



## **DIGITAL SKILLS REQUIRED BY UNIVERSITY BUSINESS EDUCATORS FOR EFFECTIVE TEACHING IN DIGITAL AGE IN SOUTHEAST, NIGERIA**

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### **Abstract**

*The study focused on digital skills required by Business Educators for effective teaching in Universities in South-East Nigeria in the digital age. The study was undertaken because of the digital skills gap among Business Educators in most Nigeria universities and in South-East universities in particular. Two research questions and hypotheses guided the study. The study adopted a descriptive survey research design. The population for the study was 73 Business Educators in Federal and State Universities in the South East States of Nigeria. The population was manageable, hence no sampling. Structured questionnaire containing a total of 14 items was the instrument for data collection. The instrument was validated by three experts. The data collected were presented in tables and analyzed using mean and standard deviation while the null hypotheses were tested using t- test statistics. It was found that Business Educators in Universities in South East need basic computer and digital communication skills for effective teaching. In digital age. However, the study recommended the need government and university managements should increase funding for provision of workshops, seminars and conferences on digital skills required for effective online teaching and learning in South-East universities. Also, there should be continuous and periodic training of both business educators and students on basic computer and digital communication skills.*

**Key words:** *Digital age, Digital skills, Effective teaching and University Business Educators*

### **Introduction**

Technology has greatly transformed the world in various ways and its influence in teaching and learning cannot be ignored. It is an integral part of teaching and learning in this digital era. Okoye (2017) noted that the global technological advancement and the Nigeria current economic trends have called for proper acquisition of Information and Communication Technology (ICT) skills for business skills development among graduates. The use of Information Communication Technology (ICT) in teaching Business Education courses will go a long way in developing the students' digital skills and intellectual competencies needed in today's business world. For effective teaching in universities in the present technological dispensation, Business Educators should take the lead in using technology in the classroom because of the numerous advantages it offers. Technology is capable of increasing students engagement, enhance personalized learning, help Business Educators to improve their lesson plan, facilitate content coverage and increase collaboration above all it makes teaching and learning very interesting. Business Educators in universities need digital skills for effective teaching in the digital age.

Business Educators are the professional trained teachers of Business Education whose responsibility is mainly saddled with teaching the pedagogy and fundamentals of business. This is in consonance with the view of Nwokike and Chukwuma (2019) that a Business Educator is a professionally trained teacher of Business Education. The authors further described a Business Educator as a teacher who has the requisite certificate in Business Education obtained from an accredited University or College of Education within or outside the country. In the context of this study, an effective Business Educator is a person who have a good knowledge of subject matter, ready to learn and have a good command of English language. In addition, they need to possess digital skills for effective teaching in the digital age. Computer technology continues to evolve in this digital age and the world is going gradually digital. This digitalization cuts across every aspect of human endeavour notably in education sector. There is need for Business Educators to upgrade their skills so that they could effectively teach and impart requisite digital skills to their students in this digital age.

Digital skills refer to the use of digital devices and application to access and manage information. It can also be defined as the skills needed to use computer and other electronic devices, communication application in teaching and learning. The utilization of digital technologies will continue to grow unprecedentedly in education industry notably in teaching and learning of business education courses in



order to prepare the recipients of the programme for digital economy. According to Usoro and Calab (2014), digital skill encompasses many different facets, tools and applications to support and empower teachers and students, including online courses, blended or hybrid learning, or digital content and resources. Digital skill is the ability to understand and use digital technologies effectively for everyday tasks especially in teaching of business education courses. Hence, it's now clear that equipping business education teachers with the right digital skills especially in classroom instructional delivery and assessment of classroom instruction are critical in meeting the demand of universities in South-East Nigeria in digital age.

Digital age is also known as information or internet age. It is the period of extensive utilization of communication technologies and digital information.. Robert (2020) defined digital age as the information age which the time period started from 1970 with the introduction of personal computer and introduction of subsequent technology. Robert noted that life in the digital age is truly information driven, with data becoming more valuable than oil. In the view of Maleehakaleem (2021), digital age refers to the present time use of machines and computers to present information.. With advancement in technology, there will be a time in life where digital devices will become part and parcel of human life. Today, we use our digital devices such as android phones, laptops, i-pads as a mode of expression, interactions, entertainments and learning. Digital age is the period in which digital change through digitalization and digital transformation has progressed so far that digital technologies have a formative influence on people's life. (Jorn, L nd). One of the noticeable influences of information age in business education programme is the digitalization of teaching and learning. Digital teaching and learning is any type of teaching that is accompanied by innovative technologies or by pedagogical approaches that uses technology enhanced learning (TEL). Business educators teaching in South –East States of Nigeria require digital skills for effective teaching in the digital age.

