

Challenges Faced by Teacher Students of Kenyatta University in Accessing Further Education through e-Learning

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Abstract

One of the innovations that Kenyatta University (KU) adopted is the Open, Distant and e-Learning (ODeL) which involves students learning at a distance, using printed modules and interacting with lecturers through e-Learning. While this mode of learning has its advantages especially cost effectiveness and reaching many students, it has had challenges which have hindered its effectiveness and therefore the realization of its intended objectives. The main objective of the study was to identify the challenges faced by teacher-students enrolled for Bachelor of Education Degree in KU-ODeL, with a view of coming up with strategies to improve on the programme performance. The study sample comprised of 50% of the in-service teachers-students in KU-ODeL. Other respondents were the lecturers of the units offered through e-Learning. Statistical Package for Social Scientists (SPSS) was utilized for data analysis. The study concluded that the challenges to e-Learning programme generally fell into four categories, namely lack of time, inadequacy in ICT and computer skills, poor internet access and lack of proper and adequate equipments and soft ware. The study thus recommended that in addition to putting in place strategies to create more time for teacher-students and lecturers to engage in the e-Learning process, there is need to regularly build the capacity of both parties in ICT skills and explore ways of accessing affordable e-Learning facilities.

Key Words: Kenyatta University, Challenges, Teacher-Students and e-Learning

Introduction

In recent times, electronic learning, commonly known as e-Learning is gaining momentum in most parts of the world. This is a web-based distance education, with no or limited face-to-face interaction with the instructors. With the growing technology and globalization, there is a steady growth in the number of e-Learning courses offered in different institutions with the core strategic motives being to transform teaching and learning experience, accommodate growing students' enrolment, sustain academic diversity and gain competitive advantage (EDUCAUSE, 2003).

E-Learning with all its challenges especially in Africa is a major breakthrough in academic education and professional training. Various Universities world wide have incorporated e-Learning in their curriculum. Following the same trend, Kenyatta University (KU) has embraced e-Learning in its teaching programmes. In order to facilitate students-teachers and other prospective learners with limited infrastructure in rural areas to access ICT, the institution has established e-Learning centers in different regions country-wide. This is a commendable effort in the learning/teaching process as majority of the communities in Kenya as

in the rest of Africa are widely spaced out in rural settings and would arguably gain most from distance education, provided it becomes feasible and affordable to access ICT tools. The same works well for the learning institutions in the sense that many students are reached faster and with minimum human resources.

There are however challenges when ICT is adopted without giving adequate thought to students level of ICT skills and competence (Zake, 2007 ajmuwanga@une.edu.au). In this respect, the developing nature of ICT not only makes it essential for students to be equipped with the necessary ICT skills, but also continue updating in order to keep up with the best and the latest ICT programmes. Since e-Learning involves electronic communication, teacher-students are supposed to visit the course site regularly in a day to view new announcements and read e-mails to peruse and respond to course information. In some cases, this may pose a great challenge to some students who may not manage to access internet on daily bases because of lack of computers, financial limitations or poor internet connectivity. Worse still is the lack of electricity in sections of rural areas where some students are based. On the other hand, the ICT supported distance education systems need not only be available but also efficient. As such, those engaged in facilitating learning should have sound level of familiarity with ICT, so as to not only be effective educators but also to pass the same skills to future educators.

For Kenya the adoption of the e-Learning mode of knowledge delivery remains a viable option, given the current high competition for higher education and the limited number of institutions. One of the advantages of e-Learning is its flexibility which allows many people with limited time to access education and training. For students, this is a major advantage in trimming down tuition fees expenses and other miscellaneous costs related to their academic pursuit (<http://drpfconsults.com/14-advantaes-of-e-Learning/>). Additionally, expenses for books and other learning materials are extremely cut down since e-Learning only requires a computer with an internet connection and the minimum fee that one has to pay to the E-Learning provider. Further, students are able to tailor e-Learning solution based on their work schedules and the particular field of expertise they want to target.

