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# E-Learning and Academic Staff Development in Nigeria: A Study of selected Universities in the Southeast Zone

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#### Abstract

Academic Staff Development through electronic learning in Nigeria Universities, was undertaken with a view to explore the extent with which e-learning have improved on the academic staff development in Nigeria universities towards effective teaching and learning. The study adopted descriptive survey method. The study was carried out with the population of fourteen thousand, five hundred and sixty academic staff drawn from the five federal universities in the south east, Nigeria. Taro Yamani formula was used to determine the sample size of three hundred and eighty nine (389) academic staff. Pearson Moment Correlation Coefficient of determination was used to determine the relationship training on e-learning has on developing the academic staff of Nigeria universities. While t T-test was used to analyze the tested hypotheses to show the extent dependent variables have affected independent variables. From the data analyzed, the study revealed that the activities of the ICT specialist in the development of academic staff of these federal universities have not been fully achieved as compared with other universities in the western world, the result showed that there is significant correlation between inadequate funding and provision of ICT facilities in these which have not developed as new federal some of these universities in the south east, and the study showed that e-learning have done well to certain extent in developing the academic staff of other universities, but more efforts needed to put in improving academic staff performance in these universities The study concludes that the successful development of academic staff through e-Learning training in Nigeria universities largely depends on the degree of supports system from the government in order to boast their performance effectively. The further recommend that Government should provide Information Communication Technology facilities through effective funding to boost training on e-learning process in order to develop academic staff to perform optimally, Federal government through their network agency should work on their network service provider to ensure adequate and steady network services to the users, Federal government through universities governing council should take adequate measure in providing conducive working environment that can drive the activities of the ICT specialists to have impacted on the development of the academic staff.

Keywords: e-learning, training, staff development, Universities, Nigeria

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#### Introduction

The developmental growth of e-Learning gained recognition majorly in the content and form of new available courses in different universities programs designed to proffer solutions to the present challenges facing higher institutions in the society. It entails course content training presented to students using texts, voices and videos by teacher through internet in order to impart knowledge in the primary, post-secondary and as well tertiary institutions to amplify their human capital potentials towards improving their living conditions in the society. The application of E-Learning in training and academic research has become a necessity and essential to both personnel and senior management and or student and the education system which has resulted in direct, objectives and first-hand learning (Hamidreza, Arasyabi, & Asgarzade, 2013). Ajadi, Salawu, and Adeoye (2008) assert that the development of e-learning in Nigeria could be traced back to the development of telecommunication which began in 1886 when e-cable connections was established by the colonial masters between Lagos and the colonial office in London to transmit information and receive feedback. By 1893, all government offices in Lagos were provided with telephone service for easy communication, feedback and easy access and later all other parts of the country were provided with telephone services.

Oluwalola & Awodiji (2019) posits that the development of human being through electronic training is one of the most vital components for effective and efficient performance in every organization in the face of technological transformation, be it public or private. It is the hub of all activities in our nation's universities vying for technological shift in her academic activities. This formed the basis for measuring the effect of training on e-learning on academic staff development in Nigeria universities so far as it bothers on the skills, knowledge, ability, and adaptability to the nature of learning environment therein in.

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The advent of proficient technological developments in the area of information and communication technology (ICT) that gave birth to the wide spread of Internet facilities in the world today, has helped in boasting the academic consciousness in the world inclusion of the south- east universities to enter the era of Informatics in projecting teaching and learning interest since. This in every form develops academic personnel through electronic training and learning. Information and communication technology in educational sphere and the training of human capital is one of the most important indicators of the educational transformation to a digital level, because it plays a vital role in the efficient and effective dissemination of information, knowledge, skills, and as well effective teaching and learning in Nigeria tertiary institutions and world at large (Wordu & Chinda, 2019; Nkwede, Udeuhele, & Ereke, 2022). The process was welcomed by business moguls in 2000's when they use e-learning to train their workers, thus enhancing on-line and off-line training. This strikes the balance between skilled and unskilled workforce in an organization. The employees began to have opportunities to improve on their technical competencies by expanding their knowledge and skills on the job or task assigned to them. Nowadays, people access tertiary education programs from their homes without visiting the institution through e – learning processes. This is the reason why new public administration is an anti-positivist, anti-technical and anti-hierarchical reaction against traditional public administration. It was on this premise that Ellis & Kuznia (2014) posit that the encumbrance process of learning should shift from traditional method to modern epoch since it does not provide room for faster learning capable of transforming the society through e- governance that caters for human capital development.

Khayinga and Muathe (2018) corroborated with the above assertion that in order to develop academic staff through e-learning universities need to place more emphasis on developing human capitals which reflects the view that market value depends less on tangible resources, but rather on intangible ones, main human resources. Getting (recruiting) and keeping (retaining) the best employees. It could be deduced that E- Learning in academic staff development focuses on training academic staff that place much value on an unfolding process and carries an implication of growth and maturation through lowest formal education level to tertiary level and the development of leadership skills, as well as knowledge.

