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## **Delivery of Open and Distance Learning in Kenya: Demand and Quality Concerns**

### **Abstract**

Kenya has witnessed a rapid expansion in university education with the number of universities increasing by 320% in the last one decade to cater for high demand. The response to this expansion has been the need for more innovative educational approaches to reach the heterogeneous population with different demands. Kenya has however not taken full advantage of the of Open and Distance Learning (ODL) delivery due to a number of challenges and thus enrolments in ODL have remained low.

There are quality concerns that have negatively affected demand for ODL programmes in Kenya as reflected in low enrolments. Institutions are implementing various strategies including improvement of students support services, marketing and awareness creation activities, and reduction of tuition fees. These efforts are yet to bear fruit however as the programmes are still suffering from a credibility and recognition crisis. This paper analyses issues related to standards of ODL programmes in Kenya. It focuses on national and institutional quality assurance policies for ODL programmes, modes of delivery, and perceptions on quality and credibility of ODL in the country. The paper presents data that was collected through desk research, as well as a survey questionnaire with both open and close ended questions. The study respondents were deans/directors of ODL centers/units in universities in Kenya. Common quality concerns cited by respondents regarding provision of ODL in Kenya are inadequate funding, inadequate expertise and lack of necessary ICT infrastructure that is hindering delivery of credible distance courses learning. The study recommends establishment and implementation of quality assurance policies as well as investment in appropriate infrastructure and training of staff to improve recognition and demand of ODL programmes in Kenya.

Key words: Quality, Demand, Recognition

## BACKGROUND

Implementation and application of ODL as a mode of study require universities to be prepared in terms of both facilities and human resources. As pointed out by Tarus et al (2015) universities that are planning to implement e-learning in their institutions should be prepared to respond to the challenges that are likely to arise in the course of implementation. With rising enrolments and demands by governments to universities to increase access, ODL has been proposed as a viable alternative. For example the Kenyan universities are being compelled by the government through the Kenya Vision 2030 to introduce e-learning and blended learning as an alternative delivery system to increase accessibility to higher education in Kenya (NESC, 2007). According to the E-Readiness Survey of Kenyan Universities (2013) Report, Kenyan universities are allocating an average of 0.5% of their total recurrent expenditures on internet bandwidth to support implementation of e-learning which is a means to deliver ODL. Mulwa et al (2013) on their study on readiness to adopt e-learning found out that internet connectivity has a significantly positive correlation with electronic learning equipment. They pointed out that these indicators were all relevant in readiness for any university to adopt ODL.

E-learning as a form of delivering ODL is considered as a long term strategy in Kenya Vision 2030 (Tarus, 2015). It has been viewed as a mode to address the issues of access, quality, equity, technology and innovation as pointed out in the vision 2030 and as observed by NESC, (2007), the vision for the education sector for 2030 is “to have globally competitive quality education, training and research for sustainable development”. However adoption of e-learning in Kenyan universities is still low. According to Kashorda and Waema (2014) the students with personal computers per 100 students’ ratio was 3:8. This is considered quite low indicating a challenge in delivering ODL. It was also noted that only 16,174 student lab computers were available for 423,664 students at the 30 universities that were surveyed by e-readiness survey in Kenya and that only 17% of students accessed computers from their campuses. On the other hand, 53% of students owned over 200,000 laptop computers in the 30 universities. There was therefore a recommendation that universities invest more in student computer labs. The E-Readiness Survey (2013) Report noted out that although all universities were inter-connected to the national fiber backbone network, universities were not investing sufficiently in their internal campus backbone and wireless network infrastructure that would make it easier for students to use their own laptops and smartphones on campus to access learning materials and other student services.

Tarus et. al. (2015) in their study on challenges of implementing e-learning in Kenya found out that 92% of the respondents identified inadequate ICT and e-learning infrastructure as one of the challenges hindering the implementation of e-learning in Kenyan public universities where all the respondents agreed that inadequate ICT and e-learning infrastructure was a major challenge in delivering ODL. Further, they found out that 85% of the respondents indicated that universities lacked operational policies for implementing and delivering ODL through e-learning. They specifically noted that five key informants believed lack of operational e-learning policies had hindered successful implementation of e-learning. This is despite that fact that Kenya has an ICT Policy developed in the year 2006 that aims to ensure the availability of accessible, efficient, reliable, and affordable ICT services. Another issue affecting delivery of ODL was funding. Tarus et al observed that most ICT and e-learning related projects in public universities relied on donor funding and priority had not been given to ODL in budgetary allocations for universities yet it is key to efficient delivery of ODL (Huynh et al 2003, Nyerere, 2012). This, coupled with the fact that Kenyan universities were spending only 0.5% of their total recurrent expenditures on internet bandwidth according to Kashorda and Waema (2014), as well as many other challenges had affected effective delivery of ODL in Kenya.

