

Getting Practical About SDG 4 in Teacher Education in Africa



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Professor Asha Kanwar
President & CEO, Commonwealth of Learning (COL)
Co-written with Ricky Cheng, COL

This is my second DETA conference and I'm very grateful to Dr Tony Mays, Prof Lakhan Lal Yadav and the organisers for the invitation. The Commonwealth of Learning has been a regular supporter of DETA conferences and we are proud to be associated with you as you undertake to reflect on 'Getting Practical About SDG4 in Teacher Education in Africa'—I have prepared this presentation with my colleague, Ricky Cheng.

Most of you know the Commonwealth of Learning or COL well. COL is an intergovernmental organisation created by Commonwealth Heads of Government with our headquarters in Vancouver, Canada.

What does COL do? Our mission is to help Commonwealth Member States and institutions to use distance learning and technologies for expanding access to quality education and training.

COL believes that learning is the key to sustainable development. Learning must lead to economic growth; social inclusion and environmental conservation. This aligns our work closely with SDG4.

In this presentation 'Getting Practical about SDG 4', I will first look at the global context and then review teacher education in SSA. This will lead to an overview of COL's various contributions that you could adopt or adapt. This will be followed by a brief look at some of the good practices in teacher development that have been recognised the world over and what we can learn from them. Finally, I will suggest three practical steps that could help us improve teacher education in SSA. You too will have the opportunity to propose concrete and practical actions that will help us to collectively address the challenges and opportunities that lie ahead.

First the context

In 2015, the international community came together to agree on 17 SDGs. SDG 4 is an ambitious goal that aspires to 'ensure inclusive and equitable quality education and promote lifelong learning for all'. We note that the focus has now enlarged from primary to secondary to tertiary education and to opportunities for lifelong learning for all by 2030. While there have been significant advances in achieving primary education, the current completion rate of secondary education in low income countries is only 14%. Current trends indicate that at this rate we may achieve the stated targets fifty years too late.

SDG 4 has several targets: one, quality education must lead to effective learning outcomes, two, we must focus on developing skills for employment, entrepreneurship and global citizenship, and three, the need for having qualified teachers in place to achieve these targets.

The target for teachers aspires to substantially increase the number of trained teachers by 2030, through international cooperation especially in the least developed countries.

As the GEM report 2016 finds, we need 3.4 million additional teachers to achieve UPE and 5.1 million more to achieve lower secondary education, if we aim to meet the targets by 2030. Even where teachers are available, not all are trained. In SSA, more than half of pre-primary and one quarter of secondary school teachers are not trained.

Clearly, it cannot be business as usual if we are looking to address the challenge of teacher quantity and quality in SSA. We are all familiar with the main issues of teacher education. One, the lack of adequate financing. Many countries still spend less than 4% of the GDP on education. Two, not enough teachers in schools, which results in unmanageable teacher-student ratios. And even where teachers are available, there is the persistent problem of absenteeism. Three, many teachers are not qualified and even when they are, are they motivated enough to achieve expected learning outcomes? Finally, there is inadequate data related to teacher qualifications and quality.

What are the differences between the MDGs and the SDGs? What has changed between 2000 and 2015? In 2015, the targets have become more ambitious and we now aspire to lifelong learning for all instead of universal primary education. The emphasis has also shifted from increased access to success in terms of achieving learning outcomes. It is no longer enough for teachers to teach well—they must also ensure that the students learn well. There is a shift from teaching to learning which in turn impacts the role of the teacher. Another major difference is the phenomenal growth of affordable technologies such as mobile devices. This opens up opportunities for how we can reach the unreached teachers such as those in remote rural locations. The MDGs placed a great deal of emphasis on the impact of HIV/AIDS on teachers in 2000. Today climate change is a big issue globally—what can be the role of teachers in addressing this?

Let us briefly look at the current status of teacher education in SSA.

In SSA, 2.2 million teachers are needed to address the growing demand. In addition, 3.9 million more are needed to replace those leaving the profession.

Added to this is the issue of untrained teachers. In Ghana, only 56% teachers are trained, with 44% untrained teachers at the primary level in 2016. While Rwanda has the highest number of trained teachers in this list at 94%, Malawi, Uganda and Nigeria all need to proactively increase the number of trained teachers.