With regards to the majority of students who live far away from their learning institutions, e-Learning is a facility that reduces the travel time and associated costs. It eliminates the expense and inconvenience of getting the teachers and students together. The students who pursue higher education while in service through e-Learning are free from any compulsions and are able to participate and complete course work according to their will and free time. This advantage has made e-Learning a viable option for those that have to carry on with the other commitments while pursuing higher education. It is these advantages and the growing demand for access to higher education in Kenya that has made Kenyatta University to adopt the Distance and e-Learning mode of learning for both undergraduate and post graduate students. This is a shift from entirely print module to interactive blended learning that focuses on collaborative problem solving, and social constructive approaches through e- learning and teaching.

Kenyatta University has therefore re-branded the institute of Open Learning to include e-Learning. It now becomes the Institute of Open, Distance and e-Learning (ODEL). The re-branding of the institute is geared towards improving the delivery of educational services to students, which in essence improves the quality of the distance learning programmes. By introducing e-Learning, the University intends to add value to the existing programmes by placing the students at the centre of the learning process. Currently the e-Learning mode of delivery has been introduced in selected units to students pursuing Bachelor of Education in the

ODEL. As majority of these students are teachers in service, this study sought to investigate on the challenges they are facing in the utilization of e-Learning in the course of their studies.

Problem Statement

Technological advancement has brought with it advantages in the education sector such that learners can now access education at a distance, and not necessarily through direct teacher-learner contact. While learners of all categories and professions have taken advantage of this, teachers already in service have enrolled in huge numbers as they are able to earn and learn at the same time. As the oldest and leading teacher educator institution in Kenya, Kenyatta University has witnessed an over-whelming enrolment by teachers from all corners of the country and the East African Region. Consequently, the University in response to the demand and in a bid to offer equal opportunities to all has introduced an Open-Distance and e-Learning programme. However, given the country's regional, social-economic and infrastructural diversity, this well intended programme may not realize its goal and objectives. It was out of this concern that this study was conceived. The study thus intended to investigate specific challenges that the student-teachers face in pursuance of further education in Kenyatta University.

Purpose of Study

Appreciating the advancement in ICT and the commitment of Kenyatta University to contribute towards the promotion of society's literacy and enhancement of social-economic and political development, this study intended to unearth the challenges that the Bachelor of Education student-teachers face in the utilization of e-Learning mode of delivery in the Kenyatta University ODeL. Most importantly, the study aimed at identifying challenges and related practical strategies for policy action to ensure that the Open-Distance and e-Learning programme realizes its goal, namely to expand access to higher education to qualified teachers who are unable to enroll in full-time residential programmes.

Theoretical Framework

This study was guided by Emile Durkheim's structural functionalism theory. The argument that is advanced in this theory is that a system consists of various components or sub systems, which must function together for the entire system to work. At any point when a subsystem or an element within the system fails, the whole system is in jeopardy and will cease to work. Accordingly, a learning-teaching institution is like an organism, which is made up of structures. Each of the structure is expected to perform so as to sustain the learning outcome.

The theory further postulates that the structures are coordinated from a central authority so as to enhance and maintain harmony and stability. Each structure is interrelated and interlinked. A malfunctioning of one structure is bound to have ripple effects on the whole unit. In this study which examined the challenges faced by teacher-students of Kenyatta University in accessing further education through e-Learning, the central authority or the center was taken to be the University while the structures were its e-Learning facilities, the student-teachers and the instructors. For the University to achieve its set objectives in the provision of education through e-Learning, all the related sub-systems must be efficient and fully operational, at all times. Any challenges on any of these sub-systems, will jeopardize the outcome of the entire e-Learning programme. To counteract the challenges, the study came up with some interventive strategies on the part of Kenyatta University, teacher-student and instructors.

