

EFFECTIVE MANAGEMENT OF INFORMATION AND COMMUNICATION TECHNOLOGY (ICT): PANACEA FOR QUALITY DISTANCE LEARNING IN COLLEGES OF EDUCATION IN NIGERIA

¹Bala Jimoh Ogu,²Joy Ogochukwu Ilukwe and³Nnate Kalu Nnate

Department of Adult Education and Extra-Mural Studies,
University of Nigeria, Nsukka

Abstract

This paper examined the place of Information and Communication Technology (ICT) in Distance Learning (DL) programmes in Nigeria. It determined how effective management of ICT can ensure quality of Distance learning Programmes in colleges of education using Nwafor Orizu college of education Nsugbe as a case study. To achieve this, two research questions and two hypotheses were generated to guide the study. The study adopted a case study research design. The population of the study is 148, comprising 30 staff and 118 final year students of Nwafor Orizu College of Education center for Distance Learning (DL). The entire population was purposively drawn for the study due to its manageable size. The instrument for data collection was a researcher-designed structured questionnaire. The instrument was face validated by three experts. It was trial tested and analysed using Cronbach Alpha and the overall reliability coefficient was 0.74. The data collected were analysed using mean and standard deviation to answer the research questions. t-test statistic was used to analyse the hypothesis. The findings revealed that the management of ICT in distance learning programme was not in line with the planning processes to ensure quality of the programme in Nwafor Orizu Center for Distance Learning (CDL). However, the organizational processes were found to enhance the quality of the programme through the integration of various departments for effective information communication and quality delivery. Based on these findings of the study, the following recommendation were made. (1). The planning processes should be well planned ahead of the programme to enhance the quality of the distance learning programme by the center through inputs from Nwafor Orizu College of Education and other stakeholders. (2). The organizational processes of the DL programme should be improved upon to enhance the quality of the programme through training and retraining of staff by the center management.

Key words: Quality, Distance Learning, Management, Information and Communication Technology.

Introduction

Distance Learning (DL) also known as Distance Education (DE) is a system of learning that aims at bridging the gap between the learner and instructor who were

separated in time and space. Alaezi (2005) defined distance learning as an education pattern, approach and strategy that permit people to learn with no barriers in respect of time and space, age and previous educational qualification, entry qualification, gender, race, tribe, and state of origin. California Distance Learning Project [CDLP] (2013) defines distance learning as “any educational or learning process or system in which the teacher and instructor are separated geographically or in time from his or her students; or in which students are separated from other students or educational resources”. Jegede (2016) defined distance learning as a form of instructional mode other than face-to-face method, where there is physical separation between the teacher and the learner. Instruction takes place through a variety of media including print and modern Information and Communication Technology (ICT). Distance learning was earlier referred to as home study, telematic study, distributed learning, online learning, self paced learning, blended learning, correspondence course, technology enabled learning, virtual learning, distance education and open learning. Despite the different names given to distance learning it has not in any way changed the meaning and characteristics. Some of the characteristics of distance learning includes its flexibility in terms of admission and mode of study; cost effectiveness; the learner is separated from the instructor and institution of learning in terms of time and space; it is open to all irrespective of age, gender, religion; and availability of support services for student and intensive use of ICT.

Distance learning dates back to the colonial era. It started with correspondence course with the aim of preparing students for professional examinations, advanced General Certificate in Education (GCE), and in-service training. It was on record that the first distance learning in Nigeria took place in Ahmadu Bello University in 1972. This was quickly followed by other Universities. Correspondence study continued until 1976 when the National Teachers Institute was established in Kaduna with the objectives of upgrading the qualification of the under qualified teachers as well as the continuing education of teachers using distance learning system. In 1983 the federal government expanded the programme of distance learning or education which led to the establishment of National Open University of Nigeria to enhance and epitomize distance Learning System (DLS) in Nigeria (ALL-Mukhtar, 2014).