It is clear, as established by several studies, that universities in Kenya are still faced with a myriad of challenges in delivering ODL ranging from lack of clear and adequate national policies, perception on quality, an elaborate quality assurance system for its delivery and reliance on print materials at the expense of use of modern technology in its delivery. The staff training in open and distance learning have been found to rely heavily on staff who facilitate the residential mode programmes assisted by staff hired on part-time terms (Nyerere, 2012). Whereas this is expected of institutions running the programmes in dual mode, the challenge is that the staff have not been given special training in the delivery of open and distance learning techniques. This has a profound effect on quality of these programmes given that teachers or instructors are a key input. Instructors are expected to be well equipped in among other techniques: practice in the design, production and presentation of materials; ample hands-on practice with delivery technologies; practice with techniques in how to humanize a course; and practice with techniques for facilitating

student participation (Moore and Kearsley, 1994). All of these require sufficient training and interaction with technology.

In their study on policy guidelines for quality assurance in ODL in Kenya, Odera and Mayeku (2011) found that the following five challenges were common across all the universities that were sampled in terms of ODL delivery: Lack of funds, outdated facilities, as well as lack of proper infrastructure and support for ODL.

### **Study Justification**

Kenya has witnessed a rapid expansion in university education with the number of universities increasing by 320% in the last one decade to cater for high demand. The response to this expansion has been the need for more innovative educational approaches to reach the heterogeneous population with different demands. Kenya has however not taken full advantage of the of ODL delivery due to a number of challenges and enrolments in ODL have remained low. This study sought to provide a brief context of Kenya's ODL development in terms of national and institutional policies in ODL, access and success in higher education for all. The study all carried out an assessment of institutional missions and mandates, the extent to which they had been achieved through ODL and challenges hindering the country from taking full advantage of ODL.

### **Study Objectives**

The objectives of the study were to:

- i. Analyse the national and institutional quality assurance policies for ODL programmes, modes of delivery, and perceptions on quality and credibility of ODL in the country.
- ii. Assess the level of adoption and use of ICTs including Open Educational Resources (OERs) and Massive Open Online Courses (MOOCs).

## **METHODOLOGY**

Data was collected from deans/directors of ODL Centers in twelve universities that are implementing ODL in Kenya. A survey questionnaire with both open and close ended questions was used to collect data. Information sought from the respondents in the study universities included the policy guidelines for ODL; the facilities and infrastructure employed in ODL delivery; appropriateness and adequacy of ODL resources; quality assurance, staffing, enrollment levels; the challenges the institutions encounter in provision of the programmes; and what they feel should be done to address the challenges. Analysis of the relevant documents was undertaken to capture information on the status of ODL and the policies guiding this type of education in Kenya. Institutional websites were also studied.

After collection, data was coded and the responses from the questionnaires and interview schedules arranged and grouped according to individual research questions. The data from the close ended questions was analyzed using frequencies, and percentages with the aid of Statistical Package for Social Sciences (SPSS) version 21.0 and Microsoft Excel. Information from the open ended questions was interpreted thematically.

## **RESULTS**

### **Introduction**

Open and Distance Learning has been implemented and delivered differently across the universities in Kenya. Though relatively new in most universities, both public and private universities are now offering the programmes. The University of Nairobi School of Continuing and Distance Learning Education (SCDE) is the oldest at fifty (50). The rest of the public universities are Kenyatta, Moi, Maseno, Jomo Kenyatta University of Agriculture and Technology, Masinde Muliro, Multimedia and Karatina. ODL programs do not seem popular with both public and private universities in Kenya and are only implemented in 8 out of 33 public universities and 4 out of 37 private universities, St Paul's, Africa Nazarene, Kenya Methodist, and KCA.

