

Chapter Eleven

Catching a Moving Target: The Emerging Role of Technology in Contemporary Nigerian Higher Education.

J. T. Dooga and L. S. O. Liverpool

The role of technology in higher education is changing all the time. In Nigeria as in many other contexts, this change is driven by increasing demand for more flexible learning, the proliferation of a new generation of ICT-driven state and private universities as well as improved connectivity. Furthermore, as infrastructure improves and technology becomes more nimble, affordable and versatile, technology's role is changing from a marginal tool to an integral asset in Higher Education. Only a few decades ago, HEIs in Nigeria aspired to acquire a few personal computers for a faculty. Then departments discarded typewriters and began to process examination questions using computers. Today, almost every HEI in Nigeria has an institutional website, and much of their administrative functions are automated. More and more HEIs have started to do eLearning as is evident from the experience of the University of Jos, or are setting up structures to do so.

There is no doubt that technology eases the performance of many functions. It is also clear that institutions which introduce eLearning believe that it will add value to the learning experience. Nevertheless, in many HEIs two common errors have plagued the adoption of Information and Communication Technologies (ICTs). The first is to base choices on technological possibilities rather than educational needs (Jaffer, Ng'ambi & Czerniewicz, 2007) and the second is to exaggerate the role of technology in solving educational problems or challenges or present technology as 'the solution' (Stromquist & Samoff, 2000, cited in Ravjee, 2007). The first error arises when an institution asks the question: 'what can technology do?' instead of 'what challenge do we face, and how can we use technology to address it?' The effect of committing the error of hyping up technology is even more devastating, especially to eLearning adoption. This error raises false and unrealistic expectations in the minds of faculty as well as administration and students. When these expectations are not fulfilled, discouragement and frustration sets in, thus diminishing the chances of accelerated adoption.

To avoid these two common errors, Jaffer, Ng'ambi & Czerniewicz (2007) advise that "it is the contextualised teaching and learning needs that ought to drive the ICT intervention, rather than the technology itself." A former president and CEO of the Commonwealth of

Learning once said that “the genius of technology, in education as in other areas of life, is to allow us to achieve scale, quality and low cost simultaneously” (2010:28). However properly contextualising the “teaching and learning needs” is no easy matter. It requires considerable skill. In the fast changing landscape of ICTs, HEIs which are start-ups in ICTs in Education would do better if they learned from the mistakes and challenges of others and benefit from their experience. If HEIs begin to work together more closely, this would be possible. If such arrangement for support is realized, it could open the way for even richer collaborations and mutual support, such as creating open educational content for common use. Furthermore, if HEIs in Nigeria are to network knowledge and share open content, skills and practices, it becomes important to create an inter-institutional platform and framework to address the question of quality control. As eLearning gradually takes centre stage in Nigerian Higher Education, it will increasingly play a prominent role, especially in distance education. Quality assurance issues will then become even more crucial.

One of the strong contributions of the present volume is that it documents the processes of conception, production, implementation and evaluation of eLearning. This is to ensure consistent quality of raw material and a consistently improved production process. The University of Jos and other HEIs can thus audit adherence to the documented system as a means of ensuring consistent quality. Such will allow for improvements, by requiring that the institution adjusts its systems documentation, and then audits its adherence to the documented improved system, in order to ensure a consistently improved product. Although quality control more often focuses on the product, it is important to examine the production environment, the raw materials, including OERs, the process, including the pedagogical and theoretical assumptions, and then the completed product.

It is equally important to research into and document the skill-level of participants in the present process. Such research can form a blueprint for the institution as well as others in the area of capacity building. This is important in order to successfully implement eLearning, ensure consistency in the process and continually provide high quality products. Thus, the quality of content, which is the raw material, will be of a consistently high standard. In turn, this would require that the quality of capacity building programmes is consistently at the desired standard.

Perhaps a single institution can set such standards of measurement. In such a situation, it is doubtful that others will buy into it. What is more attractive is collaboration among institutions. Quality assurance mechanisms can then be designed in different phases, depending on the level of a particular institution. The mechanisms will need to be flexible, so that they can be adapted by institutions according to their context. This is necessary as the application of technology to learning is essentially context specific. Implementing tight control over such processes may hinder innovation and improvement. When the

mechanisms are inflexible, they will be cumbersome for institutions to adapt to their individual contexts. This may, in turn disincentivise innovators, taking the fun out of their passion.

