Academic Infrastructural Support System on ICT Use in Distance Learning University of Lagos Nigeria

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Abstract
Academic infrastructural support system is the foundation on which distance learning is anchored in an educational and learning environment. It is a component used by staff and student in presentation of academic materials for an enhanced learning experience. It consists of web content management systems, which ensure effectiveness in academic delivery. The use of academic support system aids learners in knowledge discovery, development of intellect and character which promotes academic and personal excellence. However, the University of Lagos Distance Learning Institute uses limited ICT in teaching and learning process with limitation on Internet connectivity, computers and poor power supply, which hampers effective knowledge acquisition in distance learning. In this study, correlation survey was adopted and observed to determine effectiveness of Academic Infrastructural Support System on ICT use. The study population consist representative students from eight departments, randomly selected with 3% using multistage sampling to represent the sample size of 255 respondents. The result indicates promotion of self-development skills ranks high in mean value. The study concludes that academic infrastructural support system on ICT use has tremendous impact on distance learning in University of Lagos, Nigeria.
Keywords: Academic Infrastructural Support System, Information and Communication Technology (ICT), Correlation Study.

Introduction
The academic infrastructure is an indispensible component in an educational system of learning. "If the history of science teaches us anything, infrastructure is an indispensable adjunct to the efforts of individual researchers" (National Research Council 1998). According to Oxford English Dictionary (OED) infrastructure is defined as the "basic foundations of society or enterprise." In education, academic infrastructure refers to the hardware or equipment, software applications and services associated with ICTs, including the network infrastructure, the computing infrastructure, the system and application software, the Internet Service Provider (ISP), the bandwidth, the policy framework and the security infrastructure as Murali (2009) rightly described; learning mode requires a structured network at all its operational nodes and interconnected to each other, through a dedicated network so that all student services can be easily accessed by all operational nodes.

Learning and knowledge rests in a diversity of opinions. As a result, learners must be allowed to connect with others around the world to examine others' opinions and to share their thinking with the world. Distance learning to help learners, function in a networked world, where they can learn at anytime and from anywhere (Ally, 2005). According to Siemens (2004), digital age is an era, where individuals learn and work in a networked environment. As a result, Learners do not have control over what they learn since others in the network continually change information, and that requires new learning, unlearning old information, and/or learning current information.

The use of ICT in learning sees the teacher as facilitator rather than dispenser of knowledge. Teachers serve as guide in teaching and learning process. Infrastructural facility is central in achieving the goal of enabling, sustainable and affordable access to ICT, Anderson, (2007). The potentials associated with information and communication technology, improves the quality of instruction, transforms the school, improves school management, increases access to learning and improves the quality of teachers in educational system, among others, as emphasized in several studies. Information and communication technology allows academic materials to be presented in multiple media, motivates and engages students in the learning process, fosters inquiry and exploration, and provides access to world wide information resources, among others (Haddad, 2003).

In Nigeria, the Educational Reforms Act of 2007 (FME, 2007) clearly highlighted the need to improve the quality of instruction in Nigerian school, provide enriched learning environment, needed to provide more access to education, and provide the students with knowledge and skills necessary for the 21st century work place, among others, as the motivating factor for the educational reforms. It must be underscored that information and communication technologies assists in ensuring the achievement of these goals of the educational reforms. In specific terms, manpower that are competent and constantly given developmental training will be required through the digital libraries, virtual institutions, and other Internet resources, for easy access to teachers on relevant and current resources in their areas. Thus, they must be competent in the use of ICT to harness its potentials for the success of the reforms. Secondly, the quality of students' learning will be

enhanced through their access to the needed academic content through ICT facilities (especially, the Internet).

Information and Communication Technology is essential in the teachers' professional development, as a guide to sources of knowledge. In our contemporary knowledge society teachers require large, rich, and easily accessible-knowledge base which can be provided through ICT technologies that support teacher's professional development (Gallimore and Stigler, 2003). Teachers are life-long learners to keep abreast of new knowledge, pedagogical ideas, and technology (World Bank, 2003), relevant to successful implementation of Nigerian educational reforms. ICT enhances learning by doing, and increasing the information availability to learners, thereby engendering collaborative learning (World Bank, 2003). ICT empowers learners with awareness and skills which are essential for success in contemporary knowledge economy (Kante, 2003). Lastly, ICT provides new frontiers for providing access to basic education for disadvantaged children and youth excluded from the formal school system. As modern ICTs are attractive to children and youth, they provide unmatched learning opportunities for them to learn within and outside the formal school system.

