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Improving E-learning Practice Using Living Theory Methodology

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Abstract

E-learning as a new frontier in teaching and learning is transforming education to its scope, boundary and pedagogy. It offers exciting opportunities and provides access to global information. Its effort is a far reaching one, creating a learning atmosphere that defies the constraint of time and distance. Despite having the required technologies and infrastructures at their disposal, some notably institutions of higher learning have not be able to kick-start the online instructional course. This short coming resulted in unprecedented low Return on Investment, sustainability issue among others. The reason for this inadequacy is not limited to inappropriate handling of e-learning implementation and strategies on our campus but also include lack of leadership and initiative in this regard. The zeal to see the offering of on-line course in our faculty and University has prompted this study in looking for the best possible ways of improving e-learning practices. The best practices being proposed will be derived from our intuitions and personal experiences gathered in our educational studies using living theory methodology and our University as the basis. We believe the suggested best practices may speed up the introduction of on-line courses in our curriculum and provides opportunity for effective utilization of e-learning infrastructures and technologies. It will also enhance the provisioning of quality teaching and learning services to our students who for one reason or the other may not make it to campus everyday as demanded by traditional classroom education.

Keywords: E-learning practice, Online Education, E-learning implementation, E-Learning offering, Living theory, online instructional offering.

1. INTRODUCTION

Unlike formal traditional education, where teaching and learning takes place in a classroom domain with lecturer taking charge, e-learning include all forms of internet or networked supported education where teaching and learning takes place outside the

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classroom, anywhere and anytime. It is a self paced learning that defies time, boundary and location. The contents, skill, knowledge, teaching and learning are transferred through the computer, internet and network using media like audio, video tapes, cd-rom, satellite TV in form of text, image and animation, audio and streaming video. Over the years, it has taken various forms, shapes and names. It is synonymous to Computer Based Training (CBT), Internet Based training (IBT), Computer Based Learning (CBL), Web Based Training (WBT), Computer Supported Collaborative Learning (CSCL) and Technology Enhanced Learning (Campbell, 2001; Bates and Poole, 2003; Dabbagh, 2005; Dabbagh & Bannan-Ritland, 2005; OECD, 2005; Allen & Seaman, 2008).

The e-learning markets and technologies have been on the increase ever since its inception and it continue to gain prominence till to date with no end in sight. It has opened wide varieties of opportunities in the global e-learning economies and providing employment in various capacity of consulting, content management, technologies and infrastructures, services and support. The tertiary education has not taken exception to this range of e-learning developments. Its advances are visible on our campus but not in our curriculum. It is worth noting that most institution of higher learning are embracing the technology in one way or the other and more students are registering for online courses. This phenomenon has been a major contributing factor in changing the way teaching and learning are impacted in our campus. Most Universities in the developed world and some in developing world have taking the leads by offering on-line course while other took further steps in offering on-line education at post graduate level by enrolling students for Master and doctoral program on-line. These advancements remain a persistent challenge in our University (Allen & Seaman, 2003; OECD, 2005; Allen & Seaman, 2008).

The adoption of on-line education or e-learning as an instructional offering has the potential of reducing the numbers of drop-out students. It will extend educational opportunities to dropped-out students, previously underserved and disadvantaged students. It will provide opportunities for student with difficulties to enroll on the campus due to constraint of time, cost and working condition by providing anytime, anywhere adaptable learning with ease of time at a self paced structured. Furthermore, it will enable student to access remote educational, teaching and learning resources anywhere, anytime, 24hours a dayX7days a weekX365days a year. It will equally foster active participative learning that supports collaborative learning with interaction between participating students. It will allow students to put in their creativities and genuine skills into their learning by finding new solution to their problems and further give them the platform to integrate theory and practice in their quest to find solution to their problems (Bonk and King, 1998; Campbell, 2001; Franklin and Peat, 2001; Vovides et al, 2007; Bonk, 2009).