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However, E-learning is the ability of the individuals to access or share materials of all kinds and formats such as videos, slideshows, word documents and portable Document Format (PDFs), Conducting live online classes, and communicating with teachers through chats and messages in order to acquire knowledge. The use of electronic learning in the Nigeria universities in developing academic staff is germane in order to enhance effective teaching and learning. This is because it makes for a digital learning capable of enhancing efficiency in imparting knowledge on the students, thus providing human capitals required in the labour market in the current era. This auspicious development may have produced enough results if the activities of Information Communication Technology (ICT) experts /specialist were paid adequate attention to serve as guidance in enhancing effective e-learning knowledge by training and retraining academic staff in Nigeria universities. The activities of network providers is very crucial for effective operations of electronic learning, since it is the only gateway to access online materials by internet users and other academic experts. This is done through internet bandwidth that connects the user to web. It is the degree of data circulated or transferred across a particular path. It is also classified as data or digital, and network bandwidth.

It is commonly observed that there is always shortfall in the provision of such network service to the users, and as such results into information distortion, confusion, and frustration on the internet users. Steady network providers ensure steady and effective use of e-learning in teaching and learning, but if it is poor it might reduce the efforts of academic staff toward optimal performance in the selected universities in south-east zone. There is always a case of financial mismanagement in Nigeria organizations due to "getting rich quicker syndrome" peculiar with Nigerians; such may have endangered the provision of E-learning facilities in most of the universities in Nigeria. Whereby the management of funds meant for the procurement of e-learning facilities seems not effectively utilized in most of Nigeria universities. This makes academic personnel to develop low ebb at accessing the university's ICT centers because of poor facilities or e-learning materials therein. Thus, limiting e-learning knowledge among our academia in going digital in the present day teaching and learning.

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The major focus of this study is to explore the impact of e-learning training on academic staff development in Nigeria universities. While other specific objectives are: Determine the extent to which activities of ICT specialists have developed academic staff in Nigeria universities; analyze the extent funding has affected provision of e-learning facilities in Nigeria universities andassess the extent e-learning has improved the academic staff performance in teaching and learning in Nigeria universities. The study was guided by the following research questions;to what extent have ICT specialists gone in developing academic staff of the Nigeria universities? To what extent has funding affected the provision of e-learning facilities in Nigeria universities? To what extent has e-learning improved the academic staff performance in teaching and learning in Nigeria universities?

### **Literature Review**

## **Electronic-Learning in Academic Institutions**

Literal adage has it that knowledge is power. This means that without education there will be no knowledge, because education remains a veritable tool in the acquisition of knowledge which will only be achieved through learning. Learning is also said to be a process because it has stages upon which it flows. E-learning is a modernized process towards the acquisition of knowledge in order to improve teaching and learning in the universities today. This is designed to meet up with the present trend in academic activities at proffering a lasting panacea to educational challenges today. E-learning is a tool for enhancing academic staff development in the transformation of human capital resource for use. For e-learning to realize academic Excellence in Nigeria, it has to meet the needs of the present academic trend without compromising the ability of the future academic generations to meet their own academic needs.

It was on the above premise that Ilechukwu and Njoku (2014) posits that e-learning is the adoption and use of information communication technologies (ICTs) to extend and enhance learning in and out of schools. The point here is that it is a new digital method of learning in every institution both tertiary and post-secondary without compromising the future academic hope in the globe. They further opine that E-learning processes and applications include webbased learning, computer - based training, virtual classroom opportunities and digital

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collaborations, that its contents could be delivered through the internet, intranet /extranet, audio or video tape, satellite TV, CD Rom. And it can be self-paced or instructor-led and includes media in the forum of text, image, animation, streaming video and audio etc. E-learning is essentially the computer and network enabled transfer of knowledge and skills with reference individual experience and practice (Nwokike (2011) in Ilechukwu and Njoku, 2014). Otuka (2010) in Ilechukwu and Njoku (2014) attributed e-learning acronyms to include CBT (Computer-Based Training); IBT (Internet-Based Training); WBT (Web-Based Training). E-learning from the above view is a modifications on the traditional method of teaching and learning in Nigeria educational sector from even primary to the tertiary level in order to equalize the academic gap with the developed and third world countries.

Fundamentally, e-learning is a way of acquiring knowledge by the use of instructions given through all kinds of electronic channels such as, satellite beam, internet, intranets, extranets, audio/video tape, CD Rom and interactive TV in which information can be obtained, delivered, and utilized at anytime and any location. It was on this note that Dabbagh (2005) posit that E-Learning could be seen as "an open and distributed learning environment that utilizes pedagogical tools, enabled by Internet and Web-based technologies, to facilitate learning and knowledge building through meaningful action and interaction". Eze, Eze, and Bello (2018) corroborated with the above that the term e-learning defines technology mediated and digitally empowered learning that utilizes hardware (e.g., PCs, tablets, printer, digital camera, digital videos, scanner, overhead projector (OHP), and Overhead Projector screen), software (operating systems, cloud technologies, applications (apps), writing, editing, MS Office) and (CD textbooks that fall in the category of courseware, OERS, e-content) and others (e.g., USB drives, CD-ROM), whether from a distance or face-to-face classroom setting (PC helped learning), to empower teacher to student interactions.