What is the status of teachers in our host country Rwanda? Teaching is not the first career of choice, and there are the issues of deployment in rural and remote areas with high attrition rates. The morale and self-esteem of teachers needs boosting and all these factors impact the quality of education. This situation would not be far different from that of many developing countries.

The pupil-teacher ratio, which is often seen as a measure of quality is higher in SSA than the world average. Pre-primary ratios in SSA are 28 students per teacher as compared to the world average of 21; 42 at the primary level as compared to 24 per teacher at the global level and 25 at the secondary stage to the world average of 17. Clearly many more teachers are needed on the continent if learning outcomes are to be enhanced.

How can technology help? We know that not everyone in the Commonwealth has internet connectivity. The average for internet use in SSA is approximately 23%. The real growth in the last decade has taken place in mobile use, which stands at 76%.

In Rwanda, the figures are more or less similar to the SSA average—with 20 % access to the internet and over 70% access to mobiles. Mobile technologies present the opportunities to connect the continent and reach the unreached.

The Ambient Insight report identifies 7 Commonwealth African countries as ‘mobile-only countries’. This means that in these countries, the mobile is the dominant device used to access the Internet and people are introduced to learning content on a mobile device. Let us look at some examples of how African universities have harnessed these developments in technology.

The University of Pretoria pioneered the use of mobile phones and SMSs to address administrative matters and communicate more effectively with the students. It also harnessed mobiles for academic purposes by offering mini-lectures.

The University of Namibia did not want to take teachers out of the classrooms and developed a site-based programme using a blended approach. Mobile devices are used to deliver content through a LMS and students develop e-portfolios rather than sit for exams. A Virtual Learning Forum encourages the participation of teachers in learning communities.

The distance learning programme of the University of Education, Winneba provides students with mini tablets and SIM cards to access online resources. Students are supported by teacher-mentors, who are trained through an online programme.

COL and the African Virtual University offered a MOOC on using ICTs for teaching and learning. AVU has also developed a repository of Open Educational Resources (OER) in English French and Portuguese.

These few examples demonstrate the increasing integration of digital technologies and content into teacher training programmes in different institutions in Africa. There is a move towards class-based practice and eportfolios. Online communities of practice are operational.

Moon and Villet identify three phases of harnessing technologies for teacher training in SSA. The current phase of integrating digital technologies into existing programmes will continue over the next 3-4 years. During 2018-22, when connectivity is universally available, both training and supervision can be digitized. MOOCs could provide continuing professional development. From 2020 onwards, in the third phase, wearable technology could allow observation at any time and from any place. Teacher education can be made more participatory and interactive.

Why should we use technologies? As research tells us, there is no significant difference between the effectiveness of face to face and online provision. On the other hand, there are significant cost savings as this study by Insung Jung shows. While face to face costs per participant were USD 6.7, the same training was offered online at USD 3.7.

Technologies are being harnessed to achieve both scale and cost-efficiencies. In which ways does COL contribute?

COL developed the Commonwealth Certificate for Teacher ICT Integration or CCTI to complement the UNESCO ICT competency framework. This is an advanced course for teachers and school leaders in integrating ICT into school management and teaching and learning.

Quality is a major issue in education. COL has developed several QA Toolkits including one for Teacher Education.

COL developed OER for English Language Teaching, a free resource to improve the quality of English teaching. This free content on English Language Teaching has been used to train teachers in Kenya, Tanzania and Uganda. Teachers have indicated that students are already demonstrating better learning outcomes. The teachers and the students in the classes are the same—but what is new are the teaching resources which are making the difference.

Well-trained teachers are critical to improving the quality of education. In collaboration with the NIE, Singapore, COL supported the training of 29 teacher educators from 11 African countries in 2015 in integrating ICT in teaching and learning. The programme is organised every year and the 2017 edition is being conducted during this week in Singapore.

Nigeria established the only dedicated single-mode teacher training institute in the Commonwealth, the National Teachers Institute or NTI, which has trained nearly a million teachers since its inception in 1976. COL helped the Centre for Environmental Education, India to develop a Green Teacher programme which ensures that teachers inculcate environmental concerns amongst school children. A similar programme is now being developed by NTI with COL support for the African context.

COL has also developed a MA in Educational Leadership which is available as OER and can be accessed from our website. This is being offered by institutions in Botswana and Mauritius.