There was an estimated 3.5million students enrolled for on-line learning as at 2006 with the prospect of about 12-14% increase on the average per year over five years ranging from 2004-2009 compared with 2% increase per year in on-line enrolment in the USA. There was also claim in 2008 that an estimated quarter of all students enrolled in post secondary education were taking full on-line studies. A separate study by Ambient put the figure at 44% and the value could increase to 81% by 2014 (Ambient Insight Research, 2009; Allen and Seamen, 2009). At the home front, the figures relative to on-line studies are far cry and less comparative to the derived figures in developed world, USA. There are 23 state funded tertiary institutions. Only one tried to offer on-line course in collaboration with another private institution, in actual fact, they were involved with ratification of the contents and award of the degree towards recognition, the bulk of the delivery was undertaken by the private institution. About four Universities are presently offering distance education. The fact remains that full online education remains invisible on our campus and luxury to the students in general (DoE 2010a).

There are 726,882 undergraduate students and 136,610 postgraduate students recorded in South African's Higher Education Institutions in 2010. It was reported that the "Black African Students" shares about 63% (305,605) enrolment of contact programme and 68% (209,350) enrolment in distance education programme. The Higher Education also reported a significant dwindling in enrolment over the period of 2000 -2008 according to their distant full-time equivalent figures. It ranges from a high of 31% in 2000, to all time low in 2005. It regains a steady increase of 29% in 2008 with estimated and projected rise to 30% in 2013 (DoE, 2010a). The gain in distance education enrollment has a compelling effect on graduating rate which at the moment remained at all times low because most of our student seeks job employment before the completion of their studies. No

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doubt, we are depriving our students the great opportunities as presented by on-line education, limiting our growth and diversification and saddles our institution with low graduating rate. Hence the students enrolled some of their courses with a distant learning institution. At ends, they either apply for credits or graduate with that university. We argue that it would have been a compensating figure for us had it been that we have an online courses and this lead us to our research question:

How can we improve on our e-learning practices to offers online courses?

We believe that our suggested solutions will go a long way toward improving our e-learning practice and drive the introduction of an on-line course in our curriculum. It will provide immediate answer to our dwindling graduating rate, lower our drop out cases and improve our competitive advantage. The efforts may also provide opportunity for the less privileged and previously disadvantaged students who might wish to continue their education but were constrained by time to be on the campus either for full-time studies or distant learning education. We are optimistic that education in this case, will become more available and at lower cost for all on sundry without regard for time and border constraints. The following sections will further assist us in preparing solutions for our research question. Section 2 will highlight and present the details of our methodology, highlight our concerns, why we are concern, the benefits thereof, our suggested best practices and improvement based on personal experiences and intuitions. Section 3 will conclude the study. This section will make informed conclusion and recommendations about the future of on-line education offering and curriculum on our campus.

2.   Research Methodology and design

2.1   Methodology

The research method for this study will be based on living theory methodology. The living theory is derived from methodological inventiveness of individual and genuineness in explaining educational theories based on his own learning, learning of others, intuitions and personal experience in his daily work of life. The living theory places emphasis of the "living I" and the unique creativity of individual in devising educational theories based on their own intuition, observations, practices, studies, influences and experiences toward improving knowledge and general practice from within

historical, social-cultural perspective and understanding of his daily walks of life and work. Living theory is an approach to explain educational influences in a person's learning ability. It provides us with an opportunity to suggest our opinion on ways to improve e-learning practice and on-line education offering on our campus (Whitehead, 1989; 2006; 2009; Whitehead & McNiff, 2006; Cresswell, 2007; Samara, 2010). We note with concern the under utilizing of our Learning Management System (LMS) and the failure in starting full on-line course despite the availability of the resource, technology and infrastructure (Govindasamy, 2002; OECD, 2005; Vovides et al (2007). This research work will generate our explanation of the educational influence as a realistic means to improve e-learning practice and the implementation of full on-line course.

2.2   Research design

This research work is motivated when we noted with concern the inability of our faculty located in the deep rural community to kick start full on-line course despite the availability of the technology and equipment over the years. It translate that the equipment and technology are inevitably been continuously underutilized resulting in unprecedented low returns on investment (Alavi,& Leidner, 2001; Rosenburg, 2001; Salmon, 2005; Bates, 2009). For many years, we watched the graduating rate diminishing, we watched increasing figures of student dropout of school because they have to work and could not afford time to attends classes, we watched students travelling long distance to attend classes, we watched students skipping semester registration that is, registering one semester and working on the other semester due to high cost of tuitions and registration fees.