Basically, it transforms tertiary institutions from traditional teaching and learning to module-driven, Information Communication Technology-based customized, and adaptable and synergistic learning that involves learners, instructors, facilitators, and the experts as noted by (Falana, 2015; Markus and Robey, 1998; Olojo *et al.*, 2012 in Eze and Bello, 2018). E-learning

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is simply electronic learning made- easy. This is because it employs electronic technology devices to enhance educational learning at ease in the globe today. Kyari, et, al (2018) Observed E-learning as a kind of learning that is enabled by electronic technology that could be web-based learning, computer-based learning, or virtual classrooms and content delivery is done through enetworks, audio or video tape, satellite TV, video conferencing, CD-ROM, I-pods, e-mails, wireless and mobile technology. They went further to distinguish e-learning from distance learning. E-learning refers to the use of information and communication technology to deliver education to students without geographical limitation, while distance learning does not use electronic media for course delivery in all cases. E-learning refers could be the use of electronic tools for teaching and learning. It adopts technological devices to teach learners anytime and anywhere. It trains, imparts knowledge, and spurs students to interact with one another from different locations. It is the act of studying a course online with the aid of modem, wireless, or cable connection to access academic course materials from e- devices such as computer, phone, television, e-mail etc. e-learning can be grouped as follows: Self-paced learning, App-based learning, Course-based learning, Video-based learning, Lesson-based learning, Group learning, One-on-one learning, and Article-based learning.

The Federal Ministry of Education, in an effort to reposition the educational sector in Nigeria so as to meet global standards and competitiveness, formulated National Policy on Information and Communication Technologies (ICT) in Education in collaboration with the necessary agencies. It was approved by the Federal Executive Council in April 2010 for the implementation across the Federation. This policy aimed at ensuring qualitative education for the realization of sustainable socio-economic development, global competitiveness and the individual's ability to survive in the contemporary learning environment. The implementation of the policy is expected to amplify speedy transformation of teaching, learning and educational administration in Nigeria. (Federal Ministry of Education, 2019). This marked the period when Nigeria universities began to queue into internet facilities to enhance easy e-payment of school fees, e-library, e-registration, e-payroll and other e-transact with both internal and external agencies. The adoption of this steady innovation and its approaches by lecturers in Nigeria universities today gave more concern to scholars in both public schools and private institutions. This development jettisoned traditional

17(1) (June, 2024):267-292

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approaches of teaching and other academic activities in these Nigeria universities. Anene, Imam, and Odumuh (2014) maintained that e-learning has moved education from the traditional form of education to new methods of teaching and learning through the explosion of Information and communication technology. They further conceived e-learning to involve the use of electronic technology to deliver education and training, to monitor learner's performance and to report the learner's progress. This refers to the extent e-learning have contributed in developing the capitals in human beings through training and learning. Opescy (2018) in Wordu and Chinda (2019) sees E-learning as using electronic applications and process to learning. These applications and processes include web-based learning, computer-based learning, virtual classroom and digital collaboration. Electronic-Learning in academic environment remains the catalyst in effective academic staff development, because it requires formal learning to acquire knowledge, training to gain skills and competencies for effective academic performance, and leadership qualifications as expected among academic gurus. This is because academic staff development cannot be achieved without training, and it juxtaposes the stand of education on knowledge acquisition. Academic institutions that spends optimally on e-learning stands a good chance of having comparative advantage on academic personnel that will enhance higher and best student's performance to match with the present educational trend. As such human capital development becomes a part of an overall effort to achieve cost-effectiveness in producing competent manpower with sound capitals.

E-learning level has made education at the universities level simpler that no matter ones cognitive quotient he or she can access education even at home without being guided by anybody. This is because some of these electronic devices that aid learning have instructors that directs the user on what to do per time. Ellis and Kuznia (2014) reflected on the above when they reports that the global nature of eLearning has led to increased usage of online universities or virtual corporate universities as training platforms for employees. E-learning has played a very vital role in university education in the globe today. It have manifested in a magnificent manner that someone in another country can access tertiary education in another country without visiting the location of the institution. Example is visual conference or online studies. Hubackova (2014) gave more insight on this that the new wave of improvements in E-Learning is mainly in the

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content and form of new courses and Programmes for universities in which both Open and Distance Learning Network (ODLN) issued to exchange academic experiences have played a great role in contact with other countries.

