

Brief Reflections on the ICT Revolution and Higher Education in Africa

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The accepted concept of massification in most African Universities and in the face of deteriorating educational infrastructure poses enormous challenges to university education. Added to this is the vast and still growing chasm between the content and mode of knowledge dissemination and consumption between higher education institutions in the industrialized and developing countries. That there has been a change in approach to teaching and knowledge acquisition in most African universities is an understatement. However, in most situations the changes appear superficial because they do not help to maximize the use of information technologies in vogue in most advanced countries. The reasons for this sub-optimal utilization of ICT in teaching and knowledge acquisition are not far fetched.

Using the University of Ghana as an example, I dare say that most African universities have a long way to go if they are desirous of upgrading their facilities so as to assure the optimum utilization of new modes of research, teaching, learning, and dissemination of knowledge through ICT. It was only at the beginning of this year that the offices of the Department of Political Science of which I am the Chair/Head was hooked to the internet after the procurement of computers for the offices. The department happens to be one of the few departments in the university with complete internet connectivity. Having the connectivity is one thing and maximizing utilization of the internet is yet another. Some lecturers at this time and age are still not computer literate. The implication is that some lecturers are not able to even use the internet for the basic functions of sending and receiving e-mails. For such lecturers, applying ICT for academic research is simply a tall order. In other words, they cannot avail themselves of the trumpeted advantages through the use of ICT in the most basic of academic responsibilities, i.e., teaching and research. Even amongst those who claim to be computer literate, including myself, our knowledge of the multifunctional applications of the computer is limited. This limitation comes about through the absence of formal training in internet applications or the general application of ICTs. The problem is worse amongst those who were hired long before the ICT revolution. The fundamental knowledge in ICT application by some colleagues were acquired, in most cases, through informal self-teaching/training when colleagues got the chance of becoming visiting professors in Northern universities. But how can lecturers be computer literate when most of them do not own personal computers because they cannot afford the purchase price of such computers? Where computers are available in the offices, they lack internet connectivity. The problem, therefore, persists even with the availability of computers. The few offices and departments with internet connectivity are frustrated on daily basis because the servers are dead slow as compared to what obtains in most Northern institutions.

In a world of competing interests, there is the need for an urgent change in the mode of teaching and research; a change that will accord African academics the self-confidence in the use of ICTs in the performance of the aforementioned basic academic duties. A call for national capacity building specifically targeted at human resource development in the area of ICTs in tertiary institutions is long over due. Such an approach is likely to lead to a fundamental contextual change that will help in dissolving, or at least narrow the yawning gulf between higher education in the North and higher education in the South.

The key question is whether National Council for Tertiary Education in Ghana and for that matter the University administrators, specifically the Vice-Chancellor and his deputies are cognizant of the vast opportunities for enhanced teaching and research that could unfold through the proper application of ICTs.

Another crucial issue that ought to be carefully analyzed is the near monopolization of ICT know how by a few in the face of the pervasive intrusion of ICTs in our lives. If one considers the minimal use of ICT in most African schools and the dearth of knowledge in this area exhibited by many African academics, including myself, I pause to ask myself whether such a technology with such an undeniable power, influence and positive utility could be mine for use in research and teaching in the foreseeable future. I must admit that some are already well versed in computer applications and appear to be applying ICT in their research and teaching. But the number is so small that it cannot make the positive impact normally envisaged. The issue is of grave importance for the fact that most academics, including myself, do not and cannot go beyond the application of ICT for the usual sending of emails and aimlessly browsing the internet.

There are a host of ICT applications for research, learning/teaching in my field of specialization. But I cannot avail myself of these opportunities because of the lack of education in this area. There is much talk about e-governance and e-proposal writing through World Wide Web applications. But I bet on my last June pay packet which is not sufficient anyway, that there are many in my discipline of Political Science in African universities who are not abreast with the dynamics of the rapid changes in research and teaching because of ICT just like myself. This has become the case because some of us have not had the chance to educate ourselves in the application of these technologies. And if ICTs in reality have the capabilities of revolutionizing our teaching and research, then any delay in broadening its usage by academics is detrimental to the students we handle and Africa's overall development. More specifically, it means that our lack of knowledge makes us poisonous species bestriding the African continent quiet unaware of the venom we spew ignorantly by way of the application of traditional modes of teaching and research.

Indeed, ICTs and their applicability to research cannot be and should not be allowed to be the preserve of a select few in Africa or for that matter the preserve of Northern universities. The rate at which knowledge is being enhanced across the globe through ICTs should sensitize us to the urgent need for facilitating education in ICT use at the basic levels. That is the only way we can be assured that those who take over from us as academics and African intellectuals would not be as handicapped as some of us find ourselves when it comes to teaching and research through ICT application.

I am genuinely worried by the following questions and I believe a dispassionate discussions of these at the retreat will go a long way in helping us to come to full terms with what we, as academics who are not in tune with ICT use, are losing. Our loss is the loss of a whole generation because we are the ones to teach and research and make our findings known for societal development through ICT, among others. If, therefore, we cannot use the basic tools that will enhance our productivity in these areas, it is our charges who are bound to suffer and their suffering, willy nilly, affects many who are yet unborn. Answers to the following questions, in my view, are relevant if we really want to be true to ourselves, acknowledge our basic weaknesses, and facilitate changes that will help our universities, our nations, our continent and us.

1. How does ICT impact on teaching and research in Political Science?
2. How best can those in my discipline avail themselves of this technology?
3. How do I update myself on ICT application in teaching and research?
4. Is ICT an exclusive technology for 'special' people?
5. If not, why does it appear to be exclusive for some people?

6. How best could any personal as well as group research be enhanced by knowledge through ICT?
7. Does it really matter if an intellectual is ICT literate or not?
8. What challenges do the ever expanding umbrage of ICT pose to Social Scientists in general and Political Scientists in particular?
9. Can we assure our constituents of the best in teaching and research through the traditional mode?
10. How do the standards of students benefiting from ICT-based teaching and research compare with the non- ICT based teaching and research?
11. Has ICTs in reality made academics in Northern institutions better researchers and teachers than their colleagues in the South?
12. What role can I play in the sensitization of the African intellectual community on the need to apply ICT in teaching and research?
13. What innovations can African intellectuals evolve to maximize ICT application in our impoverished academic environments?
14. Is there the need for a joint crusade by African academics against ICT illiteracy?

For sure, this retreat is timely and I believe by the end of our deliberations and reflections, those of us who are ignorant about the vast opportunities ICT offers could walk chest-out in the full knowledge that we are equipped, to some extent, for the challenging tasks of teaching, research, and knowledge dissemination through the windows of ICT.