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THE AFRICAN RESEARCHER, THE AVU EXPERIENCES

AND

THE LIMITS AND POSSIBILITIES OF OPEN, DISTANCE AND ELECTRONIC LEARNING IN AFRICA

An Address by

Kuzvinetsa Peter Dzvimbo, PhD

Rector

The African Virtual University Nairobi, Kenya

The African Researcher, the AVU Experiences and the Limits and Possibilities of Open, Distance and Electronic Learning

Conference Directors, Chairperson, I thank you and the participants for giving me the opportunity to deliver a Key Note Address to this august meeting. Ladies and gentlemen, my simple message in this address is (a) to briefly talk about the AVU and to highlight the problems faced by Open Distance and Electronic learning institutions on the African continent, (b) to highlight the role of research in our institutions, networks and countries especially in distance education, (c) to highlight the centrality of distance education in increasing equitable access in the African academy (d) to reflect on some experiences of the African Virtual University (AVU) that may be instructive to the theme of this conference especially in relation to African initiatives in ODeL; and (e) to engage Africanists amongst you as I argue for the need for a continual dialectical interrogation of existing discourses and practices in research and knowledge production in ODeL in Africa in particular and the developing world in general.

Ladies and gentlemen, the activities of protestors and musicians before the G8 summit which was to focus on debt relief for Africa, indicated that even African higher education is at the crossroads today as we contend with the issues of poverty reduction; access and opportunity; equity; quality; national, regional and global competitiveness; and the revitalization of the African university and its research networks. Even the September 10th issue of the Economist warns us that the issue for policy makers in higher education is how to balance the demand for excellence and mass access. For us on the African continent, excellence is still an illusive concept in many universities. We are only beginning to address the issue of access as we experiment with various modes of distance teaching and open learning and the all too familiar concept of the entrepreneurial university.

Page 2 of 14

The AVU was established in 1997. It was conceived and natured in its initial years in the World Bank. The founders of the AVU wanted to create an institution that would enable African students to access world class knowledge by utilising the use of ICTs and online teaching and learning in particular. This model was very problematic as evidenced by the fact that few students were enrolled in the degree and diploma programs.

At its inception, the AVU was also intended to develop into a full fledged university offering degrees via the internet or through VSAT technologies and also utilization of other forms of electronic media. This initiative was seen as one of the best ways of increasing access to world class content in Science, Engineering and Technology to a large number of African students at reduced costs.

The AVU was also seen as an education and training vehicle that could be used to bridge the digital divide between the North and the South. Additionally, the approach was also viewed as a very cost effective way of delivering content to African students through Learning Centers. These centers were established throughout the continent in what became popularly known as the Lead Partner University Model (LPU) which was part of a network of selected Francophone and Anglophone Universities. The major content providers were and still are: The Association of Universities and Colleges of Canada (AUCC)/Laval University in Canada for Francophone African Countries and the Royal Melbourne Institute of Technology (RMIT) University in Melbourne, Australia and Curtin University from Perth, Australia for selected Anglophone Universities.

Ladies and gentlemen, as encapsulated in our vision and mission, the AVU's intention today is to play a supportive role in the development, within its Partner Institutions (PIs) of appropriate mixed mode or blended ODeL programs. Our quest is for the development of mixed or blended (traditional residential and distance education, online or computer mediated) delivery

Page 3 of 14

modes that adopt constructivist approaches to student centered learning, are delivered both onsite and online and which incorporate appropriate instructional technology, design, training and professional development for staff in the PIs. For us, this is where the AVU can add value in the development of both synchronous and asynchronous teaching and learning either on campus or out of campus. Given the increasing number of students in some African universities, it is increasingly becoming clear that the development of virtual campuses in Africa is no longer a thing of the past. The paucity of resources and demands of the learner is now forcing African universities to think creatively about how they can deliver their programs to an ever changing student profile. It is in this creative tension between vision and reality that the AVU can add value to what African institutions are engaged in as far as ODeL is concerned.

In reflecting upon the practices of the AVU since 1997, I would like to concentrate on one area close to my heart. This is the development and management of knowledge in ODeL. The main vehicle for this activity within the AVU is what we refer to as the Research and Innovation Facility (RIF).

We see the RIF as a unit which is part of a network on convergence and clashes of research ideas, coordination of discourses on ODeL and the development of policies that allow the mutual transfer of knowledge and intellectual property rights in ODeL on the African continent. It will become a virtual and physical unit that offers an opportunity for a sustained exploration of both basic and applied research in ODeL, and a bi-annual meeting and resultant publications on the cutting edge of discursive discourse practices on ODeL. For the AVU, the RIF will help us make sense of the complex and ever changing environment in which the African university is operating. This is our suggested schema of managing complexity in higher education and training in which creativity and complexity are critical to enable new meanings, visions and ideas will emerge from a diverse array of elements and African institutions.

