

# Reaching the Mass Through Open and Distance Learning in Tanzania

**Mwilongo Kardo, J.**

*Information Officer, Mzumbe University – Dar es Salaam Campus College, P.O. Box 20266, Dar es Salaam, Tanzania. E-mail: kmwilongo@mzumbe.ac.tz*

## **Abstract:**

*The advanced development of Information and Communication Technologies (ICTs) and the transformation of knowledge towards more knowledge-intensive, less dependent and globalized societies has given rise to new challenges and opportunities for design and delivery of distance teaching and learning processes. Three reasons for delivering of distance education to all societies are identified as geographical isolation, social isolation and disadvantaged groups. The invention of internet and related databases and social networks like the Web 2.0, have had and will increasingly have radical effect on the transformation of education and training in all sectors. Similarly, the use of modern teaching and learning methods based on the paradigm shift of teaching and learning has helped to sustain student's motives and interest and make the learning process more productive and interesting. The methodologies that need to be adopted are: the use of internet through which different search engines and subject based information gateways are used to supplement teaching and learning resources; computer-assisted learning and web-based learning which includes virtual laboratories, discussion forum, chat, audiovisual presentation, moodling and tutorials. The Tanzania's sectors for education under the Ministry of Education and Vocational Training have to review the teaching and learning curriculum and establish different locations at district, municipal and ward levels through which open and distance learning can be practiced among people within the society.*

**Key Words:** *Distance learning, Education, ICT, e-learning*

## **1. Introduction:**

The advanced development of Information and Communication Technologies (ICTs) and the transformation of knowledge towards more knowledge-intensive, less dependent and globalized societies has developed new challenges and chances for the design and delivery of teaching and learning processes. The advent of ICT has opened up new prospects for advancement and the exchange of inventiveness and intercultural dialogue (UNESCO, 2002). Similarly, the geographic isolation of learners from different learning institutions has been the major motivation for emerging distance learning curriculum. The traditional distance learning system relies on printed resources for instruction and interaction. Correspondence courses have been the most common delivery technique of course resources to distant and out of formal school learners (Natarajan, 2005).

The invention of internet and related databases and social networks like the Web 2.0, have had and will increasingly have radical effect on the transformation of the process of teaching and learning to all sectors. Also the development of digital services like television, telecommunication, videotape, audio teleconferencing, audio graphics conferencing and video conferencing provided an opportunity of connecting the learners and instructors who are really isolated by geographical factor. Similarly, the use of modern teaching and learning methods based on a paradigm shift of teaching and learning processes has helped to sustain student's motives and interest and make the learning process more productive and interesting. The influence is already significant in all economically advanced nations, and a great majority of third world countries, despite difficulties and fears in seeking to take part in

the emerging global educational community. The internet provides a worldwide forum in which teaching and learning resources are dynamically updated in ways never possible before. Each learner has an enormous variety of learning resources available, free from limitations of time and space. There remains substantial work to be done with respect to searching and evaluating techniques for quality assurance of these resources for learners and teachers alike. The learning resources are reconfiguring to suit the ways in which students interact, and new methods to networked learning are growing (UNESCO, 2011).

The geographical isolation, social isolation, vulnerable and disadvantaged groups are the three main reasons to disseminate distance education to all societies. People may be geographically isolated because of distance, landscape, or undeveloped communication systems. Also factors such as financial status, physical fitness, emotional, and family circumstances contribute to geographical isolation of learners (OECD, 2007). Today's distance learning has been moving very fast from correspondence education to digital education leading to the emergence of new types of teaching and learning technologies at an ever-accelerating pace.

The integration of new types of teaching and learning techniques, technological advancement and globalization allow flexible teaching and learning processes, increased potential for access and interaction between learning resources and the customer (Thomas, 1995). This phenomenon has broadened the scope by incorporating online education, online learning programmes, virtual learning programmes and virtual learning resources. Learning process becomes more self-directed, cooperative, and resource-based with an increase in access and usage of information resources. Learning changes from know what to knowing how, how to learn, how to secure information, appraise for quality assurance; using it, and how to relate to a changing society. The new emphasis will be on how to reach the entire society (Natarajan, 2005).