South-East is one of the six-geopolitical zones in Nigeria made up of five States. They include Abia, Anambra, Ebonyi, Enugu and Imo States. They have Federal and State owned Universities. The State Universities are financed and controlled by State Governments while Federal Universities are controlled and managed by Federal governments. Business Educators irrespective of the institutional ownership require digital skills for effective teaching in the digital age.

Teaching can be effective when the learning objectives and positive results are achieved. Vogt cited by Foursquare(2020) defined effective teaching as the ability to provide instructions to different students of different abilities and at the same time assessing the effective learning mode of the learner. The target of effective teaching is to improve students' achievement in the school and their performance in their work place environment. Foursquare (2020) identified the following characteristic of effective teaching: begins promptly and is well organized, provides the significance/importance of information to be learned, provides clear, specific expectations for assignments and communicates at the level of the students etc. For effective teaching of business education courses in the universities in the digital age, basic computer and digital communication skills are required by Business Educators

Basic computer skills also known as digital foundation skills are basic information technology skills you need for life and work. Basic computer skills refer to your ability to perform fundamental tasks on a computer. This according to Orji, Ali, and Okanazu (2015) include understanding certain software, applications, programs, tools and more. Digital communication refers to electronic transmission of information that has been encoded digitally as for storage and processing by computers. Basic computer skills are broadly defined as those fundamental skills needed to use digital devices, communication applications and networks to access and manage information. Basic computer skills are the fundamentals of being able to use digital technologies (Ojimba, 2012). Digitalization of teaching and learning has relatively made communication very easy in the digital age.

Communication is the exchange of facts, ideas, opinions or emotions by two or more persons. William (2015) defined communication as a process which involves the transmission and accurate replication of ideas ensured by a feed back for the purpose of eliciting actions which will accomplish organizational goals. Business educators need digital communication skills for exchanging information and ideas to their students especially in teaching learning process.

Digital communication broadly known as data communication is the ability to use computer and other electronic to transfer information from one person to another. An example of digital communication is any communication done over the internet. It involves exchange of data that transmits the data in a digital form. An example of digital communication is any communication through the internet. It can further be defined as electronic exchange of information.. This tallied with the definition of Leslie (2019) who simply defined digital communication as an organization of online communication. Fallow (2015) identified eight digital skills needed for digital communication. They are: working with documents, project collaboration, attention



management, communication, digital etiquette, search and research, platform flexibility, security and privacy. Digital technology is relevant in today's electronic world and they are required mostly by Business Educators for effective teaching in the digital age.

A business educator is professional teacher of Business Education course in the Universities or Colleges of Education. A professional Business Educator must be knowledgeable in all the core components of business education. Knowledge of only one aspect of the component of business education does not make somebody a business educator. This tallied with the opinion of Okifo and Ayo (2022) that a Business Educator must be knowledgeable in general education, general business subjects, secretarial components, marketing and distributive education subjects and accounting etc. The authors further defined a business educator as a person who is knowledgeable in the six components of the course that make up a business education programme. He/she is a professional teacher of business who is constantly aware of the art in business education( Nwanewizi,2010, Oguejiofor and Ezeabasii 2013 cited by Okifo and Ayo, 2022). For a Business Educator to be an effective teacher in this digital age requires basic digital skills, hence the need for this study. An empirical study of this nature must be based on theory. This study is based on theory of connectivism.

Theory of Connectivism was propounded by George Siemens in the year 2004. Conectivism is a learning theory for the digital age(Duke,Harper and Johnston, 2013). Conectivism is a theoretical framework for understanding learning in a digital age. It emphasizes how internet technologies such as web browsers, search engines, wikis, online discussion forums, and social networks contributed to new avenues of learning. Technologies have enabled people to learn and share information across the World Wide Web and among themselves in ways that were not possible before the digital age. Learning does not simply happen within an individual, but within and across the networks (Kop and Hill, 2018). business educator to be an effective teacher in this digital age requires basic digital skills, hence the need for this study. An empirical study of this nature must be based on theory. This study was based on theory of connectivism.