All the twelve universities implementing ODL programmes in Kenya were surveyed to establish the status of and implementation of ODL in Kenya. The survey focused on; Institutional policies, quality assurance, modes of ODL delivery, application of ICTs, learner support services, and challenges in implementation of ODL in Kenya.

### **International, Continental and Institutional Policies**

Studies have shown that there is lack of operational e-learning policies in several institutions which has hindered successful implementation of e-learning in SSA. The universities implementing ODL in Kenya however showed that they have policies guiding their ODL programmes. Figure 1 shows that an impressive eleven (11) out of twelve universities surveyed have ODL policies.

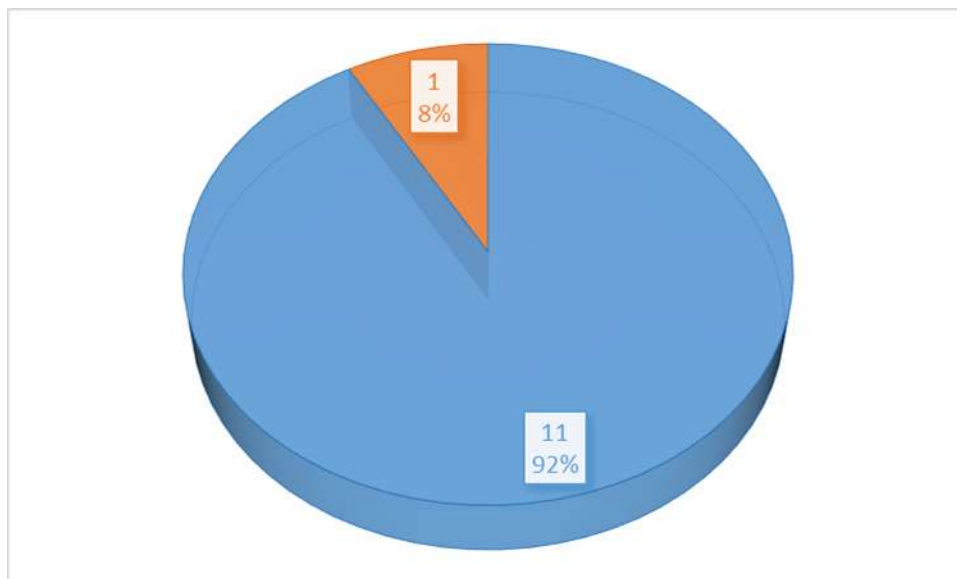


Fig. 1: Institutions with ODL Policies

This is not however the case at the national level. To date, there are no national policies that govern ODL in Kenya and the institutions providing these programmes are guided by their own institutional policies. The only policy available is one that touches on e learning, the ICT policy. The relevant objective in the ICT policy indicate the government’s commitment to encourage the use of ICT in schools, colleges, universities, and other educational institutions in the country so as to improve the quality of teaching and learning, and to promote the development of an integrated e-learning curriculum to support ICT in education. The absence of clearly defined national ODL policy certainly poses a challenge in implementation of ODL programmes in the country. This lack of specific ODL policy presents gaps not only in the provision of a common framework for the development of ODL in which institutions should anchor their policies, but also in resource mobilization to support implementation of ODL in the country. National ODL policies would also be instrumental in addressing human resource development and deployment as well as quality assurance in delivery of the ODL programmes.

International and continental bodies that are contributing to the development of ODL in the country include the African Virtual University (AVU) and the African Council for Distance Education (ACDE). AVU has been in existence since the year 1997 and is currently working with more than 53 Partner Institutions in 27 countries including Kenya to improve access to quality higher education and training through the innovative use of information communication technologies (AVU, 2012). The organization has and continues to deliver programs through information and communication technologies (degree programs, certificate and diploma programs), to develop African-based residential and e-learning materials for partner institutions, to establish e-learning centers in partner institutions, to train partner institutions staff in e-learning methodologies, to develop and implement Open Education Resources (OER) strategy, and to manage a digital library for the benefit ODL in Africa. Generally AVU is also assisting in the area of capacity building.