Generally, open and distance learning programmes have existed since the 18th century in more economically developed countries and the third world developing countries adopted this phenomenon in the

20th century. In the densely populated regions of the developing world, open and distance learning programmes have been seen to provide very substantial prospects for education and training. However, lack of infrastructure and professional capability in open and distance learning is an important obstacle to the processes. Nevertheless, these systems of educational delivery have come to stay, and many regions are focusing on open and distance learning programmes as a main approach for escalating access, nurturing quality and ensuring cost-effectiveness (MQA, 2011).

In other regions, knowledge gap has been a barrier to open and distance learning programmes. For example the knowledge gap between North and South of the Sub-Saharan Africa is great and has taken longer to initiate the programme particularly on the Southern region. It is only through this programme the Southern region has been mostly used to broaden access to basic education and to maintain and improve quality in the predictable education system, particularly through in-service training of teachers. Also the UNESCO volunteered in training the in-service teachers within the region. For example in the late 1960s and 1970s a good number of Botswana's unqualified teachers were trained on the implementation of open and distance learning. Similarly, different national and international entities had been in place practicing the same programme under non-formal education systems and public development.

In Tanzania, open and distance learning is organized through the Distance Education Association of Tanzania (DEATA), a national association established in December 1992. The association comprises of the following members; the Ministry of Education and Vocational Training, Open University of Tanzania, University of Dar es Salaam, Vocational Education and Training Authority, Muhimbili University College for Health and Allied Sciences, Southern African Extension Unit, Institute of Adult Education and Moshi Co-operative College. These organizations enroll over 18,000 students between them. Apart from the main function of the association of providing training at tertiary level to adults, it is also involved in various innovative applications of distance education to different clientele within and outside borders like training

Burundian refugees, training local counsellors and offering civic education (UNESCO, 2002).

The advanced technology in information and communication has opened up new promises and opportunities in open and distance learning. Today there are a number of open universities well-known across the world for offering courses in distance learning. Similarly, a good number of traditional universities are transforming from single mode to dual mode universities, recognising the importance of distance education in providing more accessibility and current educational resources. This paper is therefore written to envision the possible ways through which open and distance teaching and learning processes can broadly reach the society. It also focuses on the vulnerable and disadvantaged groups, the way of delivering learning resources and its quality assurance.

## **2. Definition of Key Terms:**

**2.1. Open education resources:** Open Educational Resources (OERs) are defined as technologically enabled, open provision of electronic educational materials for consultation, use and adaptation by a community of users for non-commercial purposes. The resources are naturally made freely available over the internet (Atkins, Brown and Hammond, 2007). Principally these resources are used by teachers and educational institutions to support course development and learners. Open educational resources include learning objects such as lecture materials, references and readings, interactive materials such as simulations, role play, video, assessment tools, research articles, databases, experiments and demonstrations, as well as syllabuses, curricula, and teachers'/learners' guides (UNESCO, 2011). However, open educational teaching and learning resources should be self-instructional based on sound instructional design principles and learner-friendly. The resources should be designed in simple language and should include interactive learning activities and feedbacks. The resources may be in various formats: print-based, web-based and/or multimedia (MQA, 2011).

**2.2. Open and distance learning:** Open and distance learning is a field of education that focuses on teaching/learning methods and technology with the aim of fostering teaching

and learning processes, often on an individual basis, to students who are not physically present in a traditional educational setting such as a classroom. Similarly, it can be described as a process to generate and provide free access to electronic teaching and learning materials from which it is anticipated that the source of information and the learners are separated by time and distance. The aim of open and distance learning is to bridge the barrier factors of time, geographical, economic, social and educational and communication distance between learners and the institution, learners and academics, learners and courseware and also learners and peers (MQA, 2011). Other synonymous terms for open and distance learning are; correspondence education programme, home study programme, independent study programme, external study programme, continuing education programme, distant teaching programme, adult education programme, technology-based or mediated education programme, learner-centered education programme, open learning programme, open access programme, flexible learning programme, and distributed learning programme.

