Today's Challenge of Shaping E-learning in Sub-Saharan Africa

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ABSTRACT

This paper discusses the impact of e-learning in sub-Saharan Africa, so far, considered as one of the poorest economic regions in the World. Coming to literacy, this area is also seen to be at the lowest ranking. Despite the stereotype of a poor and undeveloped sub-Saharan African region, there is room for development and progress when it regards the development of education particularly through e-learning. The purpose of the paper is to establish that e-learning becomes an inclusive platform for the promotion of education in Africa. It stemmed from the traditional distance learning but gradually seeps in the educational curricula to outreach learning in Africa. Based from a plenary session in the 12th International Conference on e-learning, this paper analyses the potential for developing e-learning platforms in Africa while it comments on the attractions and barriers that influence its diffusion in Africa. It understates the importance of e-learning while at the same time, posits that barriers to its development like poor infrastructure, low rate of literacy and implementation difficulties are substantial threats for the success of e-learning.

Keywords: Sub-Saharan, e-learning, Africa, Perspectives, Attraction and Challenges.

1. INTRODUCTION

The 12th e-learning Conference hosted by the Government of Mauritius and UNESCO, in the final week of September this year, focused on the perspective of e-learning in the African continent with a lot of interesting papers and discussions presented by international academics and industry people. The research papers reflected the development of e-learning in sub-Saharan Africa with a stereotype of a region that was and still lags behind in educational technology while, in reality, stakeholders could seek opportunities to advance e-learning. It is worth noting that distance learning and the diffusion of information technology have already made in-roads within Africa.

Possibly, Mauritius along with South Africa and a few wealthier nations of the Continent could boast having excellent internet connectivity and succeed as developed economies capable of implementing e-learning in society. There were some certain clear illustrations particularly at the tertiary education level where the University of Mauritius and the Open University have taken first-mover advantage to initiate e-learning. To this extent, one might claim that e-learning is still in its infancy and bears some distinction with distance education that combines a little of e-learning with traditional distance learning with course materials and some face-to-face interaction. There are a number of activities indicative of interest by local and international communities seeking to utilise e-learning technology to improve access to education. Governments and educational institutions look at e-learning as one option that can be exploited to achieve the important millennium goal, which is 'education for all' [1].

2.0 DISTINGUISHING 'E-LEARNING' FROM 'DISTANCE EDUCATION'

There has been some confusion in defining 'e-learning' as many policy makers, scholars and practitioners in higher education have use the terms 'distance education' and 'e-learning' interchangeably as synonyms, referring to e-learning as the new generation of distance education [2]. In the USA 'distance education' is defined mainly as being conducted through digital technologies. Bates (2005) stressed that the strong advocates of e-learning 'who see e-learning as an educational paradigm shift, making obsolete all forms of distance education that preceded it' make a fundamental mistake, since 'distance learning can exist without online learning, and online learning is not necessarily distance learning' [3]. Distance education and e-learning do overlap in some cases, but are by no means identical. Distance education and e-learning constitute two distinct phenomena [4].

The Conference held in Mauritius particularly addressed new developments taking place through e-learning. One representative from 'Blackboard', an English-based firm, stated the development opportunities to enhance e-learning in Africa. With 'Moodle' as an already established educational platform, 'Blackboard' was capable of providing tailor-made training to different audiences. The cost of implementation was minimal and this could benefit young Africans. For the intervener, it was the question of considering deeply the 'massification' of learning in Africa as an outcome of the UNDP Millennium goals. Coetzee et al (2012) mention that one of the most widely acknowledged consequences of globalisation for higher education is the ongoing demand for access to higher education, which has manifested in the massification of higher education [5]. The most tangible evidence of the massification of higher education can be found in the burgeoning of tertiary education enrolments, as well as enrolment and graduation statistics, which reflect significant and continued growth [6]. Since there would be a greater need for Africans to embrace tertiary education, 'Blackboard' could be of great use in providing excellent teaching platforms to the region based on skills development. Traditional academic education was not the main concern for employers but rather the skill acquisition and talent development were the critical employability

factors that employers considered in today's changing paradigm of learning.