The theory of connectivism is relevant to this study on digital skills required by Business Educators for effective teaching in universities in South-East in the digital age because the theory is characterized as a reflection of our education that is changing rapidly from face-to-face in-person learning to fully digital teaching and learning . It is against this backdrop that the researchers seek to determine the digital skills required by business educators for effective teaching in the digital age.

### **Statement of the Problem**

The issue of digital skills gap among Business Educators has remained at the front burners of the global discourse especially in recent times. Countries around the world even the world's most technologically advanced countries, the United State included, are struggling with it. It is clearly a more serious problem when considering less technologically advanced countries, Nigeria inclusive. Fouche (2006) cited by Nwokike( 2015) noted that the ever-changing corporate world, the lack of skill on the part of the learners and resistance to change by Accounting Educators are affecting accounting Education. By implication, if Business Educators do not possesses digital skills required of them in this digital age, the gap would still exists thereby making teaching and learning of business education courses ineffective in the digital age.

### **Research Questions**

The following research questions were formulated to guide the study

1. What are the basic computer skills required by Business Educators for effective teaching in universities in South-East, Nigeria in digital age?
2. What are the digital communication skills required by Business Educators for effective teaching in universities in South-East, Nigeria in the digital age?

#### **Null Hypotheses**

The following null hypotheses: were tested at .05 level of significance.

1. There is no significant difference between the mean scores of Business Educators in federal and state universities on the basic computer skills required for effective teaching in the digital age
2. There is no significant difference between the mean ratings of Business Educators in federal and state universities on the digital communication skills required for effective teaching in the digital age.

### **Method**

This study adopted a descriptive survey research design. According to Nworgu (2015), a descriptive research design is the type of design where peculiar character of a known or identified



population is studied through a sample which is deemed to be the representative of the population. This design was appropriate for the study because the researchers used questionnaire to generate information and data on digital skills required by Business Educators for effective teaching in universities in South-East. The area of study was South-East Nigeria.

The population of this study comprised 73 Business Educators in public universities offering business education programme in the South-East as at the time the study was carried out.

The population was manageable, hence no sampling. Questionnaire was the major instrument used for this study, and was based on the two research questions and hypotheses developed for the study. The questionnaire items were in structured (close ended) form. The questionnaire contains 21 items on the two digital skills required by Business Educators for effective teaching in universities in South-East. The response options were four rating scale of Strongly Agree (SA), Agree (A), Disagree (D), and Strongly Disagree (SD). The research instrument was validated by three experts. One from the Department of Agricultural and Vocational Education, Faculty of Education, Michael Okpara University of Agriculture Umudike, and two from Department of Business and Entrepreneurship Education, Faculty of Education, The experts inputs and corrections were used to modify the final copy of the instrument used for data collection. The research instrument was administered with the help of four research assistants. The 73 copies distributed were successfully retrieved representing 100% return rate.

Data collected were analyzed using mean and standard deviation. The real limits of the mean were used to analyze the research questions: thus: 3.50-4.00 = Strongly Agree, 2.50 - 3.49 = Agree, 1.50 - 2.49 = Disagree and 1.00 - 1.49 = Strongly Disagree

Any item with a mean of 2.50 or above was regarded as agree while any item with a mean score below 2.50 was regarded as disagree. The hypotheses formulated for the study were also tested using t-test statistics. If t-calculated is greater than t-critical value (t-table), Null hypothesis was accepted but if otherwise, reject.

**Results**

The data analyzed were based on the 73 copies of questionnaire returned.

**Research Question 1**

What are the basic computer skills required by business educators for effective teaching in universities in South East, Nigeria in the digital age?