These challenges generated lots of educational inquiry in our mind and we queried our heavy reliance on traditional classroom educational delivery model as our formal teaching and learning instructional offering. The on-line instructional offering would provide opportunity for self paced learning at student convenient time, space and at a lower cost. The introduction of on-line courses in our opinion will help to improve our graduating rate, lower the dropout rate to a bearable minimum, ensure that equipment and infrastructures are optimized and offers students alternative mode of learning at their own time, space and pace. It will also offer student an unrestricted access to global knowledge repository available at the click of the mouse 24hoursx365days (Campbell, 2001;

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Bates and Poole, 2003; Dabbagh, 2005; Dabbagh & Bannan-Ritland, 2005; OECD, 2005; Allen & Seaman, 2008).

The living theory methodology approach and design present the action researcher with platform such as action reflection cycle to explain their claim or educational problems, why and how they intend solving their problems. In doing that, we will present our university background, the present status of e-learning in our university, our concern, why we are concerned, our proposed and suggested solutions and the potential influences of this study to achieve the introduction of on-line course in our campus using descriptive and explanatory principles (Whitehead, 1989; 2006; 2009; Whitehead & McNiff, 2006; Cresswell, 2007; Samara, 2010).

2.2.1 Background of our Universities

As enshrined in the Constitution, all South Africans have the right to basic education. The government as the custodian of the Constitution has the mandate to make education accessible and available to all through reasonable measures. It is worth nothing that education enjoys more priority and allocation than any other sectors of the economy with an overall 20% budget allocation. We have three broad bands of education, General Education and Training, Further Education and Training and Higher Education and Training. Although the private and the higher education institutions like ours enjoys some autonomy but are sometime compel to implement notably government policies and enactment, for example, the policy of no discrimination on the basic of race, religion, financial background or status (DoE 2010a).

The post apartheid year had witnessed a rigorous transformation of the education sector with the major aim of unifying our education system and to correct some ills, rationalization and unbalances in the previous system. The result was a merger of about forty-two (42) higher education with uneven histories and academic reputations to give 23 state funded universities of which eleven (11) are traditional universities, six (6) university of technology – we fall in this category and six (6) comprehensive institutions. Two more universities have been gazette for regions without higher education and are earmarked to open for business in the nearest future (DoE 2010a). No doubt, we have a peculiar history of uneven distribution of academic excellence, uneven academic development, uneven

infrastructural and also we have to live with the consequence of digital divide.

Our institution is situated on the outskirts of Pretoria, in the rural community North of Pretoria. We are as a result of the merger and transformation process by the government and Department of Education (now Department of Higher Education) in 2004. The presence of our institution seems symbolical and a catchment area for students of the Northern disadvantaged tribes of South Africa. We are tasked with responsibilities of providing educational access with success to students, most of who hailed from the poverty stricken areas, poor socio-economic and educationally disadvantaged backgrounds that have not prepared them for the entry levels of most institutions. These challenges demands serious approach in our teaching and learning pedagogy and consequently, we rose to the occasion when formulating our strategic goals and objectives as read and we quote: "To ensure flexible modes of programme delivery incorporating, where appropriate, distance learning, off-campus programmes and short-learning courses and to adapt to the developments in technological, educational, and business systems (TNG Staff Manual, 2003)." In the eighth year post merger, we cannot stop asking ourselves whether we have fulfill these promise to our students or we are anywhere near it? This study seeks to suggest ways of improving on the e-learning standards and practices in our institution to the fulfillment of offering online course or online education.

2.2.2 Our concern

The post apartheid education had witnessed a huge spending and infrastructural investment to address the deficit and the remnants of the past discriminatory education system. The government continues in its effort to confront the problems and its legacy head on with different strategies and action plans. Yet, equity and balance is still a far cry and short of the government expectation as shown by the recent figures of 57% whites, 45% Indians, 15% colored and 13% black enrolment in higher education (DoE 2010a). We can deduce that the imbalance of the past is still prevailing and this may be rooted in their inherited poor education back ground and culture.