Methodology

The study adopted a descriptive survey design. The advantage of the design was that it enabled the identification of a larger sample of study respondents among student-teachers and hence the collection of detailed data on the basis of which valid conclusions was drawn and recommendations made. The study locale was Kenyatta University which is one of the seven public universities in Kenya. It is situated in the vicinity of Nairobi city in a conducive environment for research and learning. The vision of Kenyatta University is to be a dynamic, inclusive and competitive centre of excellence in teaching, learning, research and service to humanity. Its mission is to provide quality education and training, promote scholarship, service, innovation and creativity and inculcate moral values for sustainable national development.

Consequently, Kenyatta University aspires to grow to a centre of excellence of knowledge delivery and acquisition and expansion of access to higher education by offering alternatives to qualified candidates who are unable to enroll in full time residential programmes. In recognizing the significance of e-Learning to students country wide and in Eastern African region, the University has re-branded the institute of Open Learning to include e-Learning dubbed as the Institute of Open, Distance and E-Learning (ODEL). The objectives of the institute are to create access to higher education through a network of regional centres, offer affordable quality higher education, facilitate skills training and professional upgrading, provide opportunity for lifelong learning and self actualization and contribute towards promotion of societal literacy and enhancement of socio-economic and political development. It is in line with this aspiration that the University has introduced e-Learning mode of knowledge delivery in the Bachelor of education programme in four selected units, namely Development Studies, Creative and Critical Thinking, Entrepreneurship and HIV/AIDS and Drugs/Substance Abuse. The institute has a strategic plan for e-Learning and an Institutional e-Learning Policy that is supposed to address issues of the newly established ODeL.

Respondents for this study were drawn from the teacher-students pursuing the Bachelor of Education degree programme in sciences, Arts, Early Childhood Education, and Special Education. These programmes were selected because this is where majority of the teacher-students in Kenyatta university ODeL programme are enrolled and it is also in this programme that e-Learning mode of learning /teaching has been introduced. The 250 students who are engaged in the e-Learning formed the population of the study. The study sample composed of 125 students (50% of the entire population). The study sample was selected using stratified random sampling technique on the basis of the four units being offered through e-Learning mode of delivery. As such each of the four identified units formed the strata from which proportional sample was selected to a total of 250 respondents, as follows:

	Unit Name	No of students	Study sample
1.	Development Studies	18	9
2.	Critical & Creative Thinking	40	20
3.	Introduction to Entrepreneurship	80	40
4.	HIV/AIDS and Drugs Abuse	112	56
TOTAL		250	125

Table1: Study Population and Sample

Other respondents who provided vital data on the basis of which the findings, conclusions and recommendations were drawn were 10 Kenyatta University lecturers teaching the selected

four units through e-Learning and the Institute's Director. Data was collected with the use of semi-structured interview schedules which allowed for probing on the students experiences and related challenges in the utilization of e-Learning.

Findings and Discussions

The study established that the University encourages collaborative learning where students are encouraged to form small learning workgroups of five or six students called Group Learning Sets (GLS). Each group is provided with one computer. The learning sets should be within reach of one another. Training is then done online in a virtual classroom situated in Regional Open Learning Centres. To facilitate learning, students have access to the e-resources: an e-calendar, e-course outline, and other additional internet resources.

The challenges faced by teacher-students generally fell into four categories, namely time, inadequacy in ICT and computer skills, poor internet access and difficulties in coordination of group activities. On the other hand, there were also institutional challenges.

Lack of Time

All the students-teachers respondents claimed that they were constrained¹ by time. Among them, 51(41%) cited commitment at the place of work as the main hindrance to their learning. This seemed to negate one of the envisioned advantages of e-Learning; that its flexibility would allow learners to attend to their learning materials during their free time. These respondents reported that they had limited time outside their work schedule during the day. On the same breadth 34(27%) were limited by the conflict between employment responsibilities and the scheduled time for on-line interaction. Another group comprising of 40(32%) teacher-students who had no computers and had to access the internet from the regional centres claimed they experienced major time constraints since they had to use slow public means to the centres, which in effect wasted a lot of time. Figure 1 demonstrates the various aspects of time constraints experienced by teachers-students in the e-Learning process.