**2.3. Quality Assurance:** Generally, the term quality has been defined from different perspectives. One simple meaning of quality is in terms of the customer's satisfaction with a product, or its fitness for a particular purpose. This term can be developed and interpreted based on excellence, consistency, and achievement of stipulated standards. In the same context, one can discuss the definition of quality with regard to distance learning, products within a distance learning institution which is a producer of a large number of self-learning resources and as a service provider. Similarly, it is also a producer of learning programmes and related facilities such as units, blocks, books and videos, CD-ROMs, which have to abide by the stipulated and specified quality measures of a service. However, these provisions should cover areas for counselling, tutorials, assessments and the kind of awards on completion of the programme. Also distance learning system needs to be able to measure the quality of its products and services. Moreover, quality is not synonymous with excellence. It only indicates the management of continuous teaching and learning process aimed at bridging the gap

between the expected effect on what ought to be studied and the actual effect after completion of the distance learning programme (UNESCO, 2002 and MQA, 2011).

**2.4. ICT and E-Learning:** The term Information and Communications Technology (ICT) refers to forms of technology that are used for communication and to transmit, store, create, share or exchange information. ICT incorporates technologies like; radio, television, telephone, computer and network hardware and software, satellite systems, as well as other various services and applications associated with them, like video conferencing and distance learning programmes. Similarly, e-learning encompasses different forms of electronically supported teaching and learning materials. E-learning services have evolved since computers were first used in education. However, a trend to move towards blended teaching and learning services has now become imperative, where computer-based programmes are integrated with practical or classroom-based situations (UNESCO, 2002).

E-learning is benchmarked to learning that is facilitated and supported by means of Information and Communications Technology (ICT). E-learning is therefore defined as a broad set of applications and processes which include web-based learning programme, computer-based learning programme, virtual classrooms, and digital programmes. Broadly, many of the programmes associated with e-learning are delivered through World Wide Web, intranets, audio and videotape, satellite broadcast, interactive TV, and CD-ROM. Similarly, the meaning of e-learning varies depending on the organization and how it is used but basically it encompasses electronic means of communication, education and training. A number of approaches and terms have been used to explain e-learning in the past and generally came up with a synonymous terms including; web-based training programme, computer-based training or web-based learning programme and online learning programme just to mention a few. All these have over the last few years been labelled as e-learning (Butcher, 2009).

Generally, Information and Communication Technology (ICT) has been accepted as a modern instrument that facilitates educators to transform the teaching and learning process they use in order to increase learners' motives

and interest. This technology incorporates all the products that can be stored, retrieved, manipulated and transmit or receive information electronically in a digital form. Moreover, the product should comprise of hardware, software, networks and media for collection, storage, processing, transmission and presentation of information in the form of voice, data, texts and images (Mbaeze, et, al., 2010).

#### **2.5. Vulnerable and Disadvantaged Groups:**

The word disadvantaged is a generic term for individuals or groups of people who face special difficulties such as physical or mental disability, lack of fund or financial support, are politically considered to be without sufficient power or other means of influence. The term disadvantaged group is less applicable in developed regions and rather is being typically applied in developing regions. The disadvantaged groups in developing regions are related for example to women with reduced upward mobility exclusion and having limited access to natural resources, services and economic opportunities. Women in the third world regions are often landless or marginal farmers working on the most unproductive land. Statistics show that a person who was born into a poor family is likely to die poor and leave the children powerless as well. Also in terms of education, disadvantaged group refers to those who have the right to education but with regard to the special problems faced, they become vulnerable (at risk) to the service.

#### **3. Delivery through Open and Distance Learning:**

The government of the United Republic of Tanzania realizes the fact that quality education is the pillar of national development, for it is through education that the nation obtains skilled manpower to serve in various sectors in the nation's economy. It is through quality education that Tanzania will be able to create a strong and competitive economy which can efficiently and effectively cope with the challenges of development and which can also easily and confidently adapt to the changing market and technological conditions in the regional and global economy.