ACDE on the other hand was established in the year 2005 with its headquarters in Kenya. The aim was to have a continental body playing a significant role in the development of ODL in Africa. It was meant to be a unifying body of distance education providers and practitioners on the continent, and to promote research, policy and quality in open and distance learning by building capacity, fostering collaboration and partnership, and advocacy so as to increase access to education and training in Africa. Little is however known of its activities except the conferences held once in three years. Its core mandate of promoting research, policy and quality of ODL has not been appropriately delivered. This is probably the reason why 58% of the respondents in this survey did not know of its existence.

### **Quality Assurance**

Quality assurance is a very critical component in delivery of ODL programmes. Responses on the state of quality assurance in the 12 universities surveyed show that 92% were satisfied with quality of ODL programmes they provided. These institutions felt that they have put in place sufficient quality assurance mechanisms to support delivery of ODL programmes. Among the various ODL quality assurance strategies implemented by the institutions were quality assurance policy (40% of the institutions), quality assurance units (26.7% of the institutions) and monitoring and evaluation units (33.3% of the institutions). Sixty-six percent (66%) of the respondents however observed that there were no adequate quality assurance mechanisms at the national level to guide ODL programmes provision. They felt that the quality assurance strategies were too general and more favorable to residential educational programmes than the ODL.

### **Modes of ODL Delivery in Kenya**

Universities in Kenya use different modes in delivering ODL programmes. The common ones are course modules, textbooks and lecture notes, online/e-learning, blended approaches, video conferencing and skype audio CDs and mobile phones/ tablets among others. This survey established that course modules were the most preferred mode of delivering ODL (90%) followed by lecture notes and blended approach (both at 80%) as the second most preferred mode. However, video conferencing and skype were the least preferred modes of delivering ODL programmes as indicated by 1% and 11% respectively. This is illustrated in Table 1.

Table 1: Modes of delivering ODL in Kenya

Mode of Delivery	Percentage of preference
Course modules	90 %
Lecture notes	80%
Online	45%
Blended	80%
Video conferencing	1%
Skype	11%
Audio CDs	36%
Computers/Tablets	63%

### **Application of ICT in the Delivery of ODL**

Emerging ICT holds much promise for breaking down traditional barriers that have limited higher education. The advent of technology and in particular communication technology, have helped turn the world into a global village according to Agalo (2008), and as Barney (2008) put it, advances in technology are aiding the design and delivery of ODL courses, and are facilitating lifelong learning by breaking the time and distance barriers. This survey sought to establish the level of adoption of ICT in the provision of ODL programmes in Kenya. Specifically, information was sought covering the areas of computer availability and accessibility, internet availability and connectivity, and level of adoption of MOOCs among others. The following figures 2, and 3 present the responses on level of availability and adoption of ICT in delivery of ODL in Kenya.