**Table 1: Mean scores and standard deviation of Federal and State University Business Educators on the basic computer skills required by Business Educators for effective teaching in universities in South East in the digital age.**

S/ N	Basic computer skills required include: Abilities to:	Federal N=48		State N= 25		Overall		Dec.
		$\bar{X}_1$	SD <sub>1</sub>	$\bar{X}_2$	SD <sub>2</sub>	$\bar{X}_G$	SD <sub>G</sub>	
1	Turn on or boot the computer device	3.85	0.36	3.92	0.40	3.88	0.37	Agree
2	Use the available controls on a computer device	3.88	0.33	3.72	0.46	3.82	0.39	Agree
3	Interact with the home screen on a computer device	3.71	0.46	3.56	0.58	3.66	0.51	Agree
4	connect computer device to a safe and secure Wi-Fi network	3.67	0.52	3.64	0.57	3.65	0.53	Agree
5	Connect to internet to use browser to find information	3.73	0.45	3.80	0.41	3.75	0.43	Agree
6	Update and change password when prompted to do so	3.67	0.52	3.56	0.65	3.63	0.57	Agree
7	Keep password and personal information safe as they have value to others	3.65	0.60	3.56	0.58	3.62	0.59	Agree
<b>Cluster Mean/SD</b>		<b>3.74</b>	<b>0.46</b>	<b>3.68</b>	<b>0.52</b>	<b>3.72</b>	<b>0.48</b>	<b>Agree</b>

The analysis of data presented in Table 1 above shows that the mean score ranges from 3.62 to 3.88 showing strongly agree. This means that the respondents strongly agree that the identified items are the basic computer skills required by Business Educators for effective teaching in universities in South East in the digital age. The overall cluster mean of 3.72 further indicates that the items are the basic computer



skills required by Business Educators for effective teaching in universities in South East in the digital age. The low standard deviation of 0.48 indicates that the respondents have similar opinions on the items.

**Hypothesis 1**

There is no significant difference between the mean scores of Federal and State Business Educators on the basic computer skills required by Business Educators for effective teaching in universities in South East in the digital age.

**Table 2: Summary of t-test analysis of mean scores of Federal and State university Business Educators on the basic computer skills required by for effective teaching in universities in South East, Nigeria in the digital age**

Variables	N	t	df	Sig. (2tailed)	Mean Difference	Std. Error Difference	Decision
Federal	48	.637	71	0.526	0.38583	0.60595	NS
State	25						

The result of t-test analysis in Table 2 shows that the t-value at 0.05 level of significance and 71 degree of freedom for the eight items is 0.637 with a significant value of 0.526. Since the significant value of 0.526 is more than the 0.05 level of significant the null hypothesis is not significant. This means that there is no significant difference regarding the items on the mean ratings of federal and state university business educators on the basic computer skills required by business educators for effective teaching in universities in South East in the new normal.

**Research Question 2**

What are the digital communication skills required by business educators for effective teaching in universities in South-East in the digital age?

**Table 3: Mean scores and standard deviation of Federal and State university Business Educators on the digital communication skills required by for effective teaching in universities in South-East in the digital age.**

S/N	digital communication skills required include: Ability to;	Federal N=48		State N= 25		Overall		Dec.
		$\bar{X}_1$	SD <sub>1</sub>	$\bar{X}_2$	SD <sub>2</sub>	$\bar{X}_G$	SD <sub>G</sub>	
8	Create content in many formats	3.58	0.61	3.76	0.44	3.64	0.56	Agree
9	Use search and do research online	3.54	0.50	3.72	0.46	3.60	0.49	Agree
10	Know the dos and don'ts of online communication	3.71	0.46	3.64	0.57	3.68	0.50	Agree
11	File a good content, find it again, share it or send it to others	3.69	0.47	3.56	0.65	3.64	0.54	Agree
12	Manage information that is to use analytics and report	3.67	0.52	3.60	0.58	3.64	0.54	Agree
13	Adapt to quick shift in priorities	3.48	0.62	3.28	0.74	3.41	0.66	Agree
14	Practice online security and privacy	3.65	0.48	3.52	0.59	3.60	0.52	Agree
<b>Cluster Mean/SD</b>		<b>3.62</b>	<b>0.52</b>	<b>3.58</b>	<b>0.58</b>	<b>3.60</b>	<b>0.54</b>	<b>Agree</b>

The data presented in Table 3 indicates that item 13 has overall mean score of 3.41 showing agree. While the mean rating for the remaining six items ranges from 3.60 to 3.68 depicting strongly agree. This shows that the items are the digital communication skills required by Business Educators for effective teaching in universities in South-East in the digital age. The overall cluster mean rating of 3.60 indicates strongly agree. This implies that the items are digital communication skills required by Business Educators for effective teaching in universities in South-East in the digital age. The low standard deviation of 0.54 shows that the



respondents' opinions do not differ remarkably on the items regarding the digital communication skills required by Business Educators for effective teaching in universities in South-East in the digital age.

