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OBSTACLES TO SUCCESSFUL UPTAKE OF OPEN DISTANCE AND E-LEARNING (ODEL) PROGRAMMES: A CASE OF KENYATTA UNIVERSITY, KENYA

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Abstract

Demand for higher education in Kenya has continued to rise over the years thereby outstripping the available supply in the conventional face-to-face programmes. This can be attributed to two major factors. First, are the reforms in the basic education sector, for example, the Free Primary Education and the Free Day Secondary Education which have enhanced enrolment and completion rates in these lower levels. Second, is the changing labour market trend which requires workers to be re-tooled during their working life. Universities therefore have to cope with demand for education from young secondary school graduates as well as older citizens who are already working. To meet this high demand for higher education as well as provide flexible education for the working class, universities in Kenya must leverage the potential of ICT in teaching and learning. Despite moves by most universities in Kenya more than a decade ago to embrace Open and distance learning (ODL) programmes that utilise modern ICT technologies in teaching and learning, enrolment in these programmes still remain low compared to the traditional face-to-face platform of delivery. For example, in 2016, Kenyatta University, which had a total student population of about 70,000 had only about 6,000 (8.5%) enrolled in the Digital School of Virtual and Open Learning. The objective of this study is to establish the obstacles that hinder the success of Open and Distance Learning programmes at Kenyatta University. The study employed a sequential mixed methods design that allowed collection of both quantitative and qualitative data. Data was collected from a sample of 207 students through a questionnaire while Key Informant Interviews were conducted with 5 members of staff directly involved either in the management of the ODeL programme or in on-line teaching. The study established that success of the ODeL programme was hampered by technical, instructional, institutional and personal challenges. Key technical challenges faced by both students and staff are insufficient exposure to computers and ICT technology, lack of finances to buy ICT gadgets and lack of internet connectivity. Key institutional challenges facing the programme are delayed delivery of study materials and inadequate learner support services. With regard to instructional challenges, inadequate academic support due to lecturers failing to facilitate units on-line and poorly designed course materials were the key ones. Lastly, learners in the programme faced individual challenges such as financial constraints, insufficient study time, conflict between study and family/work balance. The study recommends the strengthening of learner support mechanisms to address the institutional, instructional and individual challenges faced by learners in the ODeL programme.

Keywords: *Blended learning, distance learning, e-learning, higher education, ICT, ODel, open learning.*

Introduction

The Kenyan higher education sector has witnessed rapid growth especially in the period between 2007 and 2017. Statistics from the Commission for University Education (CUE) show that whereas the country had only six public universities in 2007, the number shot up to 30 by 2016 representing a growth rate of over 400 per cent (CUE, 2017). The government's efforts were informed by the need to expand access to higher education as well as meet the increased demand. However, despite these efforts, the demand for university education still outstrips the supply. For example, in 2015, out of the 165,766 secondary school graduates who qualified for admission to universities, the government's Kenya Universities and Colleges Central Placement Services (KUCCPS) could only place 74,389 (44.9%) students in public universities (KUCCPS, 2016). Government placement which is accompanied by sponsorship is usually based on the declared capacity of the universities to offer full time education programme. Thus, in 2015, public universities in Kenya could only meet the demand for less than 50 per cent of the students who qualified in their face-to-face full-time programmes. This then calls for a paradigm shift with regard to the supply of university education in the country. There is a need to shift focus from the traditional brick and mortar universities to virtual universities which leverage on Information Communication Technologies (ICT). Towards this end, it

should be noted that most universities in Kenya have embraced Open Distance and e-learning (ODel) mode of delivery that leverage on ICT for teaching and learning.