Distance learning has gained more momentum because of the evolution of Information and Communication Technologies as a means of bridging the educational gap among distance learners. A retrospective statement by Yusuf (2006) supported this assertion when he says that distance learning is one of the major pivots upon which the nation hopes to improve the quality of instruction in Nigerian schools through the use of ICT. ICTs application in DL include radio-based study talks and TV-led video-based courses. It also includes print media used by local study groups. Both one-way (from university to students in the form of print, broadcasts, and audiotapes) and two-way communications (between tutors and students through correspondence

tutoring, face-to-face tutorials, short residential courses and in more recent years by telephone, video and computer conferencing). It also includes interactive, electronic, and computer-based devices to enhance information and facilitating communication between learners and teachers, and learners and learners. ICTs provide two-way communications that are either synchronous ('at the same time' as in videoconferencing or audio-conferencing) or asynchronous ('not at the same time' as in electronic mail or computer-based discussion forums). These efforts are in-line with the objectives of distance learning or distance education as outlined in the sixth edition of Nigeria's National Policy on Education (FRN, 2013 p.34) are to:

- provide more access to quality education and equity in educational opportunities;
- meet special needs of employers and employees by mounting special courses for employees at the work place;
- encourage the internationalization especially of tertiary education curricular;
- ameliorate the effect of internal and external brain drain in tertiary institutions by utilizing Nigerian experts as teachers regardless of their locations or places of work; and
- encourage life-long learning opportunities (p.34).

It is important to note that achieving the stated objectives depends greatly on effective use of ICT. Yusuf (2005), says ICT provides opportunities for distance learning students, academic and non-academic staff to communicate information with one another more effectively during formal and informal teaching and learning. This is why Information is described as data that has been processed, stored or transmitted by a computer. This was corroborated by Akpan (2008) who defined information as data that have been processed, analysed, and interpreted to be meaningful to the receiver through communication. Furthermore, communication is a process by which information is exchanged between individuals through a common system of symbols, signs or behavior. Technology on the other hand is seen as the organization of knowledge for practical purposes. Akpan (2008) sees technology as the process of using information to have meaningful control over nature in order to survive the challenges and changes in our environment to achieve a civilized and higher standard of living. Hence, ICT encompasses those technological facilities, which allows easy communication between an individual and the entire world. Kpolovie & Awusaku (2011) defined ICT as the science of production and utilization of computer equipment, sub-system, software and firmware for automatic analysis, acquisition, storage, manipulation, management, movement, transformation, control, display, interchange, transmission and retrieval of information to meet human needs. ICT is a medium of communication used in bringing the institution and its facilities closer to the distance learners in order to eliminate the barrier caused by distance. Some of the

technologies used in delivery of distance learning include print, audio, video, and audio-visual resources.

Information and Communication Technology (ICT) has continued to be regarded as the backbone of distance learning programmes because it eliminates most of the difficulties encountered by distance learning students and the institutions who engaged in the programme. Haddad (2007) observes that ICTs have proven to be the most effective ways of enabling high quality educational materials to reach remote clientele and overcome geographical and cultural hurdles. This has helped to improve the quality of distance learning by encouraging collaborative learner-centered and interactive learning. It enhances greater access to educational resources by allowing both the instructors and students read and download other people's research work on-line, it provides for active learning methods, it makes learning experiences flexible for learners. ICT makes instruction real and provides rich and varieties of learning experiences, which enhances the quality of distance education programmes (Nwizu, 2016). Despite these advantages of ICT on DL or DE, if not well managed, it may hinder the quality of learning in DL and its entire management processes such as in admission, registration, orientation, keeping students' records, instructional delivery, and assessment of students' performance. This is why Nwizu (2016) further argues that for quality management of DL Programmes, ICTs must be employed and well managed in record keeping, generation and dissemination of information, counseling services, planning and monitoring, assessment and evaluation of distance learning programmes. In enhancing quality in DL, the quality of inputs, processes and outputs shows how well a programme is managed and this can only be possible through effective ICT management processes.