Page 4 of 14

The problematic of basic and applied research in open, distance and electronic learning (ODeL)

Ladies and gentlemen, while some of us are now grappling with the most efficient ways of delivering open learning, blended learning, distance education and electronic learning, some of our colleagues in the conventional African university education system are still debating whether to go this route or not. While we in Africa are trying to find ways of meeting the excess demand for tertiary education and training on the African continent, some developed countries are registering growths of almost eighty per cent participation rates for the age cohort that is supposed to be in the tertiary education and training sector.

Ladies and gentlemen, the participation rates in African higher education are as low as .04% of the age cohort in Niger and one per cent for Rwanda. In today's modern world, this is a serious situation. Participation rates in the higher education sector in most African countries are generally around one to four percent, with South Africa registering around fifteen percent. This is an unacceptable situation from a continental perspective because Africa has to be a key player in the generation, storage, management, dissemination and utilization of knowledge, especially if such knowledge will facilitate the transition of our economies from a focus on natural resources to knowledge based economies. It is also unacceptable if Africa is to be competitive and a key player in a global economy where other nations are now experimenting with nuclear fusion, sophisticated bio-technology and stem cell research in genetics.

Our African institutions cannot be central in the creation of knowledge based economies if our universities are only admitting less than ten percent of those of our children who should be accessing tertiary education and training. We, therefore, have to find ways of including the marginalized so that our

Page 5 of 14

universities are truly inclusive and become the engines of growth and competitiveness in our societies. If our universities and our research activities are to be responsive to the imperatives of democratic and socio-economic development and globalization, the African academy has to make serious strategic choices in terms of the content, form, orientation and structure of our institutions and reform imperatives.

Ladies and gentlemen, at the centre of this change imperative is the need for the African academy to seriously address epistemological concerns and the role of the university in the preparation and propagation of knowledge, skills, competencies and modern attitudes. That knowledge must help us understand and take control of the materiality and spirituality of Africa's current and future existence. Therefore, as engaged academics and researchers in ODeL, and as organic intellectuals seeking to change the delivery paradigm, we are at the centre of the development of knowledge that should enable our institutions and countries to empower ourselves to take charge of our destinies. This can only happen if the methods we adopt to teach our students are flexible, scalable, and cost effective and engender the development of demand driven programs.

Colleagues, knowledge and education in general give us the capacity and freedom to choose how to interact as individuals and members of civil society. Here I would like to engage fellow Africanists in this room to the question of whether the African academy is at the centre of knowledge-generation globally, or whether we are at the periphery especially in relation to ODeL and research in this field. I pose this simple question to my fellow Africanists because we all have to answer it if we are truly to be organic intellectuals in the proper Gramscian sense. Furthermore, colleagues, are our traditional African institutions the centres, the active sites and the "hubs" of new knowledge-generation in distance education and technology for use in our distance education centres and the university? Or are we dependent users of knowledge from the Oxbridge and Ivy League institutions of the developed

Page 6 of 14

and post industrial societies? My sincere apologies to those of you who may be from Oxford and the Ivy League American Universities.

Ladies and gentlemen, as Albert Einstein once noted, "*The important thing is not to stop questioning. Curiosity has its own reason for existing.*" For us on the African continent and in the field of ODeL, knowledge in this schema constitutes a continuous dialectical effort to question the basis of our existence and reality. This is why basic and applied research become fundamental to the existence of our universities and research networks, because it is' integral to the generation of knowledge essential to freeing the some of us from "wonder" and affording us the freedom to change and improve our present and future reality. Here ladies and gentlemen, I am not arguing for an instrumentalist perspective to the role of education and research in higher education and ODeL in particular. Rather, that our activities as researchers and educators should shape and be reshaped in a dialectical process by society and the economy on the African continent as we search for better and more reliable ways of utilizing ODeL.

Ladies and gentlemen, the arguments for increasing access to equitable and quality higher education and training in Africa are stronger today than they were ten years ago. While this is not to obfuscate the fact that primary and secondary education are equally important, the role of ODeL as one of the vehicles for achieving this goal is critical. I would like to note at the outset that I am not arguing for the abolition of the conventional residential university. I am arguing for the expansion of a differentiated, flexible and creative system of higher education and training in our countries on the continent and indeed globally. It is within this perspective that I would like to briefly state the role and experiences of the African Virtual University, the AVU.

