From Policy to Practice: Lessons from the Commonwealth

10 July 2017

Presented at the International Forum on ICT and Education 2030
Qingdao, China

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It's a pleasure to be here in beautiful Qingdao, for the second time after the first meeting in 2015. I am very grateful to UNESCO for the invitation particularly David Atchoarena and Fengchun Miao, with whom the Commonwealth of Learning shares a long history of close collaboration. Fengchun led the development of the Qingdao Declaration, which has become a landmark document in any discussions of ICT in Education. My topic today is 'From Policy to Practice: Lessons from the Commonwealth', a presentation that I have prepared with my colleague Dr Sanjaya Mishra and I hope this will help advance the agenda set two years ago.

I will first briefly talk about the Commonwealth context and the status of ICT in Education policies in Member States. I will then refer to what the research tells us about the effectiveness of ICT in contributing to learning outcomes. Some examples from the Commonwealth will highlight existing practice and finally, I will share some of the lessons learned, how these shaped the work of the Commonwealth of Learning and the way forward.

But first the context.

The Commonwealth has 52 Member States that span all regions of the globe with some really large countries such as India and the small island states such as Nauru with a population of only 10,000.

The Commonwealth has a population of 2.4 million people, 60% of whom are under the age of 30—so it's a young Commonwealth in need of education and training. Its interesting that 65% of the children entering primary school today will be working in jobs that do not exist as of now. What kind of education is required to prepare them for this future and how can ICT help?

Convinced of the positive impact of ICT's on education, many governments have developed ICT in Education policies. Of the data available for the 50 Commonwealth countries, 28 Member States have policies while 22 have no policies. The data are scattered and some countries have embedded ICT in Education policies within the larger national ICT policies. It is significant to note that most of these policies were developed before 2015—before the global community had adopted the SDG's.

Let us now look into the question of the impact of ICT on education.

Why do governments develop policies in the first place? Providing access to education is a priority for all governments—we know that while there has been success in achieving universal primary education,

much more needs to be done to get all the boys and girls of the relevant age group into secondary school and to increase the APRs in tertiary education to acceptable levels. Increased access has not led to improved outcomes and therefore the quality of teaching and learning is a priority for most policy makers. How can all this be achieved within the available scarce resources? In which ways can technology be harnessed to provide cost-effective solutions?

A report by the British Educational Communications Technology Agency revealed that ICT use helps improve learners' competencies in English, Science and Technology. Schools that demonstrated higher maturity levels in the use of technology demonstrated higher gains in student performance scores. In addition, ICT use had a positive effect on student motivation and communications skills. (Comber, C. et al. (2002). 'Impact2: Learning at Home and School- Case Studies' UK: Becta).

A meta-analysis of research on ICT in education over a period of 40 years by Tamim et al (2011) revealed significant positive, small to moderate impact of ICT in experimental conditions. A significant finding was that technology supporting instruction (in addition to f2f) had a higher impact than technology providing direct instruction (without any instructor); and the impact of technology applications in K-12 was better than in post-secondary education. A blended approach and school level ICT use yielded better results.

A recent OECD study emphasized that limited use of computers at schools may be better than no use at all. However, higher use of computers beyond school hours may be associated with poor student scores. The study suggests that a moderate use of computers in schools can be effective.

Use of tablets is an example of government policy to use ICT in teaching and learning. A study by COL reported large-scale, government-supported tablet initiatives in 11 countries around the world: (Antigua & Barbuda, Australia, Brazil, India, Iran, Jamaica, Kazakhstan, Pakistan, Russia, Turkey and the United Arab Emirates). These countries distributed tablets in the expectation that the quality of teaching and learning would improve. In practice, deployment of technology alone does not improve learning. The study revealed that students learned well when teachers took a student centered approach and designed their teaching accordingly. The other advantages were: improved student's organisation and note-taking skills; improved communication skills; increased access to resources, and enhanced literacy and numeracy skills. A financial model for technology deployment that works in one country would not necessarily be appropriate in another.

Let us now look at some examples from Commonwealth Member States relating to policy and practice.

Experience shows that sometimes policies come out of practice. A COL/Infodev study of the NEPAD eSchools project in 16 African countries revealed that due to the successful implementation of ICT in schools, many African countries developed ICT policies to formalize the process of integration of ICT in education. While it is not necessary that policies are developed first, having policies in place helps in avoiding ad hoc practice, and achieving scale. Some of the lessons learnt from this study were: in order to harness the benefits of ICT, local support for infrastructure must be developed; school principals and senior officials in the Ministry need to commit to ICT integration; the education system as a whole must be ready to adopt ICT; and a realistic communication with the stakeholders is important to manage expectations.