The relevance of business training to the retail environment was another highlight of the discussions around e-learning. Based on research findings, a third of the potential South African workforce was located in the retail sector with the country having some of the biggest retail companies in Africa. Taking into consideration that retail sector employees spend long hours at work and they are barred from learning and training opportunities, training organisations were keen to develop e-learning. This could be in the form of modular courses provided to learners focused on their practical work experience. With tools providing quick and easy learning assistance, retail sector employees could gain much in time and money while following tailor-made e-learning programmes. The intervener for this debate was questioned upon the validity of such learning. From his perspective, training in the form of e-learning was highly needed and should be associated with quality certification to better reinforce the provision and validation of e-learning.

3.0 INTEGRATING BUSINESS WITH E-LEARNING

Seen from visits at the different stands, there were opportunities to have a better outlook of e-learning in the region. For instance, new universities in Western Africa recently stemmed from the development of e-learning. This was a more economical means of initiating 'start-ups' in e-learning at the tertiary level particularly when students faced financial difficulties to purchase books and stationery. In Senegal, for instance, new institutions could provide learning programmes to potential learners by offering them e-learning platforms. This could also curb the cost of displacement to the universities that could be not easily within the reach of the students. On the local scene, the Open University has been at the forefront of e-learning and this could be an inspiration to certain African educational authorities.

This Conference was also a meeting point for international representatives from the Continent to see how e-learning might have long-term sustainability in the area. There were arguments regarding the viability of e-learning principally from the fact that sub-Saharan Africa is still poor with people in remote rural areas facing the hardships of life. Access to the Internet was important along with participation from governments to ensure that e-learning remains a practical undertaking in Africa. The emerging wireless technologies are thought to hold much promise for providing connectivity to remote areas, particularly in developing countries [7]. Great strides have been made in the last decade by government agencies and several international and non-governmental organisations, such as the Commonwealth of Learning, UNESCO, the World Bank, to bridge over the digital divide. A lot is yet to be done. A major challenge nowadays in the implementation process of the digital technologies in the next decade is to achieve the appropriate integration of the digital technologies into the education systems and institutions at large, and to ensure that the new technologies become agents of expanded access and equity and increase educational opportunities for all, not just for the wealthy and the technologically privileged [8,9].

Understandably, it is usually providers based in the Western world to be the first to address the problem and fill the gap. This was particularly true because most of the technological development still remains the property of rich countries and they have developed e-learning as an educational platform to foster educational innovation and advancement in Europe and the USA. Just to name a few, Microsoft Cloud learning, Moodle, Pearson Education…

4.0 ATTRACTION AND CHALLENGE FOR E-LEARNING IN AFRICA

Sub-Saharan Africa offers an opportunity for the business world to develop e-learning. This has been a long-term prospect because publishing companies like Longman, Penguin, Macmillan, Oxford University Press along with French publisher Fernand Nathan had their footsteps earlier in Africa. They were the first to promote education based on the respective English and French backgrounds that the African nations had inherited from colonialism. Although such education was generally imposed on African natives, it stood as a hallmark for quality. Over the years, African institutions wanted to adapt western curricula to their particular needs and these led to the development of local training and educational institutions. Alongside, Africa remains a young continent with a relatively large percentage (above 35%) of people within the age group 15-24 and this calls for concern from education providers because the young are in need of education for the advancement of the Continent. Prakash (2003) stated that access to education in the developing countries is limited with less than 5% of students in tertiary education compared to the world average of 16% [10]. The demand for education in Africa exceeds the ability to deliver and is not offered to significant portions of the population. Most African countries have inefficient ICT-related infrastructure such as electricity, telecommunications, computers and trained personnel. A survey carried out by the AVU revealed that internet connectivity in tertiary institutions in Africa is inadequate, expensive and poorly managed [11].

In parallel, governments in sub-Saharan Africa are gradually more in favour of educational advancement to ensure the development of their economies. Admitted that education is the only path for economic prosperity and stability, different African States now advocate that education should be on top of their political agenda. With the increasing integration of computers and the Internet into education, there has been a shift from a centralised classroom-based education towards distributed e-learning courses [12]. In this way, the development of infrastructure in Africa has also entailed the improvement of educational infrastructure, hence, the development of Internet and connectivity in different ways. The advantages of e-learning stem from its networked environment where rapid updating, sharing of information and instruction are conveniently performed. It promotes a team-learning pedagogy in which the primary focus is to foster a learning environment conducive to group interaction through collaboration and self-learning [13]. For example, if

Mauritius adopts 4G connectivity, the Comoros are connected through satellite providers while cheaper connection systems are entailed in poorer economies. The new undersea cabling encourages higher connectivity through systems like ACE, MainOne and WACS along with SAFE and this prompts further e-learning opportunities in Africa.