Colleagues, having begun by offering internationally accredited programs from Canada and Australia, through African institutions, the AVU, in conjunction with these partners, has radically re-thought an approach which proved to be

Page 7 of 14

costly, difficult to scale, economically unsustainable and in terms of student numbers, did not lead to a significant skill transfer. Current thinking in the AVU turned to the question of why African institutions are unable to expand access to their own programs. It quickly became clear that the real problem is not the absence of programs on African campuses but the availability of these programs in modes other than the traditional classroom based methodologies. Ladies and gentlemen, the AVU now operates in 27 countries and is physically located in 57 learning centres within the African partner institutions which constitute the AVU network. Each of these centres is poised to eventually be fully integrated into the governance structures of the participating universities as we contextualize content from Australia and Canada, whilst simultaneously expanding access to programs offered by African institutions in a variety of ODeL modes, to augment the traditional classroom and face to face methodologies.

The AVU experience in ODeL: a brief exposé of limits and possibilities

Ladies and gentlemen, the AVU is not a university in the traditional sense of the word: we see ourselves as an educational institution that is part of a network and works <u>with</u> African partner institutions to <u>support</u> initiatives in ODeL. The AVU takes cognizance of progressive developments occurring in African universities towards increasing access to their programs by making use of different modes of distance education and electronic learning. The AVU, as a part of this network of African universities, will <u>enhance</u> <u>institutional capacity</u> by the universities through a selective knowledge transfer and technical know-how from its African and international partners.

Colleagues, we are very much aware that African institutions are themselves members of other networks. Our aim is to enhance these communities of practice so that we bring to the surface and challenge and interrogate prevailing mental models, and together, foster more systematic patterns of

Page 8 of 14

thinking regarding distributed, blended or mixed modes of teaching and learning.

In short ladies and gentlemen, we want to work <u>with</u> African institutions in the development of intellectual capital for ODeL and together, continually shape the future delivery of higher education and training in Africa, in an affordable, scalable, flexible, cost-effective and sustainable manner by using innovative education methods. One key approach is the AVU In-Country Strategy.

Ladies and gentlemen, the AVU In-Country Strategy is the road map that we intend to use initially to contextualize existing programs from Australia and Canada and then to scale up existing local programs where universities have excess demand and limited supply. It is our strategy for localizing programs that are currently constrained by a lack of human, financial and material resources. Capacity enhancement for the In-Country Strategy as far as localization of foreign and existing programs is concerned, is planned in key areas which include the following:

- 1. Curriculum planning, development and evaluation in ODeL;
- 2. Materials development and how to digitize content;
- 3. Quality assurance, accreditation, assessment, measurement and examinations;
- 4. Delivery and technology platforms that are relevant to African educational and technological conditions;
- 5. Choice of learning management systems and Enterprise Resource Planning Systems germane to ODeL;
- Governance models that assist in the conceptualization, setting up and location of virtual campuses in traditional and residential; and in open or dual mode universities;
- 7. Business and financial management and funding strategies for ODeL initiatives;
- 8. Personal and professional development in ODeL;

Page 9 of 14

- 9. Project development, management and evaluation in ODeL; and
- 10. Basic and applied research in ODeL.

Ladies and gentlemen, in this schema, inter-institutional support will take the form of curriculum contextualization consortia in Anglophone and Francophone Africa. It is within these formal communities of practice that we will be able to find the best collaborative approach to making use of national, regional and continental expertise and experiences.

Colleagues, to achieve this goal of building a community of practice, we are committed to the authentic and supranational development of an infrastructure of imagination as far as ODeL is concerned. Such an infrastructure will include virtual and physical facilities of orientation, reflection and exploration as envisaged in the AVU's RIF. As Wenger, E. (2003) argues, the orientation of the RIF will be in the location of researchers on the African higher education and training landscape; their location in time and in the increased use of electronic means of communication and sharing knowledge; the location of researchers in meaning, in order to explain findings and research problems in ODeL; and the deconstruction of power hierarchies within and between African universities and researchers as far as blended and single modes of teaching and learning that are flexible and cost-effective, are concerned.

Ladies and gentlemen, the RIF will spearhead iterative reflective activities such as facilities for comparisons in research, retreats, conversations, sabbaticals and other breaks in rhythm of intellectual discourses. It will also encourage the exploration of ideas by facilitating opportunities for envisioning possible futures and possible trajectories; trying out new things; creating alternative scenarios in research on ODeL; pushing research boundaries; and developing simulations of what can work in African initiatives on ODeL. The RIF, for us, will be pivotal in building a reflexive, transformative and emancipatory educational discourse for the development of autochthonous

Page 10 of 14

and indigenous African communities of practice and local virtual and physical infrastructures of learning and teaching that benefit the entire network in ODeL. (Wenger, E. (2003:237)

As a virtual and physical unit that offers an opportunity for a sustained exploration and interrogation of new ideas for both basic and applied research in ODeL through an annual meeting and regular publications on the cutting edge of discursive discourse and practice on ODeL, we see the RIF as a useful contribution to African research networks, which can be regarded as a shared history of learning *a la* Wenger, E. (2003:86). These shared histories are constituted by the convergences and clashes of research ideas, coordination of discourses on ODeL and the development of policies that allow the mutual transfer of knowledge and intellectual property rights in ODeL on the African continent.