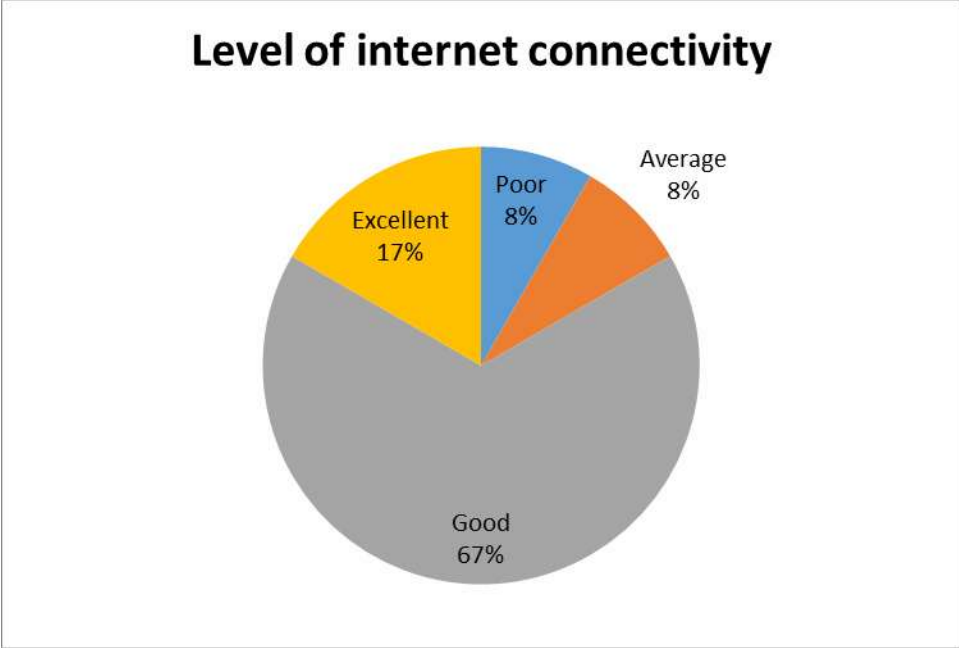


Fig. 2: level of internet connectivity

For efficient delivery of ODL programmes and especially with regard to e-learning, internet connectivity is very vital. Figure 5 shows that 66.7% of the respondents indicated that the level of internet availability and connectivity in their institutions was good with only 16.7% of the respondents rating that connectivity at their institutions as excellent.

66.7% of the respondents indicated that they had sufficient computers for ODL programmes delivery and their accessibility was adequate with 24% indicating that there were inadequate computers for delivering ODL programmes. Besides computers, other institutions like Kenyatta University are investing in provision of tablets to all students registered in ODL. KU offers the tablets to students at registration and their costs are included in the tuition fees. 67% of the respondents though indicated that tablets were not available to students but recognized their importance in aiding in delivering ODL programmes.

On the level of adoption of Open Educational Resources, 54% of the respondents indicated that it was low. The MOOCs on the other hand, even though they should be appealing for Africa due to scarcity of resources, and their ability to achieve mass enrolment with minimal investments required from the students, their use in Kenya had been very low. 46.2% of the respondents admitted that the adoption of MOOCs in Kenya is very low while 8% did not think it even exists at all. Effectively, more than 50% of universities implementing ODL programmes in Kenya have not made adequate effort to utilise the technology. Figure 3. Illustrates the responses on the level of utilisation of MOOCs.

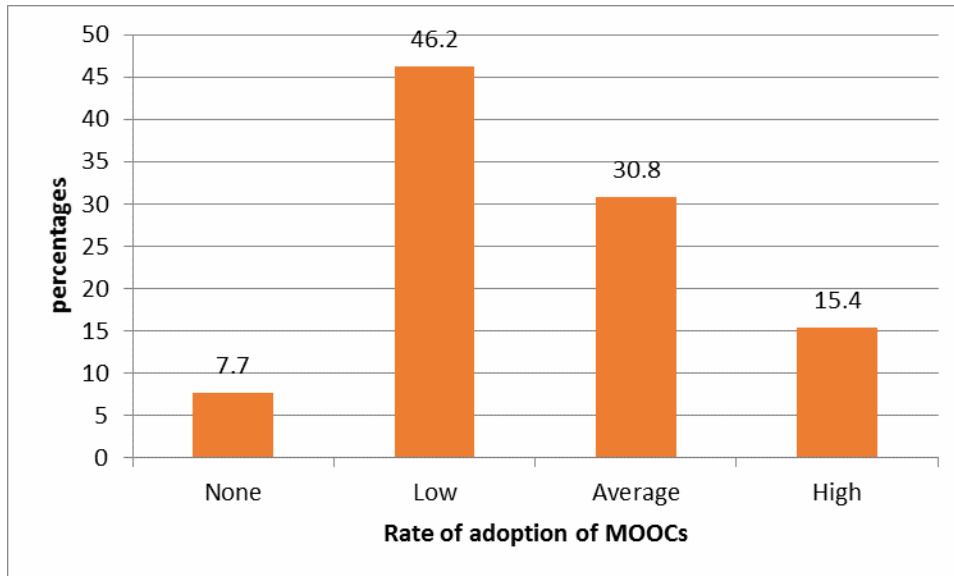


Fig. 3: Utilisation of MOOCs in delivery of ODL in Kenya

### Learner Support Services

For efficient delivery of ODL programmes, learner support services should be a critical component. Sufficient support is key in making ODL a viable option for impoverished or socially marginalized communities for example. The nature of students registered in ODL and the delivery methods require provision of support in a range of fronts including interaction with ICT necessary for e-learning, as well as guidance and counselling and career advise. 92% of the respondents indicated that they support their learners to enable them interact with the e-learning platforms. None indicated support in other spheres like social and career guidance. Specifically the learner support services provided to students registered in ODL programmes include, as shown on figure 4, user support programs, skills to interact with ICT, e-learning platforms, tutorials and internet services.