The National Policy on Education of the Federal Republic of Nigeria (FRN, 2014) required the Colleges of Education COEs as one of the tertiary institutions to train

- All teachers in educational institutions shall be professionally.
- Teachers education programme shall be structured to equip teachers for effective performance of their duties (p. 30).

This is the mandate that necessitate the use of Distance Learning System (DLS) to train the in- service teachers in various colleges of education. But quality of this system has been under close scrutiny and doubt. Andin Nwafor Orizu College of Education Distance Learning Center, Anambra State Nigeria, where this study was carried as a case study of the distance learning system in colleges of education in the Nigeria. It is noted that the center has all it takes in term of ICT to ensure quality in her DL programme. But in a survey of the DL programme, it is noted that students' find it hard to access learning materials due to poor support services which made it almost impossible for students to interact and share learning experiences among themselves and among the learner and instructors. The collaborative learner-

centered and interactive learning almost absent, there is lack of access to educational resources that could allow both the instructors and students read and download other people's research work on-line, poor active learning methods that makes learning experiences inflexible for learners. This makes instruction unreal and lack rich varieties of learning experiences. This has created some level of student's dissatisfaction on the use of action learning, providing student-centered instruction and increased interaction between students and faculty, and students to students.

So, it is presumed this might be due to poor management of ICT facilities which has the potency to enhance quality in DL programme in Nwafor Orizu college of education Distance Learning Center (DLS). This situation as it observed in Nwafor Orizu College of Education for Distance Learning Center, Anambra State might not have significance in respect of the DLS in other colleges of education in Nigeria. This is the situation that triggered this study to investigate the effective management of information and communication technology (ict) as a panacea for quality distance learning in colleges of education in Nigeria. And also, to investigate how the students the staff vary in the planning and organisational management of the ICT for quality distance learning in Nwafor Orizu distance learning center.

Management is the process of organizing and managing people and resources to ensure the completion of a task within the defined scope. UNESCO (2002) defined management as the process of getting activities done efficiently and effectively making decisions on what to do and how to do it and then checking that it is done. Surbhi (2015) defined management as an act of managing people and their work, for achieving a common goal by using the organization's resources. He states that the major activities performed by management include planning, organizing, controlling, coordination and decision-making. Management in distance education entails effective planning, organization, recruitment, selection and training of human resources and managing the application of best available technologies for achieving the institutional goal and that of the learner. In agreement with the above statement Nwizu, (2016) states that once an institutional framework is chosen for the delivery of distance education programmes, there is need to adopt an effective and efficient management strategy to address contemporary challenges to attain the overall goals of the institution.

Effective management of ICT facility requires proper planning to serve as a hub upon which the transmission of knowledge is based in DL programmes. It is a process of determining ICT requirement that will ensure and enhance quality achievement of DL programme objective. This is necessary to serve both the students and the teacher to achieve the objective of the programme. The initial effort in outlining ICT plan is to determine the type of ICT apparatus that will be able to reach the students and be accessible to them. This could be termed as ICT requirements analysis. The available technologies to the DL students are factored into the ICT plan

for students' access to the learning material. Staff experience with the technology are also factored into the planning for their training needs.

Finally, the environment, and the geographical spread of the students is important. It is important to consider if the ICT available will facilitate synchronous or asynchronous method of learning delivery. It is synchronous when it involves live meeting, conference call, audio conference using Skype, computer-assisted conference, video conference, instant messaging texting and Personal Digital Assistants (PDAs) devices that hold a calendar, a contact list, a task list, and other support programs. It is asynchronous when mails package delivery, fax, e-mails, and blogs, are used which is one-way communication. A typical ICT template plan for DL programme has the following steps. Recognize your students (to whom), recognize students' expectations (why), recognize the ICT essential to meet students' learning needs (what), recognize the students' environmental setting for ICT use and fittingness (when), recognize the ICT trappings that may complement the DL students (how), and recognize the staff and their talents. (who). Having recognized all these essentials of ICT planning, organizing it through the organizational procedures to achieve the desired quality of the DL programme is important.

