Can Technology lead to System-wide Change? The case of Guyana

Transcript

My topic today is 'Can technology lead to system-wide change? The case of Guyana'

I am grateful to the organisers UNESCO and Microsoft for the invitation. It speaks of the ongoing partnership that the Commonwealth of Learning has with UNESCO, the Commonwealth Secretariat, Microsoft and the Ministry of Education and institutions in Guyana. Collaboration with partners who share the same vision and objectives, are willing to pool their resources and bring their strengths to the partnership is bound to result in a win-win situation for each partner as well as a positive outcome for all stakeholders concerned.

Affordable technologies such as the low cost laptops and tablets as well as mobile devices are being increasingly deployed across schools in the developing world. Can this lead to system-wide change? Our educational systems were developed in the nineteenth century to serve the requirements of the industrial age. They were modeled after industry and meant to prepare people for the industrial economy. Will such systems serve the needs of the knowledge and service economies of the 21stcentury?

Let us take the specific case of a joint project in Guyana. As you know Guyana is a developing country with only 28% of its population living in urban areas. Expenditure on education is high at 6.1 % of GDP due to which the country ranks 28th in the world. Even so, the functional literacy rate in the country is only approximately 50%. Retaining qualified teachers in the system is a challenge and less than half the teachers are fully trained. In addition, only 27% of the population has access to the internet.

In order to address the challenges related to teacher development and retention, the government of Guyana elaborated an ICT Professional Development Strategy for Teachers in 2011 to provide a comprehensive framework for the effective use of ICT in teaching and learning. This was done in collaboration with UNESCO, the Commonwealth Secretariat, COL and Microsoft. The UNESCO Competency Framework for Teachers (UNESCO-CFT) became the guiding document to develop core

competencies among teachers. These relate to technology literacy, knowledge deepening and knowledge creation.

COL developed additional resources to facilitate the implementation of the UNESCO-CFT and the development of the core competencies. It has developed the Commonwealth Computer Navigators Certificate to support technology literacy.

Another COL resource, the ICT-CFT Toolkit is a comprehensive pack which brings together all the tools and materials used in the Guyana project. These include readiness surveys; a curriculum mapping tool; sample professional development strategies; links to course materials. There is a narrative which explains the relevance and significance of the resource and suggests the steps required to implement the CFT, based on the Guyana case.

The Commonwealth Certificate for Teacher ICT Integration or CCTI was developed according to the UNESCO ICT competency framework. Developed in collaboration with SchoolNet South Africa, this is an advanced course for teachers and school leaders in integrating ICT into school management and teaching and learning. This was localized for Guyana and consists of in-service and pre-service courses. These were developed using OER and are available as OER. The real strength of the Guyana experience is that we now have a replicable model that can be used in other regions. The success of the CCTI is that uses an innovative and replicable model that can be customized and adapted to local needs.

What are the elements of this model? It is important to have the ministry and the institutions on side. COL tries to implement the CCTI in conjunction with the overall ICT Teacher professional development strategy in the country. The curriculum of the CCTI is aligned to the competencies identified in the CFT. OER are identified and the capacity of master trainers built in the development, adaptation and use of OER. The key goal is to develop local capacity not create dependency on outside experts. The first step in implementation is to train mentors who complete the program themselves and then mentor others.

COL is in the process of transferring this model to six Caribbean countries and one Member State in Africa. As COL does not certify or credential we work in partnership with local institutions that offer the qualifications.

Continued engagement with the Ministry of Education in each country is critical to maintain and build the sense of responsibility for the successful implementation of the programme. Country stakeholders (especially the targeted teacher education institutions) should be included in the localisation and development of new modules of the CCTI. This will serve to increase the sense of ownership and levels of interest in the CCTI by these stakeholders.

The value of a face-to-face pre-module orientation and similar post module tutor training cannot be over-emphasised. The support and common understanding that an intense period of a contact sessions provides is critical to the success of the model.

The Cyril Potter College found the use of OER a definite advantage which helped them save costs and improve quality. The adoption and use of OER has been a positive outcome of this project and one that has implications for system wide change.

Another major outcome was that two institutions, the Cyril Potter College and the University of Guyana were brought together under the national implementation plan. The CFT was used to guide a comprehensive curriculum review and the programmes at both institutions were brought into alignment. This allowed students to move seamlessly from one institution to the other

The success of this strategy depends on catalysing appropriate partnerships. The focus is on involving local stakeholders and adapting materials that are suitable for the specific context. For example, the CCTI is not only offered online but is also available on CDROM. Advocacy is important to generate awareness about the benefits of the programme. Equally important is to track the outputs and outcomes achieved.

What did the CCTI/CFT implementation achieve? There are more trained teachers in ICT within the Guyanese system. The teachers are using OER, which is critical to the success of the OER movement. Participation in the project led two institutions to review and align their teacher education curricula. Finally, it encouraged collaboration externally and within the country.

If we need to make a change within the system, a paradigm shift is needed. It is not just about using or integrating technology. It includes curricular reform—how do we make our educational system relevant to the changing needs of our times? According to a recent McKinsey report, 40% employers are finding it difficult to fill entry level jobs as the skills of the students do not match the job requirements. More trained teachers are needed to harness the potential offered by the range of emerging technologies. The teachers also need to introduce innovative pedagogic practices to cater to the needs and preferences of the new learner. As the McKinsey report points out there needs to be an alignment between the educational institutions, the labour market and the needs of young people.

Finally, in order to ensure that the system-wide change is sustainable, we need to place the emphasis on the people, rather than purely on technologies. As we know, knowledge is a social product emerging as an interface of machine, individual, society. Learning is a process of knowledge creation rather than information consumption and the learner can be an active producer rather than passive consumer of content. Any system-wide change will need to take this into account.

Thank you for listening to me.