### **Theoretical Framework**

This study was anchored on Dabbagh's e-learning Cognitive theory, 2005. Dabbgh's cognitive theory of e-learning bothers on Instructional Technology in the Graduate School of Education at three components of information systems such as the people, technology, and services. Dabbagh propounded the theory to explain the present trend advances in Internet and Web-based knowledge technologies and as well to remodel the boundaries and pedagogies involved in distance learning by defining its scope and interconnectedness in teaching and learning. Dabbagh's theory explains the extent e-learning develops learners to possess certain kind of cognitive quotient that enables them to complete their tasks more easily without compromising the stress involved in acquiring and imparting knowledge. The tenet of Dabbagh's cognitive theory is that e-learning is hinged on an interaction that exists among pedagogical models, that is instructional tools, and technologies to enhance reasonable learning and knowledge or cognitive building.

The model includes open learning, distributed learning, learning communities, communities of practice, and knowledge building communities. Open learning refers to on-line users which involves night course, or distance course, workshop, seminars etc, distributed learning is the network explorers, learning communities (the students in the university environment), communities of practice (instructors, teachers or lecturers as the case may be), and knowledge building communities are those who also commits their resources to provide the e-learning services. For further clarity, Dabbagh's E-Learning cognitive theoretical framework has it that since learning spaces are becoming more dynamic and complex, that peoples learn from activities and the tools supporting such activity to extend their cognitive or knowledge potentials. People makes interaction with e-learning system, technologies permits direct or indirect interaction with various users of e-learning, while systems provide services to meet up specified strategies for activities. Service is considered as the major e-learning output. Dabbagh (2005) in

17(1) (June, 2024):267-292

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her model conceived" learning as a function of interactions with people and the shared tools of the users that occasioned development of pedagogical constructs and models such as distributed learning, open/flexible learning, asynchronous learning networks, knowledge building communities, and communities of practice, and the understanding of distance learning as the intentional organization and coordination of distributed forms of interaction and learning activities to achieve a shared goal". Learning is a social process whether it is done in group, time, and space does not matter since e- technology is the basis upon which knowledge are built. This model educates the teachers on how to use some e-learning instructional strategies to impart knowledge on the learners. This is because information passes through series of transformations in the minds of the receiver until it will permanently be stored in the long-term memory and dishes it out for use any time it is necessary.

The theory is summarized that academic staff development can be achieved through effective inputs on education, health and moral values, thus achieving expected technical competencies required from them. Manuela, Fernando, and Tiago (2015) contend that electronic-learning system theoretical framework refers to the components system of network providers and it's categories of the users. It comprises of e-learning system stakeholders, e-learning technologies, and e-learning activities. The e-learning stakeholders refers to the people or the network users. The people in e-learning system comprises of the e-learning system stakeholders which include customers (students and employees), suppliers (the lecturers or teachers, providers, accreditation Bodies, technology providers as well as educational institutions), professional Bodies and commissions, while education ministries, industries, companies are the shareholders and boards. The electronic learning technologies deal with the production and the usages of e-learning materials and devices. It include as follows; e-content (visualization tools, authoring tools, digital audio and video, search engines journal or newsletters web link manager etc), communication (social networking, forum chat and discussion, mail, video call etc. while collaboration refers to problem and solution sites, multi internet user dialog, mentoring based on one-one and tool sharing network. E-learning activities comprises of pedagogical model of learning and instructional strategies. The pedagogical model focuses on open and distribution learning, learning communities, Practicing groups, and knowledge building groups. Instructional strategies

17(1) (June, 2024):267-292

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are the e-learning content outputs which the network services people or the shareholders pay for. The above explanations elucidate the holistic e-learning system theoretical framework.

## Methodology

Descriptive survey design was adopted in the study. This design enabled the researcher to survey and use sample of the total population to pursue and realize the objectives of the study. This design is the type in which a group of people or items are studied by collecting data from only a few people or items considered to be representative of the entire group. The major area of this study was on the selected universities in the south east zone which comprises Ebonyi, Enugu, Anambra, Abia, and Imo state. The universities consists of Federal University of Science and Technology, Owerri, Alex Ekwueme Federal University, Ndufu-Alike, Nnamdi Azikiwe University, Awka, University of Nigeria Nsukka, and Federal University of Agriculture, Umudike.

The population of the study consists of all the academic staff drawn from the Federal Universities in the south east zone. The breakdown is as follows: University of Nigeria Nsukka; five thousand one hundred and nineteen academic staff, Alex Ekwueme Federal University, Ndufu-Alike; seven hundred and ninety eight academic staff, Federal University of Science and Technology, Owerri; two thousand five hundred and sixty one, Nnamdi Azikiwe University, Awka; three thousand eight hundred and seventy four, and Federal University of Agriculture, Umudike; two thousand two hundred and eight academic staff. Therefore, the population of the study is fourteen thousand, five hundred and sixty (14560) academic staff. Source: institutions personnel units, 2021.