In India too, practice led to policy. For example the National programme on technology enhanced learning started in 2007, followed by a mission on ICT in education in 2009. The national ICT in Education policy was adopted in 2012, and indicates a commitment to sharing educational resources with a Creative Commons license. The national repository on OER which followed adopts a CC BY-SA

license. The Govt of India also distributed tablets to students. It has a national competency standard for ICT in education and a training system in place to build capacities of teachers to integrate ICTs. All the school textbooks are now available on a mobile app called ePathshala, meant for parents, teachers and students. India has developed Swayam a national platform for massive open online courses. It is also one of the two Commonwealth countries that has developed regulations for providing credit for MOOCs, the other being Malaysia.

Having a policy led to significant investments by the government. A recent British Council supported research revealed a wide range of technology use in schools (both government and private), improvement engagement in classrooms, and a remarkable change in pedagogical practices using more active learning methods. As per a teacher, the attendance rates have gone up significantly.

The ICT in education policy in Antigua and Barbuda was developed in 2013 with the support of COL and UNESCO. OER policy is embedded in the ICT in Education policy. The government has a committed budget for integrating ebooks and OER into the school curriculum. There has been an emphasis on regular capacity building of teachers and one cohort of teachers completed the Commonwealth Certificate on Teacher ICT integration offered by COL and aligned to the UNESCO Competency Framework for Teachers. In a recently concluded MOOC on technology-enabled learning offered by COL in partnership with Athabasca University, the third largest group of teachers were from Antigua and Barbuda after India and Canada.

A recent COL study on OER use in Antigua and Barbuda indicated that students could save potentially between 600 to 704 ECD per year, if OER textbooks are used. Students at Antigua State College could save about 1 million ECD per year though the use of OER. Additional use of OER also improved student performance by 5.5%. Implementation of an ICT in Education policy led to proactive teachers, lower costs for students and improved learning outcomes.

Another study conducted by COL at the Botswana College of Open and Distance Learning (BOCODOL) revealed that open and distance learning students using ICTs, have 1/10th the carbon foot-print as compared to campus-based students.

What do these examples convey? Let us review the lessons learned and consider the possible way forward.

Goal 4 of the SDGs focuses on ensuring inclusive and equitable quality education and lifelong learning opportunities for all by 2030. The goal has several targets: quality education must lead to effective learning outcomes; we must focus on developing skills for employment, entrepreneurship and global citizenship, and finally we need to have qualified teachers in place to achieve these targets.

Do existing policies address these objectives? A review of ICT in education polices of eight Commonwealth countries using the targets of SDG4 as a lens, revealed some interesting facts. Existing policies do not focus by and large on the key targets of SDG4. While many do focus on learning outcomes, most focus on developing ICT skills rather than on developing employable and vocational skills through the use of ICTs. Lifelong learning is also not a priority for many and specific measures for reaching vulnerable groups such as those with disabilities are not included. It may be noted that most of these policies were developed prior to 2015 and the adoption of the SDGs, and therefore are not aligned to the current requirements.

This review indicates that there is a need to revisit existing ICT in education policies to incorporate lifelong learning, gender equity, people with disabilities, learning outcomes, use of ICT for skills development and sustainable development.

At COL we take a systematic approach to assist Member States to review and develop appropriate ICT in education policies that integrate ODL and OER. Our experience shows that it takes a long time for a policy to adopted and implemented and needs patience and perseverance. Policy development needs to be dynamic to emerging needs. Key steps to successful policy review and implementation include wide consultation with stakeholders for greater ownership and better implementation.

The three pillars of successful integration of ICTs in teaching and learning are the use of appropriate technology, a policy and an implementation plan and systematic capacity building.

As a way forward we can remind ourselves of the five P's. Political will is absolutely necessary to fast track the development and implementation of a national ICT in Education policy. Thanks to the personal interest of their political leaders, India and Rwanda can see a quantum leap in the use of ICT in education. Even the best crafted policies can fail if there is no capacity to implement—ongoing training especially for teachers will be critical, so people are very important. As we have seen, technology in itself cannot effect a paradigm change in the way we teach and learn—we need to engage learners in their own terms by providing more interaction and motivate them to become producers rather than simply consumers of content. Partnerships especially with private providers can be a great asset. COL in collaboration with UNESCO and Microsoft offered a very successful programme to train teachers in ICT integration in the Caribbean. And finally, the process of implementing a policy must be carried out within a specified timeframe and monitored for effectiveness.

With that let me invite you to explore the various policy resources that we have on the COL website.

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