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## Interactive Technology Competencies Required by Business Education Graduates in Universities, South-South Nigeria as Perceived by Lecturers

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## **Introduction**

Business education is a major aspect of vocational education that equips its recipients with technical, vocational, business and entrepreneurial skills needed for the world of work. Emesoba (2018) points out that business education is a specialized appendage and self-reliant of vocational education that prepares students to enter teaching and office occupation as capable and intelligent members of the labour force. Njoku in Obiete, Nwazor and Vin-Mbah (2015) opines that the goals of business education at the University level of education include to empower students with the needed skills, knowledge and values to carry out specific functions so as to become self-reliant, others include helping students to be able to explore world around them and contribute optimally towards the socio-economic development of the nation; to empower students towards the development of intellectual capability that will help them make vital decisions in all spheres of life; to guide students towards becoming judicious managers of available resources while at the same time developing proper values for healthy living and growth of the nation. To have a clear understanding of what national development entails.

Unfortunately, the attainment of these goals has become questionable. This is because business education programme has failed to impart in its students the necessary practical skills needed for self-reliance and self-employment (Obiete, Nwazor and Vin-Mbah, 2015). Nwanaka and Amahule (2011) opine that the skills acquisition process is conducted in the theoretical and not practical level. Business Education programme needs some interactive competencies to enable the graduates perform effectively in the world of work.

Interactivity is the most perceived advantage of new technologies in terms of their support for teaching (Kennewell, 2015). Beauchamp and Kennewell (2010) define interactivity as the ability to respond contingently to learners' actions. In order to facilitate interactivity in the classroom setting, technology should provide interactive gadgets which could be utilized to promote interactive teaching strategies as well as other pedagogical innovations. Interactive technology therefore is any technology that aims at facilitating digital interaction between people while giving room for creation and manipulation of suitable user contents (Vaterlaus, 2018). A form of technology that allows the users to interact with it and/or other users by opening up a whole new areas of possibilities in communications, manipulation of images and exploration. Hobbs (2010) opines that teacher-students' interaction can be facilitated by interactive digital media. Interactive media means products and services on digital-computer based systems that respond to the user's actions by displaying content including text animation, moving image, image, audio, video and video games. Borup and Graham (2013) see interactive media as integrating digital media by combining electronic text, moving images, graphics and sound into a synchronized digital computerized environment where people interact with the data for specific and appropriate purposes. The digital environment may include the internet, telecoms and interactive digital television.

Adeola (2017) observes that the last two decades have experienced an explosion of interactive technology tools in the education sector especially in developed countries. The use of tools such as the interactive white board, web 2.0 technologies, individual response pads, interactive multimedia, interactive forms, online survey tools, collaborative editing software, Instant messaging/chat room and multimedia projectors are becoming popular.

Umoru & Zakka's (2020) earlier studies reveal the following as interactive technology competencies required by Teachers of Office Technology and Management to improve secretarial performance in polytechnics in North-Central Nigeria; ability to use interactive white boards, electronic board for teaching, ability to use interactive forms on the web to create feedback or ask questions, ability to organize video conferencing or internet phone chat (Skype, Team Speak), ability to use interactive on-line survey tools (Survey Monkey, Zoomerang), ability to use student response systems (clickers, wireless learning calculator systems, etc.), ability to use instant messaging/chat room for content delivery, ability to use interactive multimedia and presentation application for teaching, ability to use simulations, or virtual worlds (Ayiti, Elemental, Second Life, Civilization), ability to use interactive collaborative editing software (Wikis, Google Docs), ability to use online student video projects (using YouTube, Google Video), ability to use Web 2.0 tools to interact and collaborate for teaching and learning purposes, ability to use interactive E-book, ability to use educational cloud services to store, manage and process data, ability to use audience response pads, ability to create online interactive audio and video instructions. Business Education graduates require these competencies for effective job performance in the world of work. Unfortunately, the graduate's ability to perform is questionable hence, the statement of the problem is, what are the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria as perceived by lecturers?

### **Purpose of the Study**

The purpose of the study is to examine interactive technology competencies required by business education graduates in Universities, South-South, Nigeria as perceived by lecturers.

### **Research Question**

The following research question was raised to guide the study;

What are the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria as perceived by Lecturers?