At Kenyatta University, the ODel platform of delivery has been in existence for almost 15 years as its genesis is the Institute of Open Learning (IOL) which was established in 2003. At its commencement, IOL delivered distance education programmes using a blended mode of print modules and face to face tutorials. The tutorials were conducted at the university campuses and other regional centres spread across the country. However, the mode of delivery in the ODel programme at the university has been changing over the years in response to technological changes. To keep pace with technological advancement, the IOL rebranded to Open Distance and e-learning (ODel) Institute and later to Digital School of Virtual and Open learning (DSVOL). These changes have been characterised by a shift from the use of print modules to digital online modules for teaching and learning. The school uses the Moodle Learning Management System to deliver its academic programmes. This is a free open-source online learning management system that allows for uploading of content and multimedia for interactive, flexible and collaborative learning. On enrolment, students are also issued with a Tablet uploaded with digital content for their course. The school still uses a blended approach which combines e-learning with face to face tutorials. However, face to face sessions in a given academic unit take only 4 out of the 35 contact hours. A key objective of DSVOL is to provide learning opportunities to students who are unable to take up fulltime study on campus programmes due to work or family commitments. The school's motto is *'Education anywhere, anytime, at your own schedule and pace'* which is to be realised through flexible delivery of educational programmes (DSVOL, 2017).

At Kenyatta University, DSVOL embraces the model of a service school. This is because DSVOL does not have its own academic programmes but coordinates programmes from other schools in the university and gives them a platform to deliver the programmes to students virtually at certificate, diploma, undergraduate and postgraduate levels. The following schools in the university are served by DSVOL: Humanities and Social Sciences; Security, Diplomacy and Peace Studies; Agriculture and Enterprise Development; Engineering and Technology; Hospitality and Tourism Management; Education; Business; Economics; and Applied Human Sciences. Nevertheless, despite these efforts and reforms by the university, enrolment in the ODel platform of delivery still remains low compared to the traditional face-to-face platform of delivery. For example, in 2016, the university had only about 6,000 students enrolled in the ODel programme run by DSVOL out of a total student population of about 70,000. Thus, enrolment in the ODel platform of delivery constituted about 8.5 per cent of the total student population. This slow uptake of e-learning programmes in the university despite the high demand for university education in the country and the efforts by the university to modernise the ODel method of delivery motivated this study.

The objectives of this study are therefore to: establish the institutional challenges facing the ODel programme at Kenyatta University; identify the instructional challenges faced by students and lecturers in the ODel programme at Kenyatta University; establish personal challenges faced by ODel students at Kenyatta University; and establish the technical challenges encountered by ODel students at Kenyatta University.

The study was significant in the sense that mapping of the challenges hampering the success of the ODel programme at the university would provide a basis for exploring strategies for addressing them with a view to improving the effectiveness of the programme. This would result into an increase in demand for the ODel programmes thereby expanding access to higher education. Furthermore, the findings and recommendations would also be useful to other universities running similar programmes.

Literature Review

According to UNESCO (2002), the terms open learning (OL) and distance education (DE) represent approaches that focus on opening access to education and training provision, freeing learners from the constraints of time and place, and offering flexible learning opportunities to individuals and groups of learners. To achieve this, all or most of the communication between teachers and learners in Open and Distance learning (ODL) is through an artificial medium, either electronic or print (UNESCO, 2000).

However, rapid advances in information and communications technology (ICT) since the mid-1990s have brought about major changes in the field of distance education (Arinto, 2016). Consequently, many DE institutions have shifted from print-based to online delivery using virtual learning environments (VLEs) and various Web technologies. The coming on board of ICT in ODL led to the coining of a new term "open and distance e-learning" (ODeL) referring to the new mode of online or Web-based DE. According to Alfonso (2012), ODeL refers to "forms of education provision that use contemporary technologies to enable varied combinations of synchronous and asynchronous communication among learners and educators who are physically separated from one another for part or all of the educational experience".

Arinto (2016) observes that ODeL expands the term "open and distance learning" or ODL to include use of e-learning or online learning methodologies to enable multiple forms of interaction and dialogue. The e-learning methodologies help bridge the distance between teachers and learners (Anderson, 2008; Calvert, 2005; Garrison, 2009) as well as provide access to a wide range of interactive and multimedia learning resources that can be used to design learning environments for learners with diverse needs (Bates, 2008; Haughey, Evans & Murphy, 2008; Tait, 2010). This makes ODel have flexibility and adaptability of design which distinguishes it from its precursor, ODL (Garrison, 2000; Haughey, Evans & Murphy, 2008; Tait, 2010).