ICT are powerful motivational tools for learning through games, exploration, collaboration, and learning work-related skills (Fillip, 2002). Education enhanced through ICT, provides flexible learning opportunities with collaborative aspects and rapid communication among learners and between the learners and academic mentors (World Bank, 2003). Also, ICT provide opportunities for disenfranchised individuals' access to quality education. They can be relevant as assistive technology, adaptive technology, and as a tool for knowledge and support (Jurich and Thomas, 2002). ICTs open new doors for people with disability to have enhanced access to education in conventional and distance education settings (Jurich and Thomas, 2002).

ICT utilizes a broad range of technologies that are applied in the process of collecting, storing, editing, retrieving and transfer of information in various forms which is one major factor of national development and global competitiveness in education. ICT is used globally to translate ideas into realizable goals and develop same into concrete achievement, as its potential spans, improves the educational system, (Moursund, 2005). It is evident that ICT incorporates and extends power of reading, writing and arithmetic. It facilitates the automation of mental activities.

ICT has proven to be valuable aid to solve problem and accomplishing task in education and other human endeavors. The concept of Teaching and Learning has made great progress in recent times. According to Siemens (2004), theory for digital age is needed as a guide to the development of learning materials for the networked world. Educators should be able to adapt existing learning theories for the digital age, while at the same time using the principles of connectivism to guide the development of effective learning materials.

Today, ICT provides knowledge base system that includes Knowledge acquisition, incubation, amplification and dissemination. Evidently information is a key resource which permeates teaching, learning, research, and publishing. Okeh & Opone, (2007) states that the use of new information technology serves three main functions in the national educational growth. These are to: (a) Deliver all or part of learning experience to learners; (b) Supplement and extend content provided in different forms other than printed copy; and (c) Provide a two way channel of communication for exchange between tutors and students with their peers for feedback or for learning, problem-solving, advice, debate and reports.

ICT is a global phenomenon which is embraced all over the world due to its importance. Government all over the world is harnessing the rich potential of ICT and as a tool for educational development, economic recovery and wealth creation (Okonta, 2006). It is very useful in tackling the ills and problems facing the educational system. Today, No nation can attain its height educationally, economically and socially without ICT. However the Distance Learning Institute University of Lagos utilizes ICT to enhance their teaching and learning ability with limited Internet connectivity, computers and poor power supply.

PURPOSE OF THE STUDY
The purpose of this study was to examine the effectiveness of Academic Infrastructural Support System on ICT Use, in improving the quality of teaching and learning experience in Distance Learning Institute University of Lagos, Nigeria.

Research Question
What is the Use of Student academic support system in distance learning?

Methodology
The study adopted the descriptive survey design of correlation type. The estimate study population adopted multistage sampling during the selection of students from distance learning Institute University of Lagos.

Study Population
The study population consists of representative students from the Faculty of Education, Business Administration and the Social Sciences with a total study population of 8,414. Three faculties participated in the study with strata of eight (8) departments. Three per cent (3%) of each population in all the eight departments was randomly selected, to represent a sample of 255 respondents for this study.

Instrument
The instruments used to collect data for this study was questionnaire. The research questions were analyzed using statistics, such as mean, standard deviations and variance, while the hypothesis was tested with Pearson correlation coefficient and Analysis of Variance (ANOVA) at 0.05 level of significance. There is significant relationship between infrastructural Support and Use of ICT by distance Learners as shown in table at * Sig at .05 level (r = .324*, N= 255, P < .05).