Our strategy goals and objectives as published in staff manual 2003 is about twelve years old. Reading through again only reminded us that we have not live up the expectation of providing modern day innovations in education teaching and learning delivery as clearly spelt out in the manual. The technology and infrastructure are available and are of any

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measurable standards. The fact remains that it is been under-utilized and will continue to attract low return on investment as long as online course is not implemented and offered as an alternative instructional offering.

Even though we concede that the legacy and impact of past degradation educational systems that spanned over forty years may be remove in eighteen years of our democracy. We equally want to put on record that we appreciate and commend the effort and approach of the government so far in uplifting the standards of education in our country and we believe that implementing online learning will contribute positively and add values to the efforts.

2.2.3   Why we are concern?

We noted with pride and sense of belonging that our universities are rated well among world class academic institutions at the cutting edges of research, innovation, technology advancement, infrastructure, sophisticated teaching and learning equipments, qualified teaching staff with high degree of autonomous even though they are highly funded by the government (OECD, 2005). We are amazed that twenty three reputable universities with long history and accolade of experiences have not deemed it fits to offer online courses despite being aware of its promise and benefits.

Equally, the bulk of our students are from the poverty stricken and previously disadvantaged community of the Northern part of the country as well as other deprived communities of South African. It is known common practice with this category of students to be saddle with family commitment and responsibility long before they enter the university. This norm pushes their search for job placement long before they could graduate. This singular factor contributes to our high dropout figure and low graduating rate. In most cases, the alternatives are limited for dropout students to recourse to their study. We argue that online education would have provided them with alternative form of education and opportunity to continue their studies.

The total enrolment figure for 2010 academic year in all South Africa higher education for under graduate and post graduate was put at 892,932. At the same time, 153,741 qualifications were achieved (DoE 2010a). Arguably, this figure does not include dropout students who were not provided with alternative on-line education or eligible students who for one reason or the other could

not make it to the four corners of the universities nationwide. We all know what would have become of these figures had it been that with online courses or education are in place.

The last of our concern has to do with our conception of what online education or e-learning should be? We can confirm that the Learning Management System (LMS) is used for student administration, provide access to study materials, conduct assessment, interaction and feedback to students. The LMS current mode of usage in our university is often describe wrongly as online education and invariably lead to under utilization and low return of investments. We are convince that a further step and review of our practice may lead to implementation of online education, improve under utilization of LMS, increased return on investment (Govindasamy, 2002; Vovides et al 2007).

2.2.4   Our suggested best practices

Most of our institution of higher learning seem to be afraid to step out of their comfort zone or are content with the current use of LMS to supplement traditional teaching and learning. They are reluctant to embark on implementing online courses despite its known and overwhelming advantages. We are convince that improving on our current form of e-learning practice will take us to the point of offering online courses and the realization of online education economies of scale advantages. The following are our suggested ways of improving e-learning offering:

First and foremost, we want to suggest a shift in attitude toward online education as a formal instruction offering. We proposed that the institution should fine tune all aspect of the preparedness and readiness to offer on-line education. Although our institution have procure the LMS but adequate funding is needed in term of training, enhancement and provision of skilled manpower to execute and drive the online strategy. Extra budgetary fund is needed to maintain and sustain the project. Content development and management are major ingredients to on-line instructional offering. We are proposing that staff should be given adequate training to prepare their syllabus, teaching and learning material by qualified e-learning curriculum practitioners.

In theory, there is a general assumption that online education can positively impact the quality of our education, teaching and learning. We have no doubt in its capacity to achieve the expected milestone in the history

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of portable education. On the contrary, the report and survey showed students preference for mixed instructional delivery mode. This may be the explanation for slow response from the management in acting swiftly to shift to online education and appear to be content with level of LMS usage. We are proposing management should not allow this impression to lie low rather, they should find means of creating an enabling environment for e-learning to prosper and flourish in our institution. Some of their efforts should be directed encouraging staff development, partnership and collaboration with industry for sponsorship towards alleviating the cost of e-learning implementation, encourage research, innovation and development on e-leaning and other learning object. Furthermore, an attempt should be made into exploring the possibility of online education as an intellectual property.