15% of the world's population suffers from one form of disability or another. When we speak of 'inclusive education' as part of SDG 4, we aspire to address the needs of this constituency. COL has developed a special needs assessment instrument to be pilot-tested in the Caribbean. This can be adopted and adapted for different contexts and I hope it will be used here in Africa as well.

The COL approach has been threefold: to influence policy at national and institutional levels through advocacy, to develop and share resources as OER and to build the capacity of institutions and individuals to offer better quality teacher education.

What can we learn from global good practices?

The Finnish Teacher Programme is considered one of the best in the world. What constitutes its success? One, the programme is based on the principles of inclusiveness and creativity, under which no child is left behind; two it relies on well-trained teachers; three, it trusts the teachers and makes them entirely responsible for developing the curriculum and assessment.

Singapore, another successful system, believes in less teaching and more learning. And the outcome is their students are top performers in international tests. As master teacher Charles Chew says 'I don't teach physics; I teach my pupils how to learn physics'. Teaching students the skill of learning how to learn will be our greatest contribution as they prepare for an uncertain future.

In South Korea, competition for getting into the teacher training programme is tough with only 5% success for the hundreds of applicants. The reason for this attraction is that teachers enjoy high salaries, have high status in society and job security.

As we have seen that in these countries with the highest student achievement there are two things in common—highly qualified teachers and a substantial investment in teachers' professional development.

What can we do to practically train more teachers for achieving better learning outcomes?

As we know a teacher is worth a lot to society. Scholars at the Open University of the Netherlands have estimated that the value of a teacher is about EUR 450,000 a year, based on the higher earnings of their class of 25 students in later life. This conclusion is based on meta analyses of research about the yield of education and research in the Netherlands.

John Hattie of the University of Melbourne looked at 65,000 research papers on what contributes most to learning. He found that class sizes, uniforms, and streaming of students by ability make little difference to student learning. What really matters to student performance is teachers' expertise and what they do in class.

A recent OECD study found that certified teachers and most forms of professional development have a limited impact on student performance. So what kind of training do teachers need?

According to Fryer from Harvard, teachers need managed professional development. This means that teachers are given clear guidelines on how to change their practice, receive regular feedback and are mentored by highly skilled teachers on an ongoing basis. One-off teacher training workshops have little impact and COL is adopting a holistic and in-depth approach to professional development.

The second practical suggestion is to promote collaboration among teachers and this is possible through appropriate policies. One of the critical success factors of the Finnish system is a culture of collaboration. In Shanghai, teachers will only be promoted when they give evidence of collaboration. Western teachers seem to be working in isolation. As an OECD study shows, 40% of teachers have never taught with another teacher, or observed another teacher or given feedback.

Can technologies support collaboration? Even in Europe with its vast technology infrastructure, 40% of the teachers felt that they were not confident about using technologies for online collaboration. The two technologies that were most widely used were social media and mobile phones. How can we train teachers in the use of technologies so that they are confident of reaching out to peers and trainers?

Because of the use of social media and mobile devices, it is possible to create successful collaboration. The Teacher App in India is a thriving community of practice where the majority of participants are willing to share this platform with their colleagues. Most of those who participated in the short courses found them useful and said they would use the strategies learned in their classrooms.

The third practical suggestion that I would make is for teachers to use OER for continually developing their expertise and improving their practice. In a recent COL-IDRC study in India, over 88% of teachers agree that the use of OER saves time, while 93% agree that OER would reduce the cost of learning materials.

Another COL study on OER in the Commonwealth found that 32% of the teachers surveyed, believed that the use of OER would improve the quality of teaching and learning. So use of OER could enable teachers to save time, enable institutions and students to save money and to improve the quality of teaching-learning.

In our efforts to contribute to the achievement of SDG4, we need to improve teacher expertise above all. This can be done by making a shift in our approach to training. As we know, good teachers are not simply born but can be made very effective through appropriate training. Trainers must be coaches and mentors who train the teachers in practical ways to enhance student performance. Because of the large numbers required and the urgency of the situation, we need to harness technologies in innovative ways to achieve both scale and speed.

Let me now leave you with some questions that you can discuss in your groups and share your three top practical recommendations with us all.

Let me invite you to visit the COL website and make use of the various resources that we have developed with you and for you.