The e-learning methodologies can be divided into two basic types namely: computer-based and the internet based e-learning (Algahtani, 2011). According to Algahtani, the computer-based learning comprises the use of a full range of hardware and software that are generally available for the use of Information and Communication Technology and could take the form of either computer managed instruction or computer-assisted-learning. He expounds that computer assisted-learning entails use of computers instead of the traditional methods by providing interactive software as a support tool within the class or as a tool for self-learning outside the class. On the other hand, computer-managed instruction is where computers are used for the purpose of storing and retrieving information to aid in the management of education.

Internet-based learning is viewed as an improvement of the computer-based learning, and it makes the content available on the internet while also giving other links to related knowledge sources which learners could use at any time and place irrespective of the availability or absence of teachers or instructors (Almosa, 2001). The internet-based learning can be classified as mixed or blended mode, assistant/adjunct mode, and completely online mode (Zeitoun, 2008; Algahtani, 2011). The adjunct/assistant mode of e-learning, according to Zeitoun (2008), is the situation in which e-Learning is employed as an assistant in the traditional classroom. The mixed or blended mode of e-learning is where the delivery of course materials and explanations is shared between traditional learning method and e-learning method in the classroom setting (Zeitoun, 2008; Algahtani, 2011). The completely online mode is devoid of the traditional learning participation or classroom participation and involves the exclusive use of the network for learning.

The completely online mode can either be "synchronous" or "asynchronous" depending on the timing of the interaction (Algahtani, 2011). The synchronous type allows learners to discuss with the instructors and also among themselves via the internet at the same time with the use of tools such as the videoconference and chat rooms and has the advantage of instantaneous feedback (Almosa & Almubarak, 2005). On the other hand, the asynchronous mode also allows learners to discuss with the instructors or teachers as well as among themselves over the internet at different times using tools such as thread discussion and emails (Almosa & Almubarak, 2005; Algahtani, 2011). The asynchronous mode has the advantage of flexibility as learners are able to learn at a time that suits them but its disadvantage is the lack of instant feedback for the learners from instructors (Almosa & Almubarak, 2005).

E-learning is said to have some advantages over the traditional method. Arkorful and Abaidoo (2014) identify the following as some of the benefits of e-learning especially in a higher education environment: provides flexibility with regard to time and place as every student has the luxury of choosing the place and time that suits him/her; enhances the efficacy of knowledge and qualifications via ease of access to a huge amount of information; provides opportunities for relations between learners by the use of discussion forums; is cost effective for both the learners and the institutions in the sense that there is no need for the students or learners to travel while a maximum number of learners can be taught with no need for many buildings; it helps compensate for scarcities of academic staff, including instructors or teachers as well as facilitators, lab technicians, and the like; it allows self-pacing, for instance, the asynchronous way permits each student to study at his or her own pace and speed whether slow or quick. E-learning has therefore been hailed as one that centres on the students or learners rather than on the instructors or the institutions (Holmes & Gardner, 2006).

For the developing world, ODeL has been viewed as a promising and practical strategy to address the challenge of widening access thus increasing participation in higher education. Indeed, ODeL could expand the limited number of places available, accommodate low or dispersed enrolment as well as make the best use of the limited number of teachers available (Commonwealth of Learning, 2003). However, the promise of ODeL has not been realized in many universities (Minnaar, 2013) as its successful take off is beset with numerous challenges.

Mansour (2006) points out that there are three major groups of stakeholders in ODeL; the administration, faculty, and students. Each of these categories of stakeholders brings its own challenges. Consequently, scholars have categorised the challenges facing ODeL programmes into three in tandem with each category of stakeholders namely: (i) instructional related challenges, (ii) institutional related challenges, and (iii) individual related challenges.