4.1 Low Standard of Living and Illiteracy

Obviously, the challenge for e-learning comes from the appallingly low standards of living in sub-Saharan Africa counting for a significant population size earning less than $2 per day. The fight for illiteracy is conventional through barriers to learning stemming from poverty, patriarchal family and authority and poor access to hygiene and health. Stakeholders of e-learning however obliterate such concepts, believing that there is a critical mass forming a niche market that is apt for learning. Africa needs its local corporate managers, middle managers and technicians. It cannot sustain itself through bringing qualified foreigners to develop the economies. Gulati (2008) stated that Developing countries, wherein only a small proportion of the population has Internet access, need to realise the disparities between rural and urban communities, male and female students, and elite and non-elite groups [14]. They need to consider how to adapt global software and hardware to benefit all of their citizens. Belawati (2005) identifies this as the critical challenge for developing countries – to educate students and teachers to use computers and develop accessible infrastructures so that they may benefit from the interactivity offered by online learning [15].

5.0 CONCLUSION

E-learning platforms and conferences should not be merely considered as meeting points just to advance discussions or get engaged in plenary sessions that have little outcome. These will be disastrous undertakings because they will just 'beat around the bush'. Developing e-learning becomes critical as younger people embrace new technologies through the smartphone and cheaper e-technologies like the tablet or the mobile with adaptable software applications. Fostering such development is necessary and will bear the fruit as people get connected and interact more sensibly today. The e-learning conference and related happenings hopefully set the ball rolling with room for positive expectations in Africa.

6.0 ACKNOWLEDGMENT

REFERENCES

[1] Delamonica, E., Mehrotra, S. & Vandemoortele, J. (2004). Education   for all: how much will it cost? Development and Change, 35, 1, 3–30.

[2] Arafeh, S. (2004). *The implications of information and communications technologies for distance education: Looking toward the future.* Arlington, VA: SRI International, Final Report, P11913.

[3] Guri-Rosenblit, S. (2005). Distance education and e-learning: Not the same thing. *Higher Education, 49,* 467-493.

[4] Bates, A.W. (2005). *Technology, e-Learning and distance education* (2nd ed.). London: Routledge Falmer.

[5,6] Coetzee M., Botha, J., Eccles, N., Nienaber, H. and Holtzhausen, N. (2012) Developing student graduateness and employability: Issues, provocations, theory and practical guidelines, Knowres Publishing.

[7] Motlik, S. (2008). Mobile learning in developing nations. *International Review in Open and Distance learning, 9*(2).

[8] Gladieux, L. E., & Swail, W. S. (1999). *The virtual university and educational opportunity: Issues of equity and access for the next generation.* Washington, D.C.: The College Board.

[9] World Bank (2002). *Constructing knowledge societies: New challenges for tertiary education.* Washington D.C.: Directions in Development.

[10] Prakash, S. (2003). The African Virtual University and growth in Africa: a knowledge and learning challenge. Human Development, 223. Retrieved October 9, 2017, from http://www.worldbank.org/afr/findings/english/find223.pdf.

[11] Twinomugisha, A., Magochi, J. & Aluoch, S. (2004). Investigation of bandwidth consolidation for partnership universities. Nairobi: The African Virtual University. Retrieved October 13, 2017, from http://www.avu.org/documents/Partneship%20Connectivity%20Report-%20revised%202017-10-04.pdf.

[12] Alonso, F., López, G., Manrique, D. & Viñes, J. (2005). An instructional model for web-based e-learning education with a blended learning process approach. British Journal of Educational Technology, 36, 2, 217–235.

[13] Gunga, S. and Ricketts, I. (2006) e-Learning initiatives in African universities, Facing the challenges of e-learning initiatives in African Universities British Journal of Educational Technology, British Journal of Educational Technology, Vol 38 No 5,896–906, doi:10.1111/j.1467-8535.2006. 00677.x

[14] Gulati, S. (2008) Technology-Enhanced Learning in Developing Nations: A review, University of Oxford, UK.

[15] Belawati, T. (2005). The impact of online tutorials on course completion rates and student achievement. *Learning, Media and Technology,30*(1), 15-25.