**Table 1: Population distribution table** 

S/N	Name of institution	Population
1	UNN	5119
2	AEFUNAI	798
3	FUTO	2561
4	FUAU	2208
5	UNIZIK	3874
	TOTAL	14560

Source: Universities personnel unit, 2024

17(1) (June, 2024):267-292

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## **Sample and Sample Techniques**

The sample size for this study was determined using Taro Yamani formular.

$$N = \frac{N}{1 + N(e)^2}$$

Where n = desired sample size

N = total population

 $e = accepted error limit (0.05)^2$ 

1 = constant

$$n = \frac{N}{1 + N (0.05)^2}$$

$$n = \frac{14560}{1 + 14560 \times 0.0025}$$

$$n = \frac{14560}{1 + 364}$$

$$n = 37.4$$

$$= 389$$

Therefore, the sample of the study is 389.

The study employed simple random sampling techniques so as to give every characteristics of the sample equal representation.

However, Kumars proportional allocation formular was used in allocating the structured questionnaires to the respondents drawn from the 5 federal universities in the south east.

$$nh = \frac{Nhx \ n}{N}$$

Where Nh = Population size

n = sample size

Nh = Number allocated to each institutions

17(1) (June, 2024):267-292

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Table 2: Questionnaires Allocation to the Respective federal universities in South-East.

S/N	Name of Institutions	Population	Calculation	Proposed Respondents for each of the Institutions
1	UNN	5119	5119 x386 14560	137
2	AE FUNAI	798	798x389 14560	22
3	FUTO	2561	2561x389 14560	68
4	FUA	2208	2208x389 14560	58
5	UNIZIK	3874	3874x389 14560	104
	TOTAL	14560		389

**Source:** University personnel units.

## **Analytical Techniques**

The data collected for this study was analyzed using frequency tables, percentages to ascertain the number of occurrences of phenomenon of interest. Pearson product moment Correlation Coefficient was used to determine the effect of the two variables at interval of time, while t—Test was used to analyze the formulated hypotheses.

$$r = \sqrt{\frac{(n\Sigma X)(\Sigma Y)}{(n\Sigma X^2 - (\Sigma X)^2 (n\Sigma Y)^2}}$$

N = Number of pairs of scores

 $\sum X^2$  = sum of the products of paired scores

 $\sum X = \text{sum of } x \text{ scores}$ 

 $\sum Y = \text{sum of scores}$ 

 $\sum X^2 = \text{sum of squared x scores}$ 

 $\sum Y^2 = \text{sum of squared y scores}$ 

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## **Results & Discussion**

## **Empirical results on scaled responses using Questionnaire Structured Format.**

Table 3: Response rate on the extent the activities of the ICT specialists have developed the academic staff in Nigeria universities

	Response Item		SA	A	U	SD	D	Total	Mean	SD
	•		5	4	3	2	1			
1	ICT experts have fully	No:	184	137	20	13	21	375		
	adopted e-learning	Os:	920	548	60	26	21	1575	4.2	6.58
	programmes in your	%	49	37	5	3	6	100		
	university									
2	ICT expects have created	No:	210	115	10	15	25	375		
	awareness on e-learning	Os:	1050	460	90	30	25	1655	4.41	7.27
	in the South-East	%	56	31	2	4	7	100		
	universities									
3	ICT expects ensure	No:	180	165	5	15	10	375		
	steady functional	Os:	900	660	15	30	10	1615	4.31	6.92
	operation of e-learning	%	48	44	1	4	3	100		
	facilities in your university.									
4	ICT experts have not train	No:	30	40	20	180	105	375		
	academic staff for the	Os:	150	160	60	360	105	835	2.22	1.84
	acquisition skill	%	8	11	5	48	28	100		
5	My skill on the use of ICT	No:	167	163	20	9	16	375		
	have improved over the	Os:	835	652	60	18	16	1581	4.22	9.74
	years	%	45	43	5	3	4	100		
6	The skill acquired via	No:	175	145	15	15	25	375		
	ICT training have	Os:	875	580	116	30	25	1626	4.34	3.79
	impacted on my academic	%	47	39	4	4	7	100		
	prowess									
7	My operational dexterity on	No:	105	40	20	180	30	375		
	ICT have been developed	Os:	525	160	60	360	30	1135	3.03	3.62
	due to training	%	28	11	5	48	8	100		
8	I access internet easily	No:	180	165	5	15	10	375		
	without any hiccups	Os:	900	660	15	30	10	1615	4.31	6.92
	, 1	%	48	44	1	4	3	100		
	TI 110 (2021)									

Source: Field Survey, (2024)

Table 3 above shows the response rates on the extent the activities of the ICT specialists have developed the academic staff of the federal universities in South East, Nigeria as contained in

17(1) (June, 2024):267-292

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questionnaire items ranging from 1 to 8, with their respective means score and standard deviation. The average (mean) value of each questionnaire item was gotten by diving the overall score with the number of observations while the standard deviation measures spread or dispersion from the observations. Standard deviation also describes how individual values are located from and around the mean. Response rates on question 6 shows that 13 (3%) of the total respondents strongly disagree with the statement, 21 (6%) of the respondents disagree, 137 (37%) of the respondents agree and 184 (49%) of the respondents strongly agree that ICT experts have fully adopted e-learning programmes in their university, while 20 (5%) of the total respondents were undecided. From table 3 above, the mean and standard deviation of the overall score on the questionnaire item were 4.02 and 6.58 respectively. Their responses as indicated showed that ITC adoption have stir e-learning as was shown in UNN, UNIZIK, FUTO, FUA and AL-FUNAI respectively.