The structure of the formal education and training system in the United Republic of Tanzania constitutes 2 years of pre-primary

education, 7 years of primary education, 4 years of junior secondary (ordinary level), and 2 years of senior secondary (advanced level) and up to 3 or more years of tertiary education. From this system, it is obvious that, the Tanzania education system is categorized into three main levels of basic, secondary and tertiary education. Basic or first level education (which is compulsory to all) includes pre-primary, primary and non-formal adult education. The secondary level education consists of ordinary and advanced level of secondary schooling while tertiary level involves programmes and courses offered by non-higher and higher education institutions

The Ministry of Education and Vocational Training (MoEVT) and the Higher Education have managed to co-ordinate the education sector in Tanzania. The Ministry of Education and Vocational Training includes a number of semi-autonomous agencies: Agency for Development of Educational Management (ADEM), Institute of Adult Education (IAE), National Examinations Council of Tanzania (NECTA), Tanzania Institute of Education (TIE), Tanzania Library Services Board (TLSB), and Vocational Education and Training Authority (VETA). Similarly, the Ministry of Regional Administration and Local Government also has contributed in the management of basic education in Tanzania. However, at tertiary level, planning and service delivery of training is vested with the institutions themselves through their governing councils. Nevertheless, co-ordination and quality control is the responsibility of the Higher Education Accreditation Council (HEAC). Moreover, quality assurance for basic and secondary education remains to be the responsibility of school heads, district or municipal education office, ward education office and school inspectors.

Basic education in Tanzania has been and is being delivered traditionally, where most of the time teacher centered approach is commonly practiced with a little of student centered strategy. Few years back around 70's - 80's basic education programmes were delivered to learners' countrywide using interactive radio instruction in schools. The Radio Tanzania Dar es Salaam (RTD) which today is the National Tanzania Broadcasting Company (TBC - 'Taifa') was used to broadcast programmes related to basic education all over the country.

Nowadays there are a number of community based radio broadcasting stations to most areas of the country, just to mention few of them; Radio Orkonorei in Simanjiro, Fadeco in Ngara and Radio Sengerema in Sengerema. Generally, the entire programme broadcasted through radios can reach out-of-school learners who have neither basic education nor the ability to access the formal school system due to inadequate provision or insufficient infrastructures, poverty, distance to the nearest formal - government school, increasing societal disinterest in school education, orphans and the impact of HIV/AIDS. There should be enough facilities and mentors or teachers to assist the learning process through community radios or government and non-government broadcasting organizations. This kind of teaching and learning process is no longer practiced, although none or little research has been done to find the pros and cons of the programme.

The advancement in technology has opened a new methodology of teaching and learning process through which the same resources from one subject expert or group of subject experts can reach all through modernized facilities like satellite broadcasting, online distribution of content and information via corporate websites, moodling and mapping. The government has to ensure or establish centers at district, municipal and ward levels where important enabling technologies like computers with good internet connections, televisions, video cameras and radios are available to facilitate the process of teaching and learning. It is through these centers where learners from different areas, including those with geographical isolation, physical disabilities and disadvantaged groups can have access to the learning resources from the nearby centers. The internet as a medium of learning is explored to the maximum for the inspired use and positive impression of such knowledge on the teaching and learning processes. Topics from the syllabus can be integrated into web based structure where the subject expert prepares the learning materials and designs a framework with links to the internet through which learners are guided to make use of them (Mapping). Through World Wide Web search, the students subscribe to the latest resources on the assigned topics and compile the materials related to the given topic

in the form of notes (Natarajan, 2005). However, learners who are remotely located and could not reach the centers can instead use radios, CDs, DVDs to learn in the presence of the mentor or subject expert.

There are other related technologies such as web 2.0, blogs, social networking facilities and e-portfolios that can be used effectively to support teaching and learning. These technologies are diverse and current in such a way that will serve the institutions' educational mission and be sustainable. However, technologies like telephone, multimedia CDs and DVDs, video and audio conferencing, SMSs and MMSs via cell phones, e-mail and discussion forums/chat facilities via institutional library webpage offer new possibilities for supporting innovative learning in distance education and must be integrated from the design phase of courseware. Also the multimedia approaches which are modified to provide easy interaction between learners and lecturer(s), learners and tutors, learner and learner, and learners and institution is much more effective than a single medium (UNISA, 2008).