Instructional related challenges have to do with the faculty whose major challenge is lack of familiarity with ODeL philosophies and the expected ODeL skills since most of them came from the face-to-face mode of delivery (Commonwealth of Learning, 2004). Instructors need sufficient time to gain experience with new technology use (especially in education), to share experience and to use technology effectively for instruction (Ilara, 2006). Training of faculty is vital to equip them with the high skills required for teaching with technology (Renes & Strange, 2011). A study in Philippines identified resistance to innovation, uneven innovation practice, and lack of standards for innovation as some of the challenges facing faculty in ODeL (Arinto, 2016). A study in Libya pointed out that despite most universities providing members of faculty with a personal computer, a significant percentage of faculty members were still computer illiterate and this group usually resisted efforts by the university to embrace e-learning models in their disciplines within the university (Kenan & Pislaru, 2012).

Institutional related challenges mostly revolve around administrative systems that are not designed to address the unique needs of ODeL students, funding constraints, development and deployment of the necessary infrastructure and human resource among others (Musingafi, Mapuranga, Chiwanza, & Zebron, 2015). Lack of effective learner support is a challenge faced by many institutions running ODel programmes. King (2012) noted that learner support in many dual mode universities was biased in favour of on-campus students who often got more than the off-campus ones did.

Some common documented individual related challenges are lack of ICT skills, inability to afford necessary ICT hardware and software, high internet costs, work-study balance, source of motivation among others (Dodo, 2013; Nyandara, 2012). Studies have also shown that intrinsic motivation as opposed to extrinsic motivation contributes to a higher persistence and course completion rate in ODel programmes (Harrell & Bower, 2011). Some demographic factors, for example, gender, age, employment and disposable income, have a considerable influence on student persistence and completion (Harrell & Bower, 2011; Subotzky & Prinsloo, 2011). While more women than men enrol in ODel programmes, dropout rates for females are higher than for males. Age is also negatively correlated with completion.

Methodology

The study employed a mixed methods approach. The design was sequential in that it started with the collection of both quantitative and qualitative data from students on their perceptions of various attributes of e-learning programme. This was done through a questionnaire. This was followed by collection of qualitative data from selected members of staff on various aspects of the e-learning programme through a Key Informant Interviews guide. This enabled triangulation of data from students and members of staff. Data was collected from 212 respondents (207 students, 3 lecturers and 2 managers of the ODel programme).

Results

Institutional Challenges Faced by Students in the E-Learning Programme

The study sought to establish the challenges faced by students in the e-Learning programme as a result of weaknesses in the university administrative structure. Data was sought from both the students and the faculty. The e-learning students were asked to agree or disagree on a number of statements on institutional challenges that they faced while pursuing their studies through a likert scale. The results are shown in table 3.1.

Table 3.1: Institutional Challenges Faced by Students in e-learning Programme

STATEMENT	SA	A	N	DA	SDA
Delayed study materials/ content at regional centres or in Tablets	25.1 %	40.1 %	19.3 %	10. 1%	5. 3 %
Difficulty in administrative services such as registering and paying fee	27.5 %	30%	23.7 %	12. 6%	6. 3 %
Lack of appropriate advice provided under the umbrella of students services support	30%	33.8 %	25.1 %	8.7 %	2. 4 %
Lack of an effective institutional network of technical assistance	25.1 %	31.4 %	23.7 %	13 %	6. 8 %
Lack of responsiveness from regional centre / ODeL headquarter administrative staff	21.3 %	30%	20.8 %	19. 3%	8. 7 %

Table 3.1 shows that one of the key challenges students face is delay in delivery of study materials either through the regional centres or in the Tablets as pointed out by a majority of the students (30%-Agreed; 25.1%-Strongly Agreed). Students also raised concern about difficulties in administrative services such as registering and paying fees (30%-Agreed; 27.5% -Strongly Agreed. Additionally, the students felt that they did not receive appropriate advice provided under the umbrella of students' support services (33.8%-Agreed; 30%-Strongly Agreed).