Item 2 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 115 (31%) of the respondents agree and 210 (56%) of the respondents strongly agree that ICT expects have created awareness on e-learning in the South-East universities, while 10 (2%) of the total respondents were undecided. From table 6 above, the mean and standard deviation of the overall score on the questionnaire item 2 were 4.41 and 7.27 respectively.

Response rate on item 3 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 10 (3%) of the respondents disagree, 165 (44%) of the respondents agree and 180 (48%) of the respondents strongly agree that ICT expects had ensured steady functional operation of e-learning facilities in their university, while 5 (1%) of the total respondents were undecided. The mean and standard deviation of the overall score on the questionnaire item were 4.31 and 6.92 respectively. The results of the mean and standard deviation on their responses to item 3 affirmed that the ICT expects had ensured steady functional operation of e-learning programmes in the respective universities.

In responding to questionnaire item 4, it shows that 180 (48%) of the total respondents strongly disagree with the statement tha tICT experts have not train academic staff for the acquisition

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skill, 105 (28%) of the respondents disagree, In UNN, UNIZIK, FUTO and FUA, 40 (11%) of the respondents strongly agree and 30 (8%) of the respondents strongly while 20 (5%) of the total respondents were undecided as observed in Ae-FUNAI. The mean of the overall score on item 4 was 2.22 while the standard deviation was 1.84. The results of the mean and standard deviation on their responses on item 4 were relatively below 3.5 suggesting that they have trained academic staff for the acquisition of internet skills.

Response rate on item 5 above shows that 9 (3%) of the total respondents strongly disagree with the statement, 16 (4%) of the respondents disagree, 163 (43%) of the respondents agree and 167 (45%) of the respondents strongly agree that their skill on the use of ICT have improved over the years, while 20 (5%) of the total respondents were undecided. From table 6 and item 5 above, the avaerage (mean) and standard deviation of the overall score are 4.22 and 9.74 respectively.

Responses on item 6 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 145 (39%) of the respondents agree and 175 (47%) of the respondents strongly agree that the skill acquired via ICT training have impacted on their academic prowess, while 15 (4%) of the total respondents were undecided. From their responses on item 6, the avaerage (mean) and standard deviation of the overall score are 4.34 and 3.79 respectively.

More so, responses on item 7 above shows that 180 (48%) of the total respondents strongly disagree with the statement, 30 (8%) of the respondents disagree, 40 (11%) of the respondents agree, and 105 (52%) of the respondents strongly agree that their operational dexterity on ICT have been developed due to training, while 20 (5%) of the total respondents were undecided. Given their responses on item 7, the mean and standard deviation of the overall score on the questionnaire item were 3.03 and 3.62 respectively.

Item 8 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 10 (3%) of the respondents disagree, 165 (44%) of the respondents agree and 180 (48%) of the respondents strongly agree that they can access internet easily without any hiccups

, while 5 (1%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.31 and 6.92.



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**Table 4:** Response rates on the extent funding have affected the provision of e-learning facilities in Nigeria universities.

	Response Item		SA	A	U	SD	D	Total	Mean	SD
			5	4	3	2	1			
9	Limited funding is one of	No:	167	163	20	9	16	375		
	the problems of e-learning	Os:	835	652	60	18	16	1581	4.22	9.74
	adoption in the South East	%	45	43	5	3	4	100		
10	Diversion of fund meant for	No:	100	240	10	15	10	375		
	the provision of e-learning	Os:	500	960	30	30	10	1530	4.08	6.21
	facilities	%	27	64	3	4	3	100		
11	Poor funding of ICT centers	No:	185	145	10	15	20	375		
	have denied academic staff	Os:	925	580	30	30	20	1585	4.23	6.66
	effective performance in	%	49	39	3	4	5	100		
	your university									
12	Poor funding of ICT centers	No:	105	40	20	180	30	375		
12	affects academic staff	Os:	525	160	60	360	30	1135	3.03	3.70
	development through to e-	%	28	11	5	48	8	100	2.02	2.70
	learning in your university	,,	20			10	Ü	100		
13	Adequate fund have been	No:	150	55	10	155	5	375		
	earmarked for the provision	Os:	750	220	30	310	5	1315	3.51	4.59
	of e-learning equipment	%	40	15	3	41	1	100		
	yearly									
1 /		NT.	175	1 15	1.5	1.5	25	275		
14	Procurement of inferior e-	No:	175	145	15	15	25 25	375	1 2 1	2.70
	learning equipment is due	Os:	875	580	116	30	25	1626	4.34	3.79
	to inadequate funding from	%	47	39	4	4	7	100		
	the government									
15	e-learning programme is	No:	185	145	10	15	20	375		
1,3	hampered by lack of funds	Os:	925	580	30	30	20	1585	4.23	6.66
	nampered by lack of funds	%	49	39	3	4	5	100	7.23	0.00
16	Achieving operational	No:	100	240	10	15	10	375		
10	ascendency would have	Os:	500	960	30	30	10	1530	4.08	6.21
	been possible if the needed	%	27	64	3	4	3	100	1.00	0.21
	fund was available	70	<i>2</i> /	01	J	'	5	100		
<u>C</u>	- Fight Comment (2024)									

Source: Field Survey (2024).