**3.1. Web-Based instruction (WBI):** Web based instruction refers to any form of innovative approach for delivering instruction to a distant audience in which the web is included as a media. Currently, a good number of web sites have been established to provide learners with access to instructional resources from a distance. However, most course-based or learning sites simply post course materials and in such circumstances, use of the web falls far short of the potential this medium can afford. According to UNESCO (2011), currently used web models of learning can be identified as one of the followings:

1. The web as source of information: This is the simplest use of the web where all the traditional supporting information for the courses offered is stored. There are varieties of search engines and subject based information gateways through which learners and facilitators can use to access the supporting teaching and learning resources like e-books and e-journals. Today a number of institutions have progressed to use the web to present information in a more structured way for teaching and learning process. Learners use the screen to read

resources, activate multimedia demonstrations, and work on self-correcting tutorials or other activities. The course resource is typically factual information, which is to be learned from the web page and any other accompanying media. There is no interaction between teacher and the learner over the web.

2. The web as a facilitator: The advanced library website provides online reference services through personal communication between Librarian and library user over chat rooms, messengers and e-mails. It is the same phenomenon that can be applied between the course facilitator and a student or between students over web communication.
3. The web as a communication medium between the facilitator and students: In this context, students learn from the facilitator but through the web and not from the web. In this context the web behaves as the communication medium for the necessary interaction and thus reflects a face-to-face learning atmosphere, within which the learner will be able to develop a kind of human relationship with the facilitator (Natarajan, 2005).

Having all this in place and with high quality of tools and availability of other enabling technologies, enough knowledge and skills on interacting with the facilities will bring flexibility in implementing distance learning. Learners will be advised to visit the nearby centers where access to the facilities and learning materials are available. The same resources should be prepared in different multimedia for effective learning to all. There are some areas where infrastructures don't support open and distance learning and thus the use of multimedia will overcome the challenge and at the same time alternative sources of electricity should be considered in such areas.

**3.2. Computer-Assisted learning:** The established centers with all important facilities can support learning through use of computers. Important tools like CD players and video cameras for video conferencing need to be in place for computer-assisted learning. The opportunities related with the development of computer-based technology in contributing to

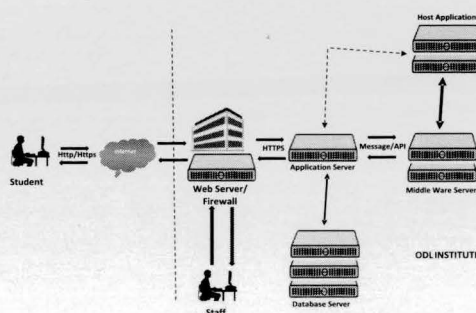
efficient and effective science education have grown exponentially within the past decade. The software program available on CD-ROM plays a great role with applications in laboratories and lectures, tutorials and project work (UNESCO, 2011). At the centers learners can learn both theoretical and practical contents with an aid of computer and the concomitant tools mentioned earlier on. CDs and DVDs can be used to provide virtual laboratories through which details on the preparation, essential equipment or apparatus required, and method or procedures relevant to the practical can be demonstrated. In the end students can then actively perform experiments based on the improvised simulation. Similarly, learners can experience a high degree of interactivity when virtual laboratory presents a range of equipment and tools on-screen. Also training through audiovisual aid plays an important role in the fields of medical science education, industrial and chemical processing, domestic sciences and natural science subjects. Teleconferencing is one of the most amazing methodologies for distance learning combining satellite teleconferencing with hands on activity session. Its implementation requires; computers well connected to the internet, teleconferencing speakers, video or web cameras. The method can help for live interaction between students or subject facilitator and the student; it is good to apply when interviewing a student, online chatting and makes interactive call-in sessions and local sessions (Natarajan, 2005).