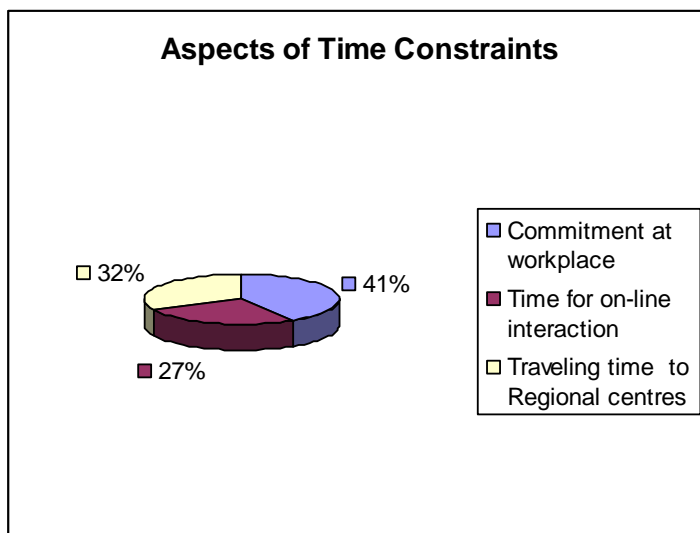


Figure 1: Aspects of time constraints

Poor Internet Access

Poor internet access was identified by a substantial number of teacher-students among whom 53(42%) cited poor internet connection and limited bandwidth, 44(35%) slow internet, and 83(66 %) lack of necessary equipment/ computers that can be used in online discussions and conferencing. In addition, 76(61%) asserted that poor internet access was complicated by the fact that signals became weaker when they tried to download materials from the net. Table 2 illustrates these concerns. The findings were also collaborated by lecturers who attributed the poor internet access across the centres to dial-up computer connections which were mainly done through copper wiring and on poor phone lines and being far away from signal boosters.

Table 2: Identified Access Problems

Access Problems	Number of respondents Affected	% of the total number of respondents
Poor internet connection	53	42
Slow Internet	44	35
Lack of equipments	83	66
Weak Signals	76	61

Inadequacy in ICT Skills

Inadequacy in ICT Skills was identified as a major challenge among the student-teacher respondents. Majority, 91(73%) of them admitted that they lacked technical skills needed to participate effectively in e-Learning. Among them, 34(37%) for example had no basic computer skills. Although 80(88%) claimed to have had some training in basic computer operations 39(49%) admitted that they had forgotten most of what they had learned due to lack of regular practice. In addition, 70(77%) had inadequate typing skills which seriously affected their speed in performing assignments and therefore compounded the limitation of time.

These challenges are consistent with the finding of Muwanga-Zake (2007), in a study done in 23 schools in South Africa which revealed that 45% of teachers had not been trained in using computers. Dr J Muwanga Zake further quotes some studies that demonstrate this fact. Among these studies is one by the International Telecommunication Union of ICT in Education (2001) that found low internet access and use in schools and lack of IT training as key challenges. In addition, teachers in Ugandan schools were found to be both ignorant of modern advances in ICT, and lacked access to ICT. This situation is likely to differ from the west as many people in Africa grow up in rural areas where access to modern technology is seriously hampered by poverty and poor infrastructure. However, as Penn State's Berner observed, even students who are comfortable using the computer may not possess all the necessary skills. Consistently, Karen Harp of Colgate University found the need to teach students how to use the technology well. Thus, although the problem may be more pronounced among beginners like the Kenyatta University students-teachers under study, the ever-evolving ICT requires continuous learning and improvement of skills.

Institutional Challenges

The study identified some institutional based challenges that originated with the facilitators/instructors of e-Learning in the identified course units. All the 10(100%) instructors indicated having had time constraints in attending to students in e-Learning courses. The majority attributed this to the fact that they had other teaching load as well as other university responsibilities. Additionally, 7(70%) of these lecturers admitted that they had inadequate skills in handling IT equipments. While 5(50%) lacked computers, other 5(50) did not have up to date

computer equipments and programmes. Moreover 8(80%) of the lecturers indicated that they would prefer the traditional face-to-face contact as opposed to e-learning. These findings are reflected in figure 2.