### Hypothesis 2

A significant difference does not exist between the mean ratings of Federal and State university Business Educators on the digital communication skills required by Business Educators for effective teaching in universities in South-East in the digital age.

**Table 4: Summary of t-test analysis of mean scores of Federal and State university Business Educators on the digital communication skills required by Business Educators for effective teaching in universities in South-East in the digital age.**

Variables	N	t	df	Sig. (2tailed)	Mean Difference	Std. Error Difference	Decision
Federal	48	0.335	71	0.739	0.23250	0.69401	NS
State	25						

The result of t-test analysis in Table 4 shows that the t-value at 0.05 level of significant and 71 degree of freedom for the items is 0.335 with a significant value of 0.739. As the significant value of 0.335 is more than the 0.05 level of significant the null hypothesis is not significant. This means that there is no significant difference with respect to the items on the mean ratings of federal and state university business educators on the digital communication skills required by Business Educators for effective teaching in universities in South-East in the digital age..

### Discussion of Findings

From the result of the study in research question 1 Table 1, it was found that basic computer skills required by Business Educators include the ability to turn on or boot the computer; use the available controls on a computer; interact with the home screen on a computer device; connect my computer device to a safe and secure Wi-Fi network; connect to the internet to use browser to find information; update and change password; and keep passwords and personal information safe. This is in line with Orji, Ali, and Okanazu (2015) who asserted that basic computer skills are the digital foundation skills that are fundamental in being able to use digital technologies in teaching and learning, such as using a browser, connecting to the internet, and keeping passwords secure among others. Usoro and Calab (2014) also contended that the issue of what kind of digital skills teachers should have was one of the areas that created the most divergence answers in their study. The null hypothesis in Table two depicts that that there is no significant difference between the mean scores of Federal and State University Business Educators in South East on the basic computer skills required for effective teaching in the new normal. This is in agreement with the finding of Ezeabii and Okonkwo (2019) that there is no significant difference on Lecturers constraints to effective multimedia applications in teaching Business Education courses in South East, Nigeria.

The study in research question two Table 3 revealed that digital communication skills required by Business Educators for effective teaching include: the ability to create content in many formats; use search and do research online; know the dos and don'ts of online communication; file a good content, find it again, share it or send it to others; manage information that is to use analytics and report; highly adaptable to quick shift in priorities; and online security and privacy. This in line with Falkow (2015) who identified digital communication skills such as working with documents, project collaboration, attention management, communication, digital etiquette, search and research, platform flexibility, security and privacy. Further in support of this finding is the finding of Khan and Khan (2017) who discovered that digital communication skills of teachers have significant role in the academic achievement of the students. The authors contended that effective digital teaching is not only dependable upon the availability of digital tools but also knowledge base of the teacher in terms of digital communication skills.

The result of the hypothesis 2 showed that significant difference did not exist between the mean scores of Business Educators in Federal and State Universities in South East on the digital communication skills required by Business Educators for effective teaching in the digital age. This is in line with the views of Okoye (2017) who found out that sex, institution, role and professional status does not affect the ICT skills required of business education graduates for effective entrepreneurship practice in Anambra State. However, the result is at variance with the views of Orji, Ali, and Okanazu (2015) who found out that there is significant difference between the mean scores of the digital skills required by Technical Vocational Education and Training (TVET) Lecturers in Federal and State universities for instructional delivery.



### **Conclusion**

The study investigated digital skills required by Business Educators in Universities for effective teaching in the digital age. From the results of the study, the researchers concluded that Business Educators need basic computer skills and digital communication skills for effective teaching in the digital age.

### **Recommendations**

Based on the findings and conclusion of the study, the researchers recommended that :

1. Business Educators should upgrade their skills on basic computer and digital communication skills for effective teaching in the digital age.
2. Business Educators should be trained and re-trained on digital skills by their institutions through seminars and workshops.

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