Results and Findings

S\N	Students Academic Support System	SD N %	D N %	A N %	SA N %	Mean	Std. Dev.
1	Enhanced students' readiness for learning, including their desire and ability to engage in distance learning,	28 (11.0%)	19 (7.5%)	134 (52.5%)	74 (29.0%)	3.00	.90
2	Promotes self-development strategies so that Student can accept responsibility for developing their own skills.	27 (10.6%)	28 (11.0%)	119 (46.7%)	81 (31.8%)	3.00	.92
3	Enhances human communications both that which is delivered on campus and at a distance.	30 (11.8%)	23 (9.0%)	121 (47.5%)	81 (31.8%)	2.99	.94
4	Encourages and facilitates interaction among and between student(s), faculty, tutor, institutional support persons and academic content.	27 (10.6%)	26 (10.2%)	128 (50.2%)	74 (29.0%)	2.98	.90
5	It personalises the learning process so as to be responsive to different individuals and groups (rather than relying on fixed elements such as a course syllabus).	28 (11.0%)	23 (9.0%)	135 (52.9%)	69 (27.1%)	2.96	.90
6	Supports Forum/ Discussion Board/ Bulletin Board System – BBS, which is a communication tools that allows learners and teachers to post messages, files and information on the spaces provided.	33 (12.9%)	22 (8.6%)	126 (49.4%)	74 (29.0%)	2.95	.95
7	Help students to build their professional resumes, develop interviewing strategies, and deal with life issues.	31 (12.2%)	23 (9.0%)	134 (52.5%)	67 (26.3%)	2.93	.92
8	Supports e–mails tools which allow students and teachers to send messages, e–mails and files to receiver's' personal spaces.	31 (12.2%)	31 (12.2%)	124 (48.6%)	69 (27.1%)	2.91	.93
9	Support learners by enabling them to submit the assignments and ask questions to teachers, or to make appointments and collaborate with the other people.	32 (12.5%)	26 (10.2%)	130 (51.0%)	67 (26.3%)	2.91	.93
10	Support Listserv which allows people with the same interests to gather and exchange ideas, ask for helps, ask and answer questions, provide and retrieve information.	32 (12.5%)	32 (12.5%)	124 (48.6%)	67 (26.3%)	2.89	.94
11	Facilitates peer partnerships through communication for mutual support, may help bridge student support gaps in distance learning.	31 (12.2%)	33 (12.9%)	125 (49.0%)	66 (25.9%)	2.89	.93

What is the Use of Student Academic support system in distance learning?
The use of student academic support system was explained from the student's functional characteristics and the internet access in the research survey. The Student academic supports are necessary information and communication tools which supports student access to the resources available to improve their study experience. The percentage of response on effective use of academic support, enhances student's readiness for learning, including their desire and ability to engage in distance learning and promotes self-development strategies so that student who can accept responsibility for developing their own skills has the highest mean value of 3.00. The table reveals that student's information support allows people with the same interest to gather and exchange ideas, ask for helps, answer questions, provide and retrieve information which rated with least mean value of 2.89. This finding conforms to those of Okeh & Opone (2007), who reported that ICT are powerful tools that can link schools in the western world with those in Nigeria and make the teaching procedures less strenuous as it will be used to support the conventional classroom work.

In addition, student academic support system facilitates peer partnerships through communication for mutual support, which helps bridge the gaps in distance learning and has a mean value of 2.89 as indicated in the result. The support of learners by enabling them to submit assignment and ask questions to teachers or to make appointment and collaborate with people which has a mean value of 2.91 clearly indicates that the use of ICT in studying and sourcing for materials for research/class work helps the students in their effective learning but with the findings of Yusuf (2005) who reported that challenges facing the application of ICT in teaching and learning were those related to limited Internet connectivity, computers and poor power supply which influenced the mean

value.

The support of listserve which allows people with same interest to gather and exchange ideas, ask for help, ask and answer questions, provide and retrieve information with a mean value of 2.89, shows that there is a wide opportunities for teacher educators to be creative in their teaching and in the students' learning. This study finding is in line with that of Okeh & Opone (2007) who stated that ICT gives room for effective learning and creates a fast and better method of collecting, processing, compiling and disseminating information to support students and researchers in both inside and outside institutions. Consequently, with the use of ICT facilities, students are more engaged in activities, show more interest and demonstrate a longer attention span.

Conclusions

This study has provided some empirical evidence to support the limitations of student academic support system in teaching and learning education programme. The findings from this study revealed that distance learners utilize ICT facilities in sourcing for materials/resources needed to impact on learner's knowledge. Information and communication technologies offer veritable tool for ensuring the success of the educational reform programmes of the Federal Government. The value of ICT is globally recognized. However, there is a big gap in ICT skills between average Nigeria student and teaching staff of comparable economies around the world (Aniebonam, 2007). Nigeria, as a nation, and Nigerians, as citizens, are never in want of policy, but always go short of policy implementation. The potentials for information and communication technologies should be exploited to ensure the success of educational reforms.

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