Distance and On-line learning in the 21st century is to a great extent dependent on ICT. Its success thus requires strong and efficient technical support for both students and faculty. On this aspect, the e-learning students felt that the university lacked an effective institutional network of technical assistance (31.4% Agreed; 25.1%-Strongly Agreed). An interview with one of the faculty members involved in the management of the ODeL programme revealed that ICT technical support staff is all based in the university main campus. Thus, students far from the main campus and who are served by the regional centres lacked ICT technical support. Other institutional challenges faced by students are lack of responsiveness from regional centres as well as the ODeL headquarter administrative staff and delays in relaying of important information.

Instructional Challenges Faced by Students in the e-Learning Programme

The study also sought to establish the challenges faced by students arising from the teaching-learning methodologies. Data was sought from both students and staff members. The students were asked to agree or disagree on a likert scale on a number of statements on instructional challenges that they faced while pursuing their studies though the e-learning mode. The results are shown in Table 3.2.

Table 3.2: Instructional Challenges Faced by e-Learning Students

STATEMENT	SA	A	N	DA	SDA
Delayed/ineffective feedback from the instructors	18.8 %	38.6 %	26.6 %	9.7 %	6.3%

Lack of instructor's contact and inadequate academic support	16.4 %	43%	20.8 %	14 %	5.8%
Poor course material design / inappropriate learning materials	15%	32.9 %	28.5 %	15 %	8.7%
Lack of adequate learning materials	16.4 %	29%	27.1 %	18. 4%	9.2%
Unhelpful course information and lack of direction	14%	33.8 %	22.2 %	17. 4%	12.6 %
Lack of interactivity in learning; no follow-up on discussions and quizzes	13%	38.6 %	26.6 %	10. 6%	11.1 %

Majority of the respondents (43%-Agreed; 16.4%-Strongly Agreed) cited lack of instructor's contact and inadequate academic support as one of the major instructional challenges. Indeed, a majority of the students (38.6%-Agreed; 13%-Strongly Agreed) felt that the online teaching was lacking in interactivity and there was no follow-up on discussions and quizzes. The information from the students about inadequate online teaching was corroborated by the interviews. From the interviews, it was established that between May and August 2016, only 61 per cent of the units were facilitated online. The converse of this is that 39 per cent of the students were left to learn on their own without the guidance of the lecturer apart from for the 4 hours face-to-face tutorial. As one interviewee involved in the management of the ODeL programme noted, *'some lecturers just dump content on-line and leave the students to read on their own'*. This could explain the observation by the students (29%-Agreed; 16.4%-Strongly Agreed) that there was *'lack of adequate learning materials'*.

It was also pointed out during the interview that out of the 1200 modules uploaded on the university's online learning platform, only 430 (35%) were interactive. The rest were merely soft copies of print modules uploaded into the system which did not allow interactivity. Additionally, the interviews revealed that some lecturers had apathy towards ICT and quite a good number lacked basic ICT literacy. In such a situation, not much would be expected from them in terms of attending to the needs of the online students. The students seemed to support this observation as quite a good number regarded the course materials as poorly designed.

Personal Challenges Faced by Students in the ODeL Programme

Data was sought from both the students and the faculty on personal challenges faced by e-Learning students. Through a likert scale, the students were asked to agree or disagree on a number of statements on individual challenges that they faced while pursuing their studies through the programme. The results are shown in table 3.3.

Table 3.3: Personal Challenges Faced by e-Learning Students

STATEMENT	**SA**	**A**	**N**	**DA**	**SD A**
Lack of sufficient time for study	19.8 %	37.7 %	28%	9.7 %	4.8 %
Financial constraints	31.4 %	36.7 %	19.3 %	8.2 %	4.3 %
Lack of support from family, employer, friends	15.5 %	26.6 %	27.1 %	15. 9%	14. 5%
Lack of experience and /or training with instructional technologies	15.5 %	38.2 %	29%	9.7 %	7.7 %
Conflicts between family /Work and study schedule	26.1 %	38.6 %	19.8 %	10. 1%	5.3 %
Difficulty in attending face to face tutorials	21.7 %	36.2 %	25.6 %	8.7 %	7.7 %