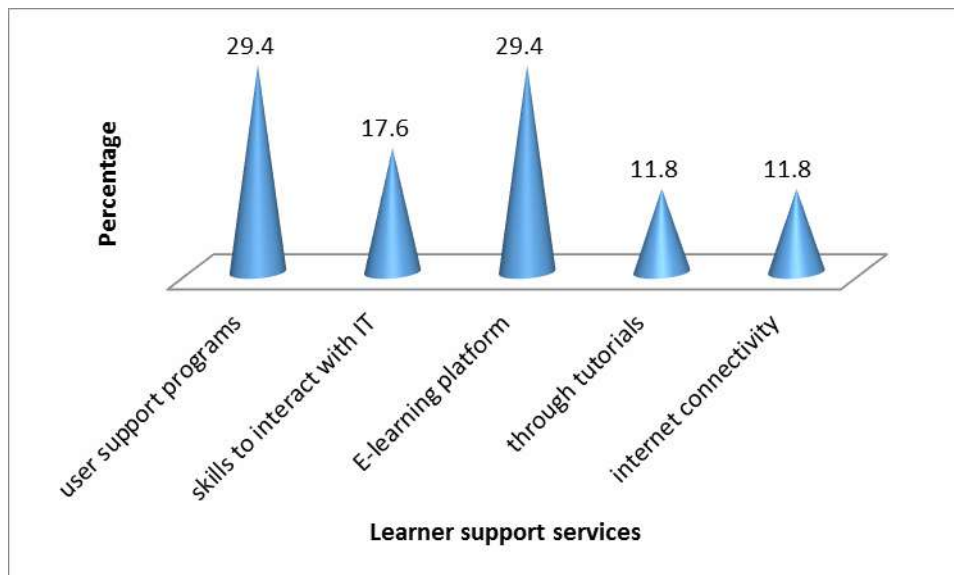


Fig. 4: Learner support services provided in delivering ODL in Kenya

Figure 4 shows that user support programs and creation of e-learning platforms were the most common learner support services provided with 29.4% of the respondents indicating that they provide these services to their ODL students. Other support services are skills to interact with information technology at 17.6%. Additionally, all the



universities who participated in the survey have ODL centres in different parts of the country. If well utilised, these centres constitute an important support facility. They are meant to provide facilities for individual learning and group tutoring, and academic guidance and counseling. The use of these centers in the universities surveyed was however not fully optimized and the centres were mostly used for examinations.

For women who have unique challenges including household duties that limit their access to and participation in education, most institutions surveyed indicated that they had taken measures to mainstream gender into the design and delivery of ODL programmes. Some of the measures they had put in place include establishment of technical management committees on gender affairs and creation of awareness for women to enroll in ODL programmes.

### **Challenges in Implementation of ODL Programmes in Kenya**

ODL holds the promise of economies of scale and expanded geographical reach, thus should be appealing to Kenya and to the continent faced with increasing demand for higher education against scarce resources. The low level of enrolment (19,038) against total university enrolment of 536,000 points to serious issues that need to be addressed. Demand for ODL programmes remains low due to a variety of reasons among them credibility of the programmes and perception regarding their quality. Not many students want to enroll in ODL programmes even with the benefits it presents. Quality of these programmes is also impacted by inadequate infrastructure due to inadequate funding for the programmes. All participants in the survey cited funding as a major obstacle to incorporating technology into their ODL programmes. This is partly due to the fact that ODL programmes do not have independent budgets and have mainly been established as income generating units of the universities and are thus expected to consume very little resources.

There are also challenges with staff training. None of the study respondents indicated that their staff had been taken through training in ODL delivery. There have however been efforts to get some staff trained by all the institutions surveyed in course module development and in application of ICT in teaching and learning.

### **Strategies to Improve Credibility of ODL Programmes**

To overcome the challenges and create more demand for ODL programmes, a variety of strategies had been put in place by the institutions surveyed. These include creating more awareness of ODL programmes, training of staff and providing more student support services. The efforts were however not sufficient to improve the credibility and recognition of ODL programmes.