Response rate on questionnaire item 9 above shows that 9 (3%) of the total respondents strongly disagree with the statement, 16 (4%) of the respondents disagree, 163 (43%) of the respondents agree and 167 (45%) of the respondents strongly agree that limited funding is one of the

17(1) (June, 2024):267-292

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problems of e-learning adoption in the South East, while 20 (5%) of the total respondents were undecided. The mean and standard deviation of the overall score on the questionnaire item were 4.22 and 9.74 respectively.

In responding to questionnaire item 10, it shows that 15 (4%) of the total respondents strongly disagree with the statement, 10 (3%) of the respondents disagree, 240 (64%) of the respondents agree and 100 (27%) of the respondents strongly agree that diversion of fund meant for the provision of e-learning facilities, while 10 (3%) of the total respondents were undecided. The mean of the overall score on item 10 was 4.08, while the standard deviation was 6.21.

More so, response rate on item 11 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 20 (5%) of the respondents disagree, 145 (39%) of the respondents agree and 185 (49%) of the respondents strongly agree that poor funding of ICT centers have denied academic staff effective performance in your university, while 10 (3%) of the total respondents were undecided. From table 7 and item 11 above, the avaerage (mean) and standard deviation of the overall score are 4.23 and 6.66 respectively.

In addition, responses on item 12 above shows that 180 (4%) of the total respondents strongly disagree with the statement that poor funding of ICT centers affects academic staff development through to e-learning in your university, 30 (8%) of the respondents disagree, 40 (11%) of the respondents agree and 105 (28%) of the respondents strongly agree, while 20 (5%) of the total respondents were undecided. From their responses on item 12, the avaerage (mean) and standard deviation of the overall score are 3.03 and 3.70 respectively.

Responses on item 13 above shows that 155 (41%) of the total respondents strongly disagree with the statement, 5 (1%) of the respondents disagree, 55 (15%) of the respondents agree and 150 (40%) of the respondents strongly agree that adequate fund have been earmarked for the provision of e-learning equipment yearly, while 10 (3%) of the total respondents were undecided. Given their responses on item 13, the mean and standard deviation of the overall score on the questionnaire item were 3.51 and 4.51 respectively.

17(1) (June, 2024):267-292

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Item 14 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 145 (39%) of the respondents agree and 175 (47%) of the respondents strongly agree that procurement of inferior e-learning equipment is due to inadequate funding from the government, while 15 (4%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.34 and 3.79.

Item 15 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 20(5%) of the respondents disagree, 145 (39%) of the respondents agree and 185 (49%) of the respondents strongly agree that e-learning programme is hampered by lack of funds, while 15 (4%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.23 and 6.66.

Responses on item 16 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 10(3%) of the respondents disagree, 240 (64%) of the respondents agree and 100 (27%) of the respondents strongly agree that achieving operational ascendency would have been possible if the needed fund was available, while 15 (4%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.08 and 6.21.



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Table 5: Response rates on the extent e-learning have improved the academic staff performance in teaching and learning in the selected universities.

	Response Item		SA	A	U	SD	D	Total	Mean	SD
	_		5	4	3	2	1			
17	The academic staff of	No:	150	55	10	155	5	375		
	your university has	Os:	750	220	30	310	5	1315	3.51	4.59
	improved on their academic performance	%	40	15	3	41	1	100		
	through e-learning									
18	E-learning has made	No:	149	105	40	55	26	375		
	academic staff more self-	Os:	745	420	120	110	26	1421	3.79	5.36
	reliant on their profession	%	39	28	11	15	7	100		
19	E-learning has made	No:	155	20	10	160	30	375		
	research easy for the	Os:	775	80	30	320	30	1235	3.29	4.05
	academic staff of your university	%	41	5	3	43	8	100		

20	E-learning provides	No:	175	145	15	15	25	375		
	access to online materials	Os:	875	580	116	30	25	1626	4.34	3.79
	to the academic staff of	%	47	39	4	4	7	100		
	your university anywhere									
	and anytime									
21	Our performance as	No:	150	55	10	155	5	375		
	academic staff have	Os:	750	220	30	310	5	1315	3.51	4.59
	improved over-time	%	40	15	3	41	1	100		

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22	I am motivated to put in	No:	175	145	15	15	25	375		
	my very best on the job	Os:	875	580	116	30	25	1626	4.34	3.79
	due to the knowledge I	%	47	39	4	4	7	100		
	have acquired on e-									
	learning training									