Financial constraints was considered a major constraint facing a majority of e-Learning students (36.5%-Agreed; 31.4%-Strongly Agreed). Distance from home to the regional centre or the university's main campus for tutorials and examinations was also cited as another challenge (42.5%-Agreed; 19.8%-Strongly agreed). This is further compounded by the fact that a majority of the students are working people and the timing of the tutorials may be at a time when they have work related responsibilities thus making it difficult for them to attend classes (36.2%-Agreed; 21.7-Strongly agreed). Lack of sufficient time for study is another challenge that students faced (37.7%-Agreed; 19.8%-Strongly agreed). Indeed, a majority of the students cited conflicts between family/work and study schedule as a big challenge (38.6%-Agreed; 26.1%-Strongly agreed). Lack of experience and/or training with instructional technologies was also given as a major challenge (38.2%-Agreed; 15.5%-Strongly agreed). These sentiments were corroborated in the interviews. One lecturer noted that many ODel students had challenges in balancing family/work responsibilities and studies. As a result of this, the students generally miss online academic engagements like discussion threads and chats as well as quizzes when their work and family commitments, for instance, force them to travel away from their normal locales.

Technical Challenges Faced by ODeL students

The study also sought to establish the nature of technical challenges encountered by e-learning students. Though literature isolates three categories of challenges faced by ODel students (institutional, instructional and personal challenges) as already discussed, the researchers felt it was necessary to tease out specific technical challenges since technology was a key cog in the ODel programme. Data was sought from both the students and the faculty. The students were asked to agree or disagree on a number of statements on a likert scale on technical challenges that they faced while pursuing their studies through the e-learning programme. The results are shown in table 3.4.

Table 3.4: Students' Views on Technical Challenges Faced in e-learning Programme

STATEMENT	SA	A	N	DA	SDA
Lack of sufficient exposure to computers and other ICT related technology	22.2%	34.3%	26.6%	13%	3.9%
Lack of finances to buy ICT gadgets	22.6%	31.4%	25.1%	15%	6.3%
Lack of internet connectivity where I live	26.6%	31.4%	20.8%	15%	5.8%
The content hanging or not opening when I need to study	29.5%	36.7%	16.9%	11.1%	5.8%

The study revealed that a majority of the students (34.3% Agreed; 22.2% strongly agreed) perceived insufficient exposure to computers and ICT technology as a challenge. Majority of the students (31.4% agreed; 22.6% strongly agreed) also noted that there was insufficient ICT training by the university. From the interviews, it emerged that although the university gives training to students on how to use the Learning Management System, the ODel students were disadvantaged as they were in campus for a very brief period. This made it difficult for them to gain full mastery unlike the conventional students who were in campus throughout and were also in a position to seek assistance from the technical staff whenever the need arose. A majority of students (31.4% -Agreed; 22.6%-Strongly Agreed) also noted lack of finances to buy ICT gadgets as another technical challenge they faced. Lack of internet connectivity was cited as a challenge by a majority of the students (31.4%-Agreed; 26.6%-Strongly Agreed).

Discussion

The key institutional challenges cited were: late delivery of study materials either through the regional centres or uploading content in the Tablets; difficulties in getting administrative services such as semester registration and paying fees; lack of appropriate advice from students' support services; lack of an effective institutional network of technical assistance; lack of responsiveness from regional centre as well as the ODeL headquarter administrative staff; and delays in relaying of important information. These institutional related challenges are in tandem with literature which noted that they mostly revolve around administrative systems that are not designed to address the unique needs of ODeL students, funding constraints, development and deployment of the necessary infrastructure and human resource among others (Musingafi, Mapuranga, Chiwanza, & Zebron, 2015).