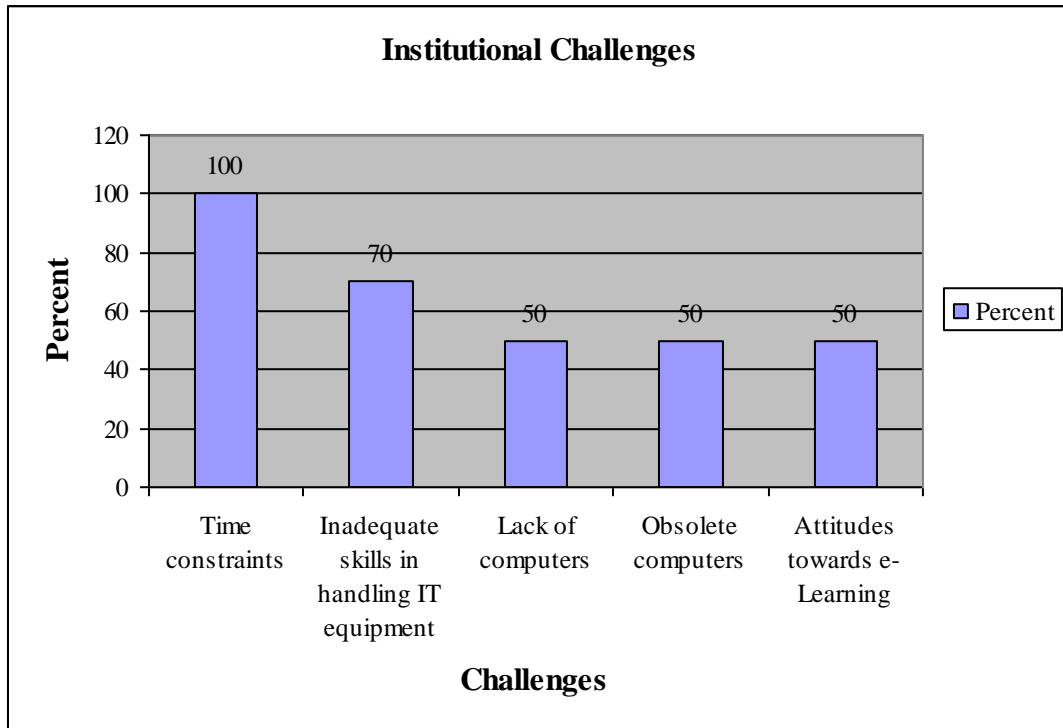


Figure 2: Identified Institutional Challenges

Conclusions and Recommendations

The study came up with specific strategies to ensure that the e-Learning programme realizes its mission in Kenyatta University. In order to address the issue of time constraint, the employers of the student-teachers in the ODeL programme in both public and private sectors need to be incorporated as key stake holders. This would allow for negotiations for less teaching load and flexibility in time to enable them engage more effectively in the learning process. Further, intensifying rural electrification and enhancing the net-working of fiber-optic cables could enable teacher-students to access internet from their homes. This would minimize on the time and cost incurred traveling to the University’s ODeL regional Centres. It is also important for the University to organize regular capacity building sessions on ICT skills for student-teachers as well as instructors. Such training would enhance their competence in e-Learning interactions and enable them to cope with the ever evolving technology.

The study further recommends that the university devises strategies to enable student-teachers and course instructors acquire affordable e-learning equipments and related soft ware. This could be achieved by establishing linkages with many financing institutions and donors. While appreciating an existing Kenyatta University-Equity Bank computer loan programme, engaging other financing intuitions is likely to create competition that would make the equipment more affordable. To facilitate the efficiency and effectiveness of instructors’ on-line interactions with teacher-students, the university should consider allocating them less teaching load and administrative duties.

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Web Support

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