Organization is the process of harnessing efforts invested by individuals or group of people to accomplish organisational goal. Nwachukwu (2007) define it as a process of coordinating individuals' effort to achieve a common goal. ICT organization is the process of integrating individual and departmental efforts to enhance the quality of DE programmes. This will create access to harness ICT facility to support the operation and achieve the objectives of the entire programme. This is done through proper ICT design, structure, power, authority control, human resources, innovation and change to manage DE programme. Proper ICT design will optimize the achievement of institutional objective. Especially when done in line with modern but less localized management strategies to provide wider integration of ICT resources in DE programmes. This will enhance interdependency of ICT features and the changing tasks to accomplish organizational goals. Team work will also be enhanced to solve ICT problem by integrating the environment in tune with ICT changes to improve the quality of programmes. In terms of structure, broader ICT structure will enhance more integrated efforts to outline and stratify its need for quality access by various departments of DE programme. Harmonize in Power play and authority will be achieved that influence the effective use of ICT for quality programme delivery. This will integrate interpersonal power and authority that plays vital role in how effective ICT is managed especially with the central and local ICT task execution. In this perspective, clear definition of rights and role, and local diversity and responsibility of local independence will be achieved.

Furthermore, the human resource impact is also pivotal to ICT utilization for quality programme delivery since this is the engine that drives the entire activity in a DL programme. So, the overall ICT strategy will be driven by people, information, and

mission which requires a shift from the knowledge of hardware and software to data and knowledge that is in alignment with the operational and organizational goals. Organizational innovation and change are the process of improving the services, product and processes in organization's activity. It requires a culture of innovation and change that supports new ideas and processes that create a new way of doing business (Kustoff, 2008). Managing ICT innovatively for change does not demands a return to business as usual in the face of new ICT challenges which require change in the running of the programmes. It is obvious that it may not be a happy spot for most staff. But problems always bring innovations, and the urge to move to usual ways and roles is very high. This has to be discouraged while effort is made to rediscover new ICT innovation for quality DE programmes.

Quality means level of excellence. Harvey and Green in Nwizu (2016) suggested five interrelated ways of defining quality:

- Excellence – Quality as something exceptional, distinctive and elitist.
- Consistency – Quality as a perfect, consistent or flawless outcome.
- Fitness for purpose – Quality as fulfilling pre-determined requirements, needs or desires.
- Value for money – Quality as return on investment.
- Transformation – Quality as enhancement and empowerment (p.36).

American Society for Quality (2008) sees quality as:

- The characteristics of a product or service that bear on its ability to satisfy stated or implied needs.
- A product or service free of deficiencies.

Quality can mean different things to different people and fields, but in the field of DL quality embraces all activities in the academic sphere of an institution. They include the quality of instructors, facilities, instructional delivery, student's performance, and student's evaluation of learning experience. In other words, quality means the level of excellence of the input, processes and output in DL programme. Iqbal and Ahmad (2010) stated that quality in DE involves achievement (what the students learns in terms of skills, knowledge, attitude, behaviour, and attainment). It means the number of students who have completed prescribed academic programmes and quality of certificates awarded and standard of learning as expected by the society.

The growing phenomena and innovative use of technology to distribute learning in DL has projected a pervasive image of the programme bringing the quality into question. Specifically, there is a continued question from educators whether or not DL or online courses maintained the "high standards of excellence" (Ciavarelli, 2003). Other areas also questioned were student's satisfaction, the use of action learning, providing student-centered instruction and increased interaction between

students and faculty, and students to students. However, it is noted that there is an increased enrollment in distance learning programmes, but without commensurate quality enhancement in terms of administrative support and resources for technology training (Abromitis, 2002). This increase in the use of DL or online training even within corporate organizations was due to increase in e-learning tools such as course management systems, collaborative tools, video conferencing, electronic mail, messaging services, and electronic conferencing (Palmer, 2004). This is happening without equal attention to enhance the quality of its use in DL programmes which lead to the growing concern about the degrees that are often received by students enrolling and graduating from DL or online programs. A national survey was conducted among the hiring committee chairpersons of companies on who they would hire among graduates of DL or online and traditional face to face degrees holders. Their quantitative response was straightforward with 98% of the respondents selecting the candidate with a traditional face to face degree” (Adams and Defleur, 2005).

