number of migrant youth that perish in their quest for jobs overseas. In the African context, therefore, the crisis of education is really a challenge of transforming the large population of youth into citizens with high productive capacity. Large numbers of highly skilled teachers are the key determinant of success in the attainment of this herculean task.

17 million additional teachers needed by 2030

Emerging research reveals that currently there is a yawning gap in the provision of qualified teachers. The data shows that the continent will need 17 million additional teachers to achieve universal primary and secondary education by 2030. This deficit is so huge that African governments need to undertake a complete restructuring of the structure and content of our education systems. Hitherto, many countries have simply been engaging untrained teachers to fill the growing shortfall of teachers in schools. Conservative estimates show that in 2019 the average proportion of qualified teachers per country in Africa was 78 percent - 89 percent at the primary level, and 80 percent at the secondary level.

African leaders are fully aware of the enormity of the task of providing quality education for the youth. The multiplicity of policies and slogans about large numbers of unemployed youth being a ticking time bomb attests to this awareness. Education for All by the year 2000, Sustainable Development Goals (SDG 4) Africa Union Agenda 2063, and Plan 2016-2025 for Education in Africa are just three of the programmes that have been devised by policy makers over the years to provide sustainable and inclusive human development. For instance, the Strategic Plan 2016-2025 for Education in Africa is said to be driven by the desire to set up a qualitative system of education and training in Africa. It is to provide

the African continent with efficient human resources adapted to African core values and therefore capable of achieving the vision and ambitions of the African Union.

Over the years, educators have realised that unless teacher training becomes a key priority, the future of the African youth will continue to be bleak. Yet, over the period, educationalists and stakeholders continue to challenge politicians and policy makers to transform education systems in service of society. Educators can only accomplish the goal of providing 17 million additional teachers required to achieve universal primary and secondary education by 2030 if they deploy the latest technology and allocate dedicated funding for the training of teachers on the continent.

Teachers in desperate need of additional training

Available models or tools for mass training of teachers already exist. However, the political commitment to deploy these tools is weak. For instance, audio or video technology could be deployed to record class lessons that could be disseminated by podcasts, live or on-demand television, DVD, public access television, or online. Public broadcast television stations and radio or mobile telephony could be deployed to transmit standardised lessons. For pupils without the internet, digital audio recordings could be burned onto CDs or DVDs. Digital copies of textbooks, reference materials, assignments, and audio-visual learning supports could be made available on special websites. Learning Management Systems including Zoom could be more widely used. The use of these tools would allow teachers to share and store much more in the way of instructional materials including assignments, worksheets, calendars, and assessments. Digital tools are necessary to improve tracking of student progress and grade work, to send messages and notifications to students, to facilitate discussions with students using blogs and/or discussion boards, to conduct online class meetings and much more.

Some countries have successfully piloted models of these mass training techniques including in Africa. For example, the Ministry of Education of Senegal, UNESCO, Microsoft, Huawei and Orange joined forces to support tens of thousands of teachers and students in an effort to continue learning during the COVID-19 crisis. The Ministry's Distance Learning Platform has enrolled 82,000 teachers and 500,000 learners. With support from Microsoft, 1.5 million learners and teachers benefited from this action. UNESCO is supporting training for 200 teachers to become 'master trainers.' The project will soon adopt a 'train the trainers' approach in which teachers train other teachers. Huawei distributed devices to improve connectivity of the 200 master trainers in June 2020. Orange offered zero rating for access to education data (https://globaleducationcoalition. unesco.org/).

Orange has also created the Orange Campus Africa, providing hundreds of thousands of free educational and cultural items in French, English and Arabic. One terabyte of content has been installed on the Orange Africa data centre in order that it is accessible via free or very cheap mobile access in Burkina Faso, Cameroon, Côte d'Ivoire, the Democratic Republic of the Congo, Guinea, Liberia, Madagascar, Mali, Senegal and Sierra Leone.

UNESCO is also providing financial and technical support to Egypt, Ethiopia, and Ghana on planning and building technology-enabled crisis resilient learning systems, including improving national distance or online learning platforms, developing new distance learning courses and digital resources, and training teachers and students in digital skills as well as on the effective use of distance learning (https://globaleducationcoalition.unesco.org/).

The Global Partnership for Education (GPE) funded the West African Anglophone learning platform project to improve the quality of distance education in five West African Anglophone countries. The Gambia, Ghana, Liberia, Nigeria and Sierra Leone plan to develop a sub-regional learning platform. Its specific focus is on offline and printed learning materials, as well as teacher training. It will also monitor distance

education by using radio and TV in cooperation with Ecowas and media partners in the coalition (https://globaleducationcoalition.unesco.org/).

The challenge of providing 17 million additional teachers by 2030 is enormous. The fire-fighting approach that policy makers have adopted so far will not help Africa convert the large number of youth into a powerful source of growth and progress that is required to liberate the continent from the cycle of poverty. It is regrettable that in spite of the enormity and importance of the task, the process has largely been left to the leadership. Indeed a careful look at the education budget shows that, despite the Abuja Declaration, education financing in Africa is still largely dependent on donor funding. That is why the United Nations, international donors and civil society organisations should continue to play their role in supporting the development of education systems on the continent.

Pan-African approach only way to train 17 million additional teachers by 2030

What is critical now is for Africa to come together as a united entity to develop a comprehensive strategy for achieving the goal of training 17 million new teachers by 2030. This is the time for action. The time is now for establishing multi-sectoral partnerships with telecommunications companies and internet providers to provide stable and reliable internet services and to reduce the cost of airtime, mobile data and broadband services. No resource is too big or too insignificant. It is critical now to enhance the implementation of innovative teaching and learning approaches that expand access to online learning resources for all who want to learn, including the most disadvantaged and vulnerable. More schools must be included in digital connectivity to enable groups that fall behind to receive special attention, thus leaving no one behind.

There is an urgent need to address the challenges faced by humanity including climate change, wars and ethnic conflicts, and the growing impoverishment of marginalised groups. Consequently, policy-makers must recognise the holistic character of lifelong learning as a common good that promotes the collective dimension of learning. It is critical to transform schools and universities into lifelong learning institutions and to strengthen technical and vocational education training through increased investments. Additionally, there is the need to foster greater links with industry and align education to labour markets so as to improve the skills profile, employability, and entrepreneurship of especially youth and women, and to close the skills gap across the continent (African Union, 2013).

Educators need to impress upon the politicians the need to ensure greater and equitable access to learning technologies and the need to encourage local lifelong learning initiatives. The role of MOJA in promoting lifelong learning as a human right is critical at this point.

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