Ladies and gentlemen, the selective use of ICTs will continue to be a marked feature of the AVU's educational strategy. However, what has fundamentally changed is how we integrate technology into the AVU learning architecture. We are no longer accentuating technology so that it dictates pedagogy nor student support and delivery models, nor even access to digital resources. In the new strategy adopted by the AVU, it is the needs of the learner, the educational content including discipline requirements, the institutional and national ICT contexts that <u>will</u> determine the appropriate technology. This is why we now talk of a <u>learning architecture</u> which enables us to lay down the basic general elements of designing technological and educational models. The new AVU technology model will enhance both the asynchronous and synchronous delivery of learning and teaching materials using VSAT technologies.

The technological limits and possibilities to ODeL in Africa



Page 11 of 14

Ladies and gentlemen, our biggest technological challenge has been the availability of bandwidth and connectivity for the effective and efficient delivery of our programs. As we all know, most of our universities in Africa do not have access to reliable and affordable bandwidth. It is common knowledge that some of our universities make do with less than one megabyte of bandwidth. Indeed we know that an ordinary household in Europe and North America has more bandwidth than an average African university with 30 000 students. The solution that the AVU and its partners have put in place is the development of a consortium to purchase bandwidth.

As a result of this approach we have managed to purchase bandwidth for 11 African Universities plus the head guarters of the Association of African Universities, and the Kenya Educational Network (33 tertiary education and training institutions) at an all time low price of US\$2.3 per kilobyte per second per month. Funding has been provided by the Partnership of Higher Education in Africa made up of the Ford, Rockefeller, Mc Arthur, Carnegie, and Hewlett Foundations. We are now in the process of publicizing this price so that more African universities can join the Consortium or even form regional consortia for bandwidth and connectivity. This situation will have very positive effects on key aspects of our activities such as the Digital Library for students and researchers across the AVU network. Academics will have much easier access to the ubiguitous World Wide Web and millions of digital resources available on the internet for free. From now onwards users will not have to spend inordinate amounts of time in front of a computer to just to download a page!

Concluding remarks

In concluding my remarks, I would like to inform my Africanist colleagues present this evening that Michael Gibbons' Mode I and II research in ODeL is critical in the creation, development, storage, dissemination and management of knowledge on the African continent. However, for us to be able to achieve

Page 12 of 14

this goal as individual institutions and as networks across the continent, we need to think differently and to be nimble and to move away from state control. For us to understand what we really mean by thinking differently, it is instructive to quote Edward de Bono (199:129) on the story of the person who invented the Fosbury flop in high jump.

"We can seek to do better and better at what we are doing now-or we can change the way we do something. As a student, Fosbury did not seek to get better and better at traditional Western-roll method of high jump. Instead he invented the Fosbury flop, which is a different approach. He won the Olympic high jump and changed the method forever."

If the African research networks, our universities and our research agendas on the continent are to move us from the periphery to the centre of the global knowledge process, then we must all change the way we see our strategic role in African higher education and training and the value we add to various research initiatives in African universities in the area of distance teaching and open learning. In the example above, Fosbury turned the style of high jump upside down: literally. As a network, as communities of practice, we have to find a niche in the African higher education research landscape by conducting an "outside-in" analysis of how we can create and add value to the burgeoning networked African open, distance and electronic learning environment. In other words, ladies and gentlemen, it is necessary to continually renew, and regenerate the epistemological predilections and ideological paradigms that frame the way we operate in the African higher education research landscape.

Ladies and gentlemen, in this schema, the art of progress is to preserve the order we inherited amidst change, and to preserve the change we are working on amidst order in Africa's research networks and universities as far as ODeL is concerned. It remains a certainty that "...change, (planned or otherwise) unfolds in non linear ways; that paradoxes and contradictions abound; and that creative solutions arise out of diversity, uncertainty and chaos". As

Page 13 of 14

Einstein once said, we should not worry about the future, because the future is here with us. If you never fail, you will never succeed. Therefore, we will create the future higher education landscape in Africa because the task before us needs endogenous and transformative solutions. We know that he or she who dares wins.

Thank you for listening. Kuzvinetsa Peter Dzvimbo



Page 14 of 14