Once implemented, we advocate the use of international renowned best practices and measures that can guarantee the quality and its sustainability. For instances, the mere using of LMS to manage classroom must stop and our choice of LMS must provide for our need to manage our traditional classroom and at the same time offers online education in one package, we require an LMS which will provide flexible multiple levels of access, learning modes and self-service tools for different users (learners, content developers, instructors and site administrators) without compromising security, the LMS must be able to use time limits for self-administered tests, limit the number of allowable attempts, impose time delay between attempts and should automatically log the student out when the set time elapsed. The lists of LMS best practices are in-exhaustible. Tracking the learning process enables instructor and managers to evaluate the effectiveness of the course and accurately measure the knowledge, experience and skill levels gained (Govindasamy, 2002; Hall, 2003). These checklists ensure that we are comparable and up to international acceptable standards.

Whereas, the need for sustainability is to ensure that our effort in implementing online education is not easily derailed. We advise that management must put plans in place to endure the gains of e-learning despite numerous challenges its present to our teaching and learning. Providing the e-learning sustainability plans may yield a valuable return on investment. Sustainability plans should be reinforced by providing for financial and budget support, encouraging stakeholders, ensuring stable social and political friendly environment that can diffuse any resistance to online education implementation, availability and maintenance of state of the heart technological, provision plans for viable security, energy and internet connection. The main stream of online education requires the development and adaptation of content for online delivery and its subsequent management. Management is encouraged to provide adequate training for effective implementation and sustainability (Attwell, 2001; Billig, 2002; Cisler, 2002; Attwell et al, 2003). We should not ignore the power of building community of practice among institution to share the same commitment and aspiration. All of these would ensure that gain of e-learning are sustained to avoid possible disruption of our education systems.

3   Conclusion

The rate of e-learning growth and prospect in our university is very slow. Despite its accolade and recorded benefits, the e-learning offering is by no means a contender for traditional classroom education. The face-to-face mode of teaching and learning is still a seasoned choice among our students. Amidst high level dropout rate and low graduating rate, we are charge with the mandate to find alternative form of educational pedagogy that can complement the formal classroom education. It is not an exaggeration that most students prefer mixed mode strategy to fully online education as an alternatives form of teaching and learning. We are of the opinion that since there is a demand for this novelty in form of mixed learning mode, we have to keep pushing for its inclusion as alternative form of teaching and learning by simply improving on our LMS practices and usage as a gateway to online education instructional offering.

The underutilization of LMS has not helped the matter because our institution has not optimized the LMS usage. This singular factor has contributed to low return on investment, wasteful expenditure and inadequate use of the tools. This misconception of its use is hampering the development of online teaching and learning to its pedagogical principles. Even though the LMS is not being used correctly at this point in time, evident have shown that it has already impacts on the student learning experiences both within and outside normal classroom, it has increase their participation and access to the learning material, course information and lecturer-student communication. We argue that we have to improve on this practice. It may be our ticket to see online course be implemented on our campus.

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The proposed suggestion for improvement of e-learning practice as highlighted in this study could hold the key to online education offering in our campus. Fine tuning our level of preparedness, constant training, proper use of LMS and adoption of its best practices and high consideration for sustainability issues will go a long way in proffering opportunity for implementation of on-line education as an alternative mode of teaching and learning. We note with concerns some stake holders might be content with the use of LMS, others may resist the change, while other may remain skepticism about the future and query the pedagogy value of online education as an alternative mode of instructional offering. The management should find means to diffuse this low morale and friction. We are aware of the challenges and issues of enduring a community of practice among collaborators but insist that partnerships and sharing a wide range of ideas on research, best practices, knowledge, technology and intelligence are some of the key attributes in improving e-learning practice and towards the realization of online education offering in the nearest future.

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