Delayed delivery of materials points to a lack of prior preparation by the university before an academic year/semester begins. Such delays are costly in terms of time and finance to e-Learning students who are far from campus. This affects the efficiency and effectiveness of the programme. The poor administrative services experienced by the students, especially in the regional ODel centres could be attributed to inadequate staffing. The numerous ODeL campuses spread across the country are not well staffed to deal with all student issues and many times, students have to travel to the Kenyatta University main campus to access some essential services like registering for a semester or payment of fees. This is costly to the students both financially and time wise as some campuses are hundreds of kilometres away from the main campus. Lack of an effective institutional network of technical assistance was another institutional challenge cited by both students and staff. Interviews with faculty members involved in the management of the ODeL programme revealed that ICT technical support staff is based in the university main campus and not in the regional centres. As a result of this, technical challenges on students' Tablets cannot be addressed at the regional centres and the gadgets have to be sent to the main campus for repair which takes away valuable academic time from the student.

Poor communication was cited by students as a challenge. They noted that there was lack of responsiveness to their queries by the regional centres and the ODeL headquarters administrative staff as well as delays in relaying of important information to them. By virtue of their programme, e-Learning students can be said to be at the periphery of the university and unless deliberate efforts are made to keep them abreast of development in the institution, they may not know what is going on and they may feel isolated. Furthermore, when their queries are not responded to, it may impact negatively on their academic progress.

The students also decried lack of advice from the umbrella of students' support services. The university has a directorate of students' services (dean of students) which is housed at the main campus. However, it is not decentralized to the ODeL campuses and therefore, students on the e-learning programme who spend the better part of their academic life outside the university may not be receiving advice and other forms of student support like counselling and mentorship services. The university also has a students' union headed by a president which is expected to not only act as a link between the students and the university management but also provide psycho-social support to students, for example, peer counselling. However, majority of student leaders are elected from amongst the regular full-time students. Since ODeL students carry out most of their learning outside the university, they may neither be in a position to be elected into university student leadership positions nor enjoy the services of the union. Furthermore, unlike regular full-time students who can come together and give a strong voice to their grievances, the scattered nature of the ODeL students consigns them to suffering as individuals and therefore their issues may never get to the agenda table of the students' leadership as well as the university management. This finding concurs with King (2012) who noted that learner support in many dual mode universities was biased in favour of on-campus students rather than the off-campus ones.

Some key instructional challenges identified were: lack of instructor's contact and inadequate academic support; lack of interactivity in teaching; lack of follow-up on discussions and quizzes; and inadequate learning materials. The e-learning programme is structured in such a way that only 4 hours out of the expected 35 contact hours per academic unit are allocated for on-campus face-to-face tutorials while the rest should be on-line interactions. This implies that almost 90 percent of the instruction is supposed to be executed online. However, from the students' responses and the interviews with ODel management, it was found that online visibility of the lecturers was very low. This implies that, to a large extent, the students were left to navigate through the online module on their own. As stated by one of the ODel managers in an interview, 'most of the lecturers just dump content online and disappear'. Statistics from ODel management also showed that 39 per cent of the units offered between May and August 2016 were not facilitated online at all while only 35 per cent of the 1,200 modules in the LMS were interactive. Thus, these are key instructional challenges which robbed the teaching-learning process the expected interactivity.

It was also pointed out in the interviews that some lecturers had apathy towards ICT and quite a good number lacked basic ICT literacy. In such a situation, not much would be expected from them in terms of attending

to the needs of the online students. The students seemed to support this observation as quite a good number regarded the course materials as poorly designed. This puts the ODeL students at a disadvantage as they do not readily access the university library like their full-time counterparts and thus the need to upload adequate learning materials. These findings about lack of ICT competence by lecturers concurs with those of other studies (Commonwealth of Learning, 2004; Renes & Strange, 2011; Kenan & Pislaru, 2012; Arinto, 2016). These instructional challenges erode the effectiveness of the e-learning programme as learners may not be well grounded in their areas. This may also affect students pass rates in examinations thus affecting efficiency of the programme.