**3.3. ICT, E-learning and open education resources:** The open and distance learning institution services through ICT and e-learning are a complex web of people, services and interactions. There are many individuals and groups that either use or provide learner support services. However, it is desired that any information system should be responsive to such diverse groups. In the open and distance learning system the students can log on to the databases of their institution and benefit from them in various ways e.g. be informed about the latest activities in their institution, navigate through one information topic to another, have an online status of different topics. Moreover, in order to accomplish all these duties successfully and efficiently, the web-system that has to be developed in the open and distance learning

centers must be improvised with some specific requirements like brilliant software agents for accomplishing the required functions (Khanna and Basak, 2011).

The world and particularly the education institutions have been using the internet and other digital technologies to develop and allocate teaching and learning for decades. Currently, Open Educational Resources (OER) has gained increased consideration for their potential and promise to remove demographic, economic, and geographic educational boundaries and to promote life-long learning and personalized learning processes. The rapid growth of OER has established new opportunities for teaching and learning, at the same time, they challenge developed views about teaching and learning practices (Yuan, et al., 2010).

Figure 1: Web Based Information System



ICT support for learning communities has become common place over the last decade but not well developed to basic and secondary education. However, with respect to tertiary education, there are usually numerous bottom-up initiatives, through which different tools and educational designs are improvised to support learning and teaching processes. Similarly, many universities have been embedded to a broad variety of pioneering projects which are in place, integrating ICT in various forms and formats, but with little or no deliberate approach to sustainability. Thus, the need for e-learning strategy has been recognized. However, an e-learning strategy which generally refers to a comprehensive set of goals and directives explained and recommended by institutional management for the sustainable implementation of ICT support for learning and teaching processes. The ministry of education and its agencies may need to find out the strategies used by the tertiary institutions to the success in using ICT

and e-learning to advance the same at the lower levels of basic and secondary education (Arnold, 2010). However, learners at all levels of education should be well trained to develop skills on the use of ICT and e-learning in the process of teaching and learning. Also the widespread availability of web 2.0 technologies and other social networking media have to be analyzed and in the end integrated to support the process of teaching and learning. Web 2.0 technologies and other related social media are usually easy to use, freely available, suited to support informal learning settings and cover a wide geographical area, but the challenge is establishing facilities and acquiring technology-know-how to meet the learners' demand.

Streaming software is one of the tools which allows for easy digitizing of videotaped lectures. This kind of software makes it simple to broadcast live lectures to distant locations or to capture lectures for later reference and revision by learners. Thus, streaming technologies can provide learners with flexible study formats while also covering a wider audience and geographical locations, e.g. students with disabilities or those who are otherwise incapable of following lectures on campus or in a formal education system (Arnold, 2010).

Generally, web based learning materials provide learners' access to well-organized and easily-updatable study resources, task-based activities, online resources, and tutorial support. In spite of these benefits, learners may be left frustrated or disappointed; since web based learning resources do not always sufficiently address their demands or expectations. Web based learning materials have been established mainly by software designers and developers with a high level of technical expertise, but often without enough knowledge about learners' demand. As a result, difficulties may arise when graphics is overemphasized to the detriment of pedagogical aspects, resulting in web based learning resources that look attractive, but are difficult to use in educational settings. Clearly, existing web based learning materials still lack a number of important aspects that need to be considered in design and evaluation (MQA, 2011).

Given the qualities and weaknesses of the

software designers, the ministry of education and education agencies should pay attention to the software's shortcomings when designing web-based learning resources which will be uploaded to the educational websites or to the social networking tools for students. Moreover, an independent educational website can be centrally developed instead and a number of subject experts together with website developers and software engineers could work together to have a dedicated webpage for educational purposes.