Approval of ODL programmes by relevant bodies and creation of more awareness of ODL programmes for various stakeholders were the most cited strategies (38.5%) by the survey participants to improve the demand and recognition of ODL programmes. Other strategies cited include provision of accredited ODL programmes, continuous research and development in the area of ODL and formulation of policies to enhance delivery of ODL both at the national and individual institutions level. With regard to improving the outcomes of ODL students and therefore increasing demand for ODL, respondents cited steps such as incorporation of the 21<sup>st</sup> century knowledge skills, improvement of student support services, instilling practical skills, and increasing the use of technology interaction. Figure 5 shows the steps that the respondents suggested to improve learning outcomes.

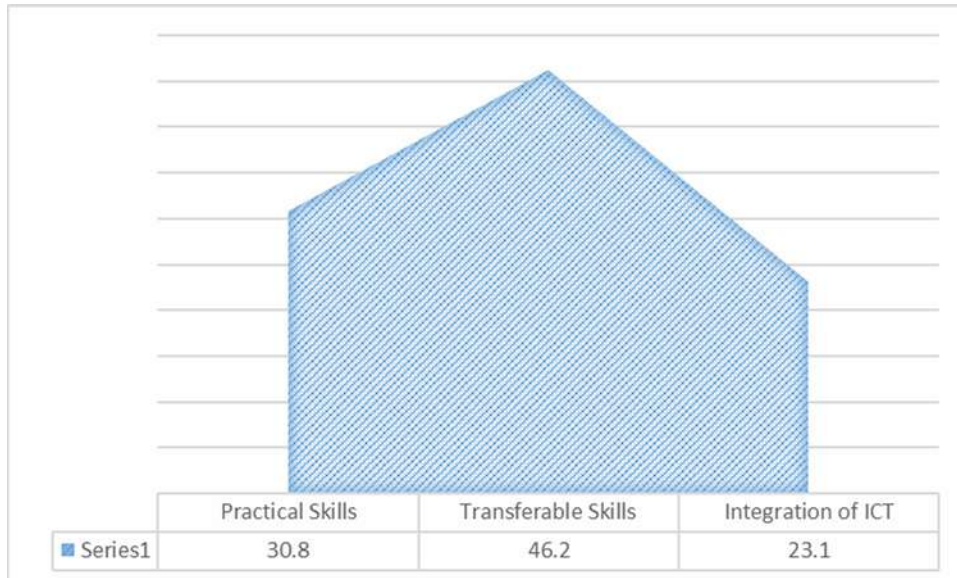


Fig. 5: Steps to improve employability of ODL learning outcomes

Majority of respondents, 46.2% felt that equipping ODL learners with transferable skills like communication skills, critical thinking and creativity as well as interpersonal skills would increase demand and recognition of ODL programmes. Other respondents, 30.8% felt that equipping the learners with practical skills (30.8%) and increasing usage of ICT skills especially by incorporating them in ODL programmes (23.1%) are also important strategies.

### CONCLUSIONS

1. Demand for ODL programmes is very low at 19,038 against total university enrolments of 536,000 raising concern with regards to the credibility of these programmes in Kenya. The issues raised were in relation to recognition and concerns related to quality of the programmes.
2. The study did establish that most of the teaching staff who facilitate these programmes have not been given adequate special training on the delivery of open and distance learning techniques. It is important to note that well-trained and competent staff are important in the delivery of quality open and distance learning.
3. There is no specific budgetary allocation for ODL programmes according to the study findings and most of the ODL programmes have been launched as means of generating income to universities thus universities are not investing enough e.g. in ICTs.
4. Lack of national policies that govern ODL in Kenya have seen the programmes pushed to the periphery of education quality regulations and resource mobilization.

### RECOMMENDATIONS

1. Establish and implement quality assurance policies and invest in appropriate infrastructure and training of staff to improve recognition and demand of ODL programmes in Kenya.
2. Provide sufficient funding for staff training in ODL delivery techniques.
3. Include ODL programmes in the country's budgetary allocations to support the programmes' capital development, infrastructure and capacity development. To enable institutions take full advantage of MOOCs and other open education resources, there is need to mobilise all stakeholders to establish the infrastructure needed to support adequate application of technology in the provision of ODL.

4. Establish and implement national policies on ODL to address, among other issues, programme financing, human resource development and deployment, and QA. This would lend credibility to ODL programmes in the country and increase demand for them.

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