Obviously, the quality of the programmes could be hindered if the ICT components which is the hub of the programme is not well managed through proper planning and organization especially in developing countries like Nigeria. In Nwafor Orizu College of Education Center for Distance Learning, Anambra State Nigeria, the center has all it takes in term of ICT to ensure quality in her DL programme. But in a survey of the DL programme, it is noted that students’ were dissatisfied in the use of action learning, providing student-centered instruction and increased interaction between students and faculty, and students to students. This could be due to poor management of the ICT component of the DLS. This is why this study is focused on investigating the planning and organizational processes in the management of ICT to enhance the DL programme in Colleges of Education especially in Nwafor Orizu College of Education DL center in Anambra state Nigeria.

Purpose of the Study

The general purpose of this study is to determine how quality could be enhanced in the distance education programme through effective management of ICT. Specifically, the study seeks to:

1. ascertain the extent to which the planning processes of ICT management has enhanced the quality of DE programme in Nwafor Orizu college of education DL centre Nsugbe, Anambra state?
2. determine the extent to which the organizational processes of ICT management enhanced the quality in DE programme of Nwafor Orizu college of education DL centre Nsugbe, Anambra state.

Research question

The following research question were posed to guide the study.

1. To what extent has the planning processes of ICT management enhances quality in DE programme of Nwafor Orizu college of education DL centre Nsugbe, Anambra state?
2. To what extent has the organizational processes of ICT management enhances quality in DL programme of Nwafor Orizu college of education DL centre Nsugbe, Anambra state.

Hypothesis

Two null hypotheses were stated and tested at .05 level of significance.

Ho₁: There is no significant difference in the mean ratings of staff and students on the extent of planning processes of ICT management to enhance quality in DL programme of Nwafor Orizu college of education DL centre Nsugbe, Anambra state.

Ho₂: There is no significant difference in the mean ratings of staff and students on the extent of organizational processes of ICT management to enhance quality in DL programme of Nwafor Orizu college of education DL centre Nsugbe, Anambra state.

Research Method

The design adopted for this study is a case study research design. The study aims at eliciting the opinions of the respondents on how effective ICT management has enhanced the quality of DE programme in Nwafor Orizu college of education Distance Learning Centre (DLC) as a case of DL programmes of Colleges of Education. The population of the study is 148 respondents comprising all the 30 personnel and 118 final year students enrolled in the DL programme of the college. These group were selected for the study because they are conversant with the extent of ICT infrastructure and its management for quality delivery of DL programme to the institution. The entire population was purposively drawn as sample for the study because of its manageable size. The instrument for data collection was researcher-designed structured questionnaire titled "Effective Management of Information and Communication Technology (ICT): Panacea for Quality Distance Education Programme in Colleges of Education (QEMICTQDEPCE). It was designed on a four-point scale of (4) Very high extent (3) High extent (2) Low extent (1) Very low extent. Experts from the Departments of Adult Education and Extra Mural Studies and Science Education both in the University of Nigeria, Nsukka, face validated the instrument. Their input was embedded in the final draft of the instrument. The reliability index of cluster A was 0.69 and cluster B was 0.79. 0.74 was obtained as overall reliability index using Cronbach Alpha method to establish the reliability of the instrument. The instrument was administered to the respondents with a return rate of 92% which is high enough for the study. The data collected was analyzed using mean and standard deviation. Real limit of numbers was used to determine value of responses of the

respondents as Very High Extent 3.50-4.00 High Extent 2.50-3.49 Low Extent 1.50-2.49 Very Low Extent 0.50-1.49. t-test analysis was used to analyze the null hypotheses, the null hypotheses was rejected when the significant value is less than 0.05 alpha levels and not rejected when the significant value is higher than 0.05 alpha levels.