In respect to the role of designers and developers, it is high time that they develop web based learning resources with suitable usability, user-friendly features and then tailor it more closely to meet the learners' demand. The materials should focus on assisting learners discover and explore things for themselves through interactive, flexible, differentiated, and motivating activities. Unfortunately, as mentioned above, most web based learning resources provide little support to achieve a high level of flexibility, interactivity, feedback, differentiation, and collaboration, diminishing the added value of web based learning resources. The Ministry of Education and Vocational Training and its educational agencies should establish a quality assurance unit, through which the educational curriculum developers will have a role of monitoring and evaluating the quality of web based resources. However, there should be a routine program of evaluating learners' and teachers' perceptions of web based learning materials in open and distance education, modalities of teaching and learning using these materials. Moreover, feedback from the evaluation team should be used to improve the web based learning processes, infrastructures and/or the curriculum in general (Hadjerrouit, 2010).

#### **4. Open and Distance Learning for Vulnerable and Disadvantaged Groups:**

Open and distance learning has opened a new era to vulnerable and disadvantaged groups, despite the problems they are facing and particularly with regard to economic status, and learning disabilities. Agyemang and Dadzie (2010) noted that with application of ICT and e-learning, a stronger distance learning approach can increase educational access by reaching out to the disadvantaged groups, including; the less fortunate who did not attend



school for some reasons like being a refugee or orphan. The centers where the victims are located can be improvised with ICT facilities and IT professionals and subject experts or mentors for making learning effective.

Open and distance education also helps secondary school graduates who fail to gain admission to university, they can just enroll for distance learning through institutions that offer degree programmes similar to the Open University of Tanzania (OUT). Similarly, women and particularly those with household responsibilities can benefit from these programmes, as it is currently estimated that about 35 per cent of women are tertiary enrolled in African higher learning institutions. This under-representation implies an increase in the general intake, as home-based study within a flexible schedule is well suited for those who must fulfill family responsibilities. Also students in remote and local rural areas, small towns or refugee camps who do not have convenient access to tertiary higher learning institutions will save travel time, travel expenses, as well as the continuation of income while studying. For example, it has been well-known that since 1994 refugees from Burundi who lived in camps in western Tanzania could register for training in Basic English language, Mathematics, History, Geography and Swahili (Agyemang and Dadzie, 2010).

Social and political tension can displace people who become vulnerable to different circumstances and thus in the end find open and distance learning as the only means of access to education. Open and distance learning provides an opportunity to all levels of education to people with disabilities. The ministry of education has to ensure that the centers or institutions developed for education services through open and distance learning are improvised with facilities that are user-friendly to this group with regard to the type of physical disability and other circumstances.

##### **5. Quality Assurance for Open and Distance Learning:**

Quality assurance measures are seen as quality and security-enhancing measures. Today open and distance education has developed multi-typologies, according to the specific needs and aspirations of learners. It aims to serve as an alternative mode of

educational delivery. It is now evident that points of interrogation on quality assurance addressed to distance education courses are equally applicable to traditional measures of quality assurance, such as quality of curriculum design, instructional materials, assessment, learner's satisfaction with products and services, independent, external and technical reviews, evaluation and validation. However, open and distance learning institutions believe that continuing commitment to access and equity; learner independence and professional design of relevant resources with respect to learners demand, a flexible and interactive approach to curriculum and modes of teaching are the attributes of quality assurance offered to distant education clients. These institutions are now moving towards a stage in which learning is an individual process. Due to this approach, quality assurance has to develop a range of control mechanisms and assurance processes which cater equally to all media and modes of teaching and learning (MQA, 2011).

A Quality Assurance System (QAS) consists of policies, attitudes, actions and measures necessary to ensure that quality is being maintained and enhanced. The QAS should be applied equally to all the centers rendering open and distance learning and on the courses and programmes offered and the learning content, the teaching and non-teaching staff, technology, teaching and learning strategies and services. Quality assurance denotes those practices in distance education which lead to some kind of public, formal guarantee or certification, so quality assurance is typically a matter of judging the outcome of the implementation of course material, a special performance, or testing exercise (UNESCO, 2002).