Personal challenges cited were: financial constraints; time constraints; distance from home to the regional centre or the university's main campus; and conflicts between family/work and study schedule. These personal challenges could be understood by studying the demographic profile of ODel students. Most of them are older than conventional students, have families and social responsibilities, many are in full time employment, and may have many other responsibilities. These findings on influence of demographic aspects of ODel students are in agreement with earlier studies (Harrell & Bower, 2011; Subotzky & Prinsloo, 2011). Unlike the full-time regular students who benefit from government sponsorship, the ODel students are categorised as 'self-sponsored students', meaning that they directly pay for their education. Many of them rely on their salaries to pay their fees and meet other educational costs alongside other family responsibilities which could leave them constrained financially. Their job and family commitments may at times conflict with their ODel academic schedules which could explain the failure by some of them to attend the campus face-to face tutorials or examinations. Some of the key individual challenges faced by ODeL students of Kenyatta University such as lack of ICT skills, financial constraints and work-study-family equilibrium resonate with those of similar students in other countries (Dodo, 2013; Nyandara, 2012).

The key technical challenges encountered by ODel students at Kenyatta University are: insufficient exposure to computers and ICT technology; insufficient ICT training by the university; lack of finances to buy ICT gadgets; and lack of internet connectivity. Insufficient exposure to computers and ICT technology could be understood from a contextual perspective. In Kenya, the spread of computers and ICT technology is not very broad and it is possible that some of the students start interacting with these gadgets and technology only when they enrol for the ODel programme. Insufficient ICT training given by the university is another handicap to the students because about 90 per cent of the learning in the ODeL programme is on the ICT platform with only about 10 per cent reserved for on-campus face-to-face tutorials. Thus, inadequate ICT skills by the learners greatly compromise their learning thereby impacting negatively on the effectiveness of the programme.

Lack of finances to buy the necessary ICT gadgets and internet connection was another challenge the students cited. Although students are issued with Tablets by the university upon enrolment and there is a charge on their fees on this, these gadgets at times require replacement due to loss or damage. Financial constraints may thus force a student to stay without the gadget during which time his/her learning is paralysed. This undermines the effectiveness of the learning process. Lack of internet connectivity was also a major challenge that a majority of students mentioned. The ODeL students are spread across the country and for some; especially those in remote rural areas, internet connectivity could be quite a challenge. Due to lack of fibre connectivity, a majority of Kenyans in the rural areas rely on wireless internet from cellular phone service providers. This poses two challenges: one, in some places the signal is quite poor or non-existent; and two, the cost of internet via cellular phone is quite high. A combination of these two poses a serious challenge to students who are at times forced to travel from their workstations to local townships to seek for internet services from cyber cafés. This may erode the expected cost-effectiveness advantage of the e-learning platform.

Another technical challenge noted by students was that of content hanging or not opening when they needed to use their Tablets. This could be a result of technical challenges with the gadgets (software or hardware issues) or due to the poor internet connection as already pointed out. This constrains the learning process as the students may not access learning materials or submit their assignments on time. All these technical challenges impact negatively on the efficiency and effectiveness of the e-learning programme.

Conclusion

This study concludes that ODel students at Kenyatta University face instructional, institutional, individual (personal) and technical challenges which have a bearing on their academic progress and on the programme's efficiency and effectiveness. There is need for the university to take corrective administrative action to address the identified institutional challenges. The regional ODel centres should be adequately staffed to enable them address the administrative, technical and psycho-social needs of students. The university should also find ways and means of encouraging lecturers to facilitate online teaching. With regard to this, capacity building of lecturers on course

design and online facilitation should be given emphasis. The university could further consider giving lecturers the necessary material technical support and incentives, for example, Tablets and internet bundles. There is also need to enhance the training and instructional technologies given to ODeL students on ICT to enable them fully exploit these resources. Additionally, the university should strengthen the learner support mechanisms for the ODel students to enable them tackle some of the personal challenges they have. The government should also consider extending financial support to ODeL students through the Higher Education Loans Board (HELB) to enable them invest in appropriate ICT gadgets for their studies.

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