Result.

Research question one:

To what extent has the planning processes of ICT management enhances quality in DL programme of Nwafor Orizu College of education DL centre Nsugbe, Anambra state?

Table 1: mean scores and standard deviation of respondents on the extent of planning processes of ICT management.

Sn	item statement	\bar{X}	SD	Dec
1	ICT type available to both the student and the instructors were considered during the planning processes to enhance quality.	2.00	1.00	LE
2	The accessibility of ICT in the students learning environment were considered in the planning processes to enhance quality.	2.44	1.04	LE
3	Staff experience with the ICTs in use were in the planning processes to enhance quality by meeting their training needs.	2.45	0.96	LE
4	The learning environment of the student to support the ICTs in use were considered during the planning processes for better quality output.	2.60	0.99	HE
5	The geographical spread of the students' in relation to ICT reach were considered during planning to enhance quality of the DE.	2.45	1.03	LE
	Grand mean	2.38	1.03	LE

From the table one above only item 4 was accepted that the learning environment of the student to support the ICTs in use were considered during the planning processes for better quality output with a mean score of 2.60 while items 1,2,3 and 5 were re with mean scores of 2.00, 2.44, 2.45, 2.45 respectively. This shows that proper planning for the DE programme in the institution were not done not done to improve the quality of distance education programme.

Ho₁: There is no significant difference in the mean ratings of staff and students on the extent of planning processes of ICT management to enhance quality in DL programme of Nwafor Orizu College of education DL centre Nsugbe, Anambra state.

Table 2: t-test analysis of respondents on the extent of planning processes of ICT management

Respondents	No	\bar{X}	SD	Df	t-cal	Sig	Decision
Staff	30	2.57	0.94	146	0.16	0.35	not rejected

Students	118	2.19	1.07
Total	148	2.38	1.05

Table two shows a t-calculated value of 0.16 significant at 0.35 at an alpha level of 0.05. this result indicated that the null hypothesis is not rejected showing that there is no significant difference in the mean rating of respondents on the extent of planning processes of ICT management to enhance quality in distance education programme in Nwafor Orizu, college of education distance learning center Nsugbe, Anambra state. Nigeria

Research question two:

To what extent has the organizational processes of ICT management enhances quality in DL programme of Nwafor Orizu college of education DL centre Nsugbe, Anambra state?

Table 3: mean scores and standard deviation of the respondents on the extent of organisational processes of ICT management

Sn	item statement	\bar{X}	SD	Dec
1	The ICT features were designed in line with focus on wider, and integration of resources in DE programmes for quality output	2.00	1.00	LE
2	The ICT facility was structured in an integrated manner for quality access by various departments in DE programme	2.51	1.05	HE
3	There is a clear definition of roles in the use of ICT for quality communication among the diversity of users in the DE programme.	2.55	1.04	LE
4	The staff are exposed to ICT training for effective management of information for quality delivery of the operational goals of the DE programme.	2.76	1.10	HE
5	The staff are innovative in the face new ICT challenges to enhance quality in the DE programme.	2.60	1.07	
HE	Grand mean			
2.65	1.03			HE

From the table three above, all the items were accepted to a high extent which shows that the organizational processes in the management of ICT features were designed in line with focus on wider, and integration of resources in DE programmes for quality output. The ICT facility was structured in an integrated manner with a clear definition of roles in the use of ICT for quality communication among the diversity of users in the DE programme. The staff are exposed to ICT training for effective management of information and innovative in the face of new ICT challenges to enhance quality in the DE programme. These organizational processes have created avenue for enhancing the quality of DE programme and

boosting student's online learning with the mean scores of 2.85, 2.51, 2.55, 2.76 and 2.60 respectively.