23	E-learning makes for	No:	155	160	10	20	30	375		
	academic forum lectures	Os:	775	320	30	80	30	1235	3.29	4.05
	in your university	%	41	43	3	5	8	100		
24	E-learning has enabled	No:	149	105	40	55	26	375		
	academic staff to improve	Os:	745	420	120	110	26	1421	3.79	5.36
	in the production and	%	39	28	11	15	7	100		
	publication sound									
	research work at ease									

Source: Field Survey (2024)

Response rate on questionnaire item 17 in Table 4 above shows that 155 (41%) of the total respondents strongly disagree with the statement, 5 (1%) of the respondents disagree, 55 (15%) of the respondents agree and 150 (40%) of the respondents strongly agree that the academic staff of your university has improved on their academic performance through e-learning, while 10 (3%) of the total respondents were undecided. The mean and standard deviation of the overall score on the questionnaire item were 3.51 and 4.59 respectively.

In responding to questionnaire item 18, it shows that 55 (15%) of the total respondents strongly disagree with the statement, 26 (7%) of the respondents disagree, 105 (28%) of the respondents agree and 149 (39%) of the respondents strongly agree that E-learning has made academic staff more self-reliant on their profession. The mean of the overall score on item 22 was 3.79, while the standard deviation was 5.36.

More so, response rate on item 19 above shows that 160 (43%) representing proportionate number of the respondents strongly disagree with the statement, 30 (8%) of the respondents disagree, 20 (5%) of the respondents agree and 155 (41%) of the respondents strongly agree

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thatE-learning has made research easy for the academic staff of your university, while 10 (3%) of the total respondents were undecided.

In addition, responses on item 20 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25(7%) of them disagree, 145 (39%) of the respondents agree and 175 (47%) of the total respondents strongly agree that E-learning provides access to online materials to the academic staff of your university anywhere and anytime, while 15 (4%) of the total respondents were undecided. From their responses on item 24, the avaerage (mean) and standard deviation of the overall score are 4.34 and 3.79, respectively. The mean and standard deviation results dovetailed with their responses.

Responses on item 21 above shows that 155 (41%) of the total respondents strongly disagree with the statement, 5 (1%) of the respondents disagree, 55 (15%) of the respondents agree and 150 (40%) of the respondents strongly agree that their performance as academic staff have improved over-time, while 10 (3%) of the total respondents were undecided. Given their responses on item 25, the mean and standard deviation of the overall score on the questionnaire item were 3.51 and 4.51 respectively.

Item 22 above shows that 15 (4%) of the total respondents strongly disagree with the statement, 25 (7%) of the respondents disagree, 145 (39%) of the respondents agree and 175 (47%) of the respondents strongly agree that I am motivated to put in my very best on the job due to the knowledge I have acquired on e-learning training, while 15 (4%) of the total respondents were undecided while the mean and standard deviation on their scores were 4.34 and 3.79.

Responses on item 23 above shows that 20 (5%) of the total respondents strongly disagree with the statement, 30 (8%) of the respondents disagree, 160 (43%) of the respondents agree and 155 (41%) of the respondents strongly agree that they were motivated to put in their very best on the job due to the knowledge they have acquired on e-learning training, while 10 (3%) of the total respondents were undecided while the mean and standard deviation on their scores were 3.29 and 4.05.

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Responses on item 24 above shows that 26 (7%) of the total respondents strongly disagree with the statement, 55 (15%) of the respondents disagree, 105 (28%) of the respondents agree and 149 (39%) of the respondents strongly agree that E-learning has enabled academic staff to improve in the production and production sound and ease publication, while 10 (3%) of the total respondents were undecided while the mean and standard deviation on their scores were 3.79 and 5.36

### Conclusion

The study concluded that academic staff development in Nigeria universities has been tremendously influenced by e-learning training despite poor network providers and epileptic power supply in the country. It was also concluded that activities of ICT specialist and inadequacy of funds were critical determinants of provision of e-learning facilities in the Nigeria Universities. The empirical results point to the fact that adequate attention is needed on the improvement of the activities of the ICT specialists through, adequate funding of ICT facilities, stable network service provider, and the alike to have provided convivial environment necessary for improved learning and training. The provision of these facilities would make internet accessibility easier. Also, the result of the findings indicated that lack of funds as one of the major problems bed bounding the activities of ICT specialists in providing the needed human capital requirement needs.

### Recommendations

- 1. Government should provide Information Communication Technology facilities through effective funding to boost training on e-learning process in order to develop academic staff to perform optimally.
- **2.** Federal government through their network agency should work on their network service provider to ensure adequate and steady network services to the users.
- **3.** Federal government through universities governing council should take adequate measure in providing conducive working environment that can drive the activities of the ICT specialists to have impacted on the development of the academic staff.
- **4.** Academic staff should to placed on constant training and retraining on electronic learning in order to develop them intellectually competent of the teaching profession.

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**5.** Electronic learning or ICT knowledge and experience should a necessary requisite of employing academic staff into Nigeria universities.

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