In the domain of distance education quality assurance includes course-approval mechanisms, team work for preparing materials, processes of designing the material and the reviews of the material, which are subject to scrutiny either in the form of student questionnaires, or by the review of external experts. The findings of the formal procedures are usually publicly announced or at least made available to the practitioners. In this way quality assurance is an ongoing process and is public and formal in its nature. Moreover, quality assurance is described as the process whereby stipulated standards are specified for

a product and/or service and appropriate procedures under taken to ensure that these standards are met considerably (Butcher, 2009).

The quality of the academic staff in open and distance learning is one of the most important components in assuring the quality of that mode of distance education. Thus, every input must be made to develop proper and effective recruitment, service, development and appraisal policies that are valuable to staff productivity. It is important to note that every programme has appropriately qualified and adequate number of academic staff. The institution should consider various responsibilities and specialized tasks that would be required for the open and distance learning academic staff, for example; knowledge in pedagogy, IT-related technical skills and student support. However, consideration should be on the general mission of any higher learning institution of teaching and learning, research and consultancy services but also community engagement are the core interconnected academic works (MQA, 2011).

The physical facilities to support an open and distance learning programme are slightly different from facilities for face to-face programmes. For open and distance learning, learning centers are needed to cater to students who are spread over a wide geographical area. A learning center (district, municipal or at ward level) would have a minimum requirement in terms of infrastructure and facilities. Other facilities which are essential for supporting teaching-learning activities in open and distance learning such as electronic learning platform, virtual library and counselling system through distance are equally important. The programme must ensure that there is quality, sufficient and appropriate physical facilities and educational resources to enable efficient and effective teaching and learning processes. ICT and related facilities for example, learning management system, digital or virtual library, video conferencing, virtual laboratories, online helpdesk, reference services must be provided for and maintained up to acceptable current standards and capacities. The institution library or resource center must have sufficient, adequate and up-to-date reference materials and qualified staff that meet the needs of the programme and research

amongst academic staff, students and the community around. These include provisions for adequate computers and information and communication technology mediated reference materials. For practical-based programmes, equipment and facilities for training must be adequately provided for at all learning centers (OECD, 2007).

A high priority should be given to research-based programmes and programmes with a substantial research component, the ministry of education or institution must provide adequate and suitable research facilities and supportive environment for research work. However, the institution policy regarding the selection and effective use of electronic devices, internal and external networks and other effective means of using information and communication technology in the programme, should be considered for a smooth running of the programmes and this includes coordination with the library services. The learning environment should be regularly improved through renovations, building new facilities and the acquisition of the latest and appropriate equipment to keep up with the development in educational practices and changes (Yuan, et al., 2010).

The learning resources, education services and facilities should be frequently reviewed to assess the quality and appropriateness for current education and training. The facilities should be user-friendly including those with special needs, vulnerable and disadvantaged groups. Quality enhancement calls for training and the programmes in general to be frequently monitored, reviewed and evaluated for future improvement. These include the monitoring, reviewing and evaluation of institutional structures and processes (Butcher, 2009). Monitoring and review for open and distance learning programme should encompass elements such as the open and distance learning system or structure, learning materials, delivery system, communication system, student support services, financial strength, assessment system, teaching strategies and physical facilities. Programme monitoring and review activities should involve all academic and non-academic staff and students. These activities involve the process of gaining feedback from all relevant stakeholders. The findings should be recorded, reviewed and evaluated.

## 6. Conclusions:

Generally, issues of access to quality education are a matter of urgency, and yet the formal education system has not bothered to provide education for all at all levels. For out of school learners, disadvantaged groups and at tertiary education, therefore, open and distance learning strategies need to be adopted by the government and institutions at ensuring that open and distance learning is considered as an alternative approach at addressing the educational needs. For example the out of school learner's and particularly children of fewer than 18 years of age are the most vulnerable group that has their child rights violated. The challenge is how to develop suitable programs and high quality learning materials to protect child rights and retain them in the education system than drop outs. Thus, it is crucial take into consider child rights, adult learners, vulnerable and disadvantaged groups when planning, designing, developing and implementing education programmes for the purpose of reaching all through open and distance learning. However, there should be effective quality assurance systems for the programme, and the services provided needs to be user-friendly to the vulnerable and disadvantaged groups and particularly those with disabilities.

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