Ho₂: There is no significant difference in the mean ratings of staff and students on the extent of organizational processes of ICT management to enhance quality in DL programme of Nwafor Orizu College of Education DL Centre Nsugbe, Anambra State.

Table 4: t-test analysis of respondents on the extent of organisational processes of ICT management

Respondents	No	\bar{X}	SD	Df	t-cal	Sig	Decision
Staff	30	2.75	1.01	146	0.12	0.41	not rejected
Students	118	2.55	1.05				
Total	148	2.65	1.03				

Table four shows a t-calculated value of 0.12 significant at 0.41 at an alpha level of 0.05. This result indicated that the null hypothesis is not rejected showing that there is no significant difference in the mean rating of respondents on the extent of organisational processes of ICT management to enhance quality in distance learning programme in Nwafor Orizu, College of Education Distance Learning Center Nsugbe, Anambra State. Nigeria

Discussion of the findings

The findings reveal that the respondents agreed to a low extent that ICT type available to both the student and the instructors were considered during the planning processes to enhance quality. The accessibility of ICT in the students learning environment were considered in the planning processes to enhance quality was also agreed to a low extent. It is also agreed to a low extent that staff experience with the ICTs in use were considered in the planning processes to enhance quality by meeting their training needs. The learning environment of the student to support the ICTs in use were considered during the planning processes for better quality output was agreed to high extent. The geographical spread of the students' in relation to ICT reach were considered during planning to enhance quality of the DL was agreed to by the respondent to a low extent. The overall implication of this findings is that the planning processes accorded to distance learning programme in distance learning center in Nwafor Orizu College of Education Nsugbe Anambra State is low. This will not enhance the desired quality in DL programme. This finding is in line with the outcome of a national survey conducted among the hiring committee chairpersons of companies on who they would hire among graduates of DL or online and traditional face to face degrees. Their quantitative response was straightforward with 98% of the respondents selecting the candidate with a traditional degree" (Adams and Defleur,

2005). This outcome was due to the low-quality degrees of DL programmes as a result of improper planning as one of the major factors among others.

Furthermore, the findings also show that the organizational processes of ICT features were designed to focus on wider integration of resources in DE programmes for quality output. It was also structured in an integrated manner for quality access by various departments with a clear definition of roles in the use of ICT for quality communication among the diversity of users in the programme. It also shows that staff are exposed to ICT training for effective management of information for quality delivery of the operational goals and display state-of-the-art attitude in the face new ICT challenges to enhance quality in the DL programme. The findings of this study corroborated Palmer's study of 2004 which attest to increase in the use of DL or online training even within corporate organizations was due to increase in e-learning tools which are designed and organize in such a way that enhances the management of course systems, collaborative tools, video conferencing, electronic mail, messaging services, and electronic conferencing. This has enhanced the quality of DL programme in DLS centers especially in Nwafor Orizu College of Education Nsugbe Anambra State. The two null hypothesis shows that the students and staff do not differ in the planning and organizational processes of ICT management in the DL programmes of Nwafor Orizu College of Education Nsugbe Anambra state Nigeria.

Conclusions

Distance learning has become veritable instrument to industrialize the system of education. This is to enable those who has not been reached in the conventional system of education to be served. However, it is discovered that majority of people both students and the employer of labour doubts the quality of degrees possessed by graduates of distance education system. It is seen as been inferior to the conventional system which has made the holder of DL programmes degree or certificate as second-class graduate. The bright for delivery of learning to the learners in DL programme is through Information and Communication Technology (ICT). This study was carried out to determine how effective management of the ICT could enhance the much-needed quality in distance education programme. ICT is the hub upon which the system revolves and the study revealed that a well-managed ICT has a very high potency to enhance the desired quality in DL programmes.

Recommendations

Based on the findings of the study, the following recommendations were made:

1. The planning processes should be well planned ahead of the programme to enhance the quality of the distance learning programme by the center through inputs from Nwafor Orizu College of Education and other stakeholders.