The Technology for Teaching (TfT) initiative of the University of Jos is already being shared widely within the immediate regional context of the institution. The University is keen to share such practice more widely, strongly convinced that improvements will come only when others try out the strategies in different contexts and share experiences. In the end, Nigerian HEIs would be evolving, through practice, home grown processes and locally created content that are suitable for our context, but which can be shared with the global knowledge community. Through the creation of Open Educational Resources (OERs), they will be able to combine world class quality with local relevance (Daniel 2010). According to a Commonwealth of Learning publication (2010:19) “UNESCO and COL believe that OERs have considerable potential to widen access to higher education—both numerically and geographically—and to improve the quality of curricula and teaching,” adding that OERs can help achieve these goals at low cost.

At the current pace that the technology is evolving, newer possibilities present themselves daily. As practitioners document their practice, it will help newer entrants into ICTs in Education to leap-frog rather than attempt to re-invent the implementation wheel, along with all the mistakes and mis-steps that come with it. These mistakes and mis-steps are sometimes very expensive having long-lasting effects. Granted, eLearning should be more about good practice and less about the technology. As an editorial in *Connections* (2011:10), a publication of the Commonwealth of Learning put it, “the biggest challenge is not to focus on the ‘e’ but on the ‘learning.’” Even so, eLearning can, and has challenged existing approaches and pedagogies, disrupting extant structures. As Laurillard (2006:2, quoted in Postle and Tyler, 2010:65) aptly put it:

E-learning could be a highly disruptive technology for education—if we allow it to be. We should do, because it serves the very paradigm shift that educators have been arguing for throughout the last century. Whatever their original discipline, the most eminent writers on learning have emphasised the importance of active learning. The choice of language may vary:

Dewy’s inquiry-based education,
Piaget’s constructivism,
Vygotsky’s social constructivism,
Bruner’s discovery learning,
Pask’s conversation theory,
Schank’s problem-based learning,

Marton's deep learning,
Lave's socio-cultural learning.

Such disruptions provide opportunities to adopt and promote new pedagogies that are more closely aligned to technology-aided teaching and learning, but more important, are more learner-centred and encourage more active learning, especially in large classes. It is in this sense that it can be said that, not only is technology a moving target, but even erstwhile relatively stable pedagogies and theories of learning are also, as a result of the technological revolution, changing. Keeping pace with these moving targets, adapting and incorporating them into our teaching and learning in meaningful ways, is a task that requires continued commitment from University administrators and faculty.

References and Bibliography

Connections: Learning for Development June 2011 Vol. 16, No.2. Commonwealth of Learning (2011).

Danaher, Patrick Alan and Umar Abdurrahaman (eds.). *Teacher Education through Open and Distance Learning*. Vancouver: Commonwealth of Learning (2010).

Daniel, John. *Distance Education: Threats and Opportunities—Selected speeches and website blogs of Sir John Daniel and Colleagues*. Vancouver: Commonwealth of Learning (2010).

Jaffer, Shaheeda, Dick Ng'ambi and Laura Czerniewicz. "The role of ICTs in higher education in South Africa: One strategy for addressing teaching and learning challenges" International Journal of Education and Development using Information and Communication Technology (IJEDICT), Vol. 3, Issue 4, 2007, pp. 131-142.

Postle Glen and Mark A. Tyler. "Learning and Teaching Strategies and Practices in Teacher Education through Open and Distance Learning" in Danaher, Patrick Alan and Umar Abdurrahaman (eds.). *Teacher Education through Open and Distance Learning*. Vancouver: Commonwealth of Learning, Pp. 61-74, 2010.

Ravjee, Neetha. "The politics of e-learning in South African higher education" International Journal of Education and Development using Information and Communication Technology (IJEDICT), Vol. 3, Issue 4, 2007, pp. 27-41.

Stromquist, N and Samoff, J. "Knowledge Management Systems: on the promise and actual forms of information technologies. *Compare*, 30(3), pp.323-332, 2000.