2. The organizational processes of the DL programme should be improved upon to enhance the quality of the programme through training and retraining of staff by the center management.

References

- Abromitis, J. (2002). Trends in instructional technology and distance education. (ERIC Document Reproduction Service No. 472650)
- Adams, J. & Defleur, M. H. (2005). The acceptability of a doctoral degree earned online as a credential for obtaining a faculty position. *The American Journal of Distance Education*, 19(2), 71-85.
- Akpan, C. P. (2008). Enhancing Quality in Open and Distance Education via the Use of ICT in Nigeria. A Paper presented at the 2nd African Council for Distance Education (ACDE) Conference and General Assembly, 8-11 July 2008. Lagos. Nigeria.
- Alaezi, O. (2005). National Open University Plan: Enhancing High Education in Nigeria through ODL Delivery Systems. Lagos. NOUN.
- (ALL-Mukhtar, 2014). History of National Open University of Nigeria NOUN. www.allmukhtar.com
- American Society for Quality (2008) Glossary on Quality. Retrieved 09/008/2018 from <http://asq.org/quality-resources/quality-glossary>.
- Association of Advance Collegiate Schools of Business (2007). Quality Issues in Distance Learning. USA: AACSB International.
- California Distance Learning Project [CDLP] (2013). Adult learning activities/California Distance Learning. www.cdiponline.com
- Ciavarelli, A. (2003). Assessing the quality of online instruction: Integrating instructional quality and web usability assessments. (ERIC Document Reproduction Service No. 480084).
- Federal republic of Nigeria (2013). National policy on education. 6th edition Lagos: NERDC Press.
- Haddad, W. D. (2007). ICTs for Education: A Reference Hand Book retrieved from <http://www.ictinedtoolkit.org>, <http://mw/hpic.NECTEC/th/PNC> downloaded August 2010.
- Iqbal, A. and Ahmad C. (2010). Enhancing quality of education through e-learning: the case study of Allama Iqbal Open University. *Turkish Online Journal of Distance Education-TOJDE* 11 (1)
- Jegede O. (2016). Open and Distance Learning Practices in Nigerian Higher Institutions of Learning in Bates (ed).: Keynote Address at the 3rd University of Ibadan Annual Distance Learning Centre Distinguished Lecture and Stakeholders' Forum Held at the International Conference Centre, University of Ibadan, Thursday, 14th & Friday, 15 July, 2016

- Kpolovie, P. and Awusaku O.K. (2011). ICT adoption attitude of lecturers. Retrieved from https://www.researchgate.net/publication/310124017_ict_adoption_attitude_of_lecturers
- Kustoff, R. (2008). What is organizational innovation? Retrieved from <http://www.ezinaticles.com/?What-is-organisational-innovation?&id=1573028>
- Nwachukwu, O. (2007). Management: theory and practice. Retrieved from <http://www.leadershipmanagement.org/html>.
- Nwizu, S.C. (2016). Higher Distance Education Programmes in Nigeria: The Quality Perspective. UNN 114th Inaugural lecture retrieved on 2/8/18 from www.unn.edu.ng/inaugural-final
- PABILOBA (2017). in Willis, B. (Ed.). Distance education: Strategies and tools. Educational Technology Publications, Inc.: Englewood Cliffs, N. J.
- Surbhi, S. (2015). Difference Between Management and Administration. Retrieved July 2018 from <https://keydifferences.com/difference-between-management-and-administration.html>
- UNESCO (2002). Information and communication technologies in teacher education: A planning guide, Paris. UNESCO
- Yusuf, M.O. (2005). Problems and prospect of open and distance education in Nigeria. Turkish Online Journal of Distance Education 7 7(1) 22-29.
- Yusuf, M. O. (2006). Information and communication technologies and education: Analyzing the Nigeria National Policy for information technology. International education journal 6(3), 316 – 321