### **Hypotheses**

The following hypotheses were tested at 0.05 level of significance

1. There is no significant difference in the mean ratings between male and female lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria.
2. There is no significant difference in the mean ratings between state and federal university lecturers on the interactive technology competencies required by business education graduates in South-South Universities, Nigeria.
3. There is no significant difference in the mean ratings between Experienced and less experienced lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria.

## Method

Descriptive Survey design was chosen for the study to assess the interactive technology competencies required by business education graduates in south-south universities, Nigeria as perceived by Lecturers. The population comprises 146 lecturers in Universities, South-South, Nigeria namely; Ambrose Ali University, Ekpoma; Delta State University, Abraka; Niger Delta University, Yenagoa; Ignatious Ajuru University of Education, Port-Harcourt; Rivers State University, Port-Harcourt; Cross River State University of Science and Tech while Federal Universities are; University of Benin, Federal University, Otuoke; University of Uyo; University of Calabar. There was no sampling since the population was manageable. A 32-item questionnaire was the instrument used for data collection. It has two parts. Part A contains information on demographic variables of the respondents such as; name of school, sex, university type and job experience while Part B contains information on the research question. The questionnaire was designed on a 4 point rating scale of Very Highly Required (VHR), Highly Required (HR), Moderately Required (MR) and Not Required (NR). There was face and content validation of the instrument by six experts, three (3) in measurement and evaluation and three (3) in Business Education. The questionnaire was administered to 15 lecturers at Ebonyi State University Abakaliki to establish the internal consistency of the instrument. The data collected were analyzed using Cronbach alpha which yielded a reliability coefficient of 0.86. Mean and standard deviation were used to analyze the data collected. The questionnaire items were weighted as follows; Very Highly Required (VHR) – 4 points, Highly Required (HR) – 3 points, Moderately Required (MR) – 2 points and Not Required (NR) – 1 point. In decision rule, any item with a mean score of 2.5 and above was regarded as highly required while any item less than 2.5 was regarded as not required. The decision rule guiding the null hypothesis testing is that if the calculated t-test value is less than the table t-test value, accept the null hypothesis. Otherwise, if the calculated t-test value is greater than the table t-test value, reject the null hypothesis.

## Result

The result of the study is presented as follows;

**Table 1:** Mean ratings of respondents on the Interactive Technology competencies required by Business education graduates.

S/N	Items on Interactive Technology Competencies Required by Business Education Graduates	X	SD	Remark
1.	Ability to use interactive white boards for teaching	2.76	0.92	Highly Required
2.	Ability to use electronic board for teaching	2.81	0.78	Highly Required
3.	Ability to use interactive forms on the web to create feedback	2.75	0.58	Highly Required
4.	Ability to organize video conferencing on Skype	2.66	0.67	Highly Required
5.	Ability to organize video conferencing on Team	2.91	0.86	Highly Required

6.	Ability to organize internet phone chat on Speak	2.83	0.75	Highly Required
7.	Ability to use interactive on-line survey tools.	3.06	0.68	Highly Required
8.	Ability to use student response systems on clickers.	2.78	0.92	Highly Required
9.	Ability to use student response systems wireless learning.	2.99	0.69	Highly Required
10.	Ability to use student response systems calculator systems.	2.68	0.88	Highly Required
11.	Ability to use instant messaging/chat room for content delivery.	2.87	0.92	Highly Required
12.	Ability to use interactive multimedia and presentation application for teaching.	2.65	0.95	Highly Required
13.	Ability to use simulations for teaching	2.55	0.83	Highly Required
14.	Ability to use virtual worlds on Elemental	2.75	0.74	Highly Required
15.	Ability to use virtual worlds on Second Life	2.88	0.85	Highly Required
16.	Ability to use virtual worlds on Civilization	2.76	0.91	Highly Required
17.	Ability to use interactive collaborative editing software on Google Docs	2.58	0.85	Highly Required
18.	Ability to use interactive collaborative editing software on Wikis	3.04	0.69	Highly Required
19.	Ability to use online student video projects using YouTube	2.98	0.71	Highly Required
20.	Ability to use online student video projects using Google Video.	2.95	0.98	Highly Required
21.	Ability to use Web 2.0 tools to interact for teaching.	3.01	0.67	Highly Required
22.	Ability to use interactive E-book.	2.59	0.85	Highly Required
23.	Ability to use educational cloud services to store	2.69	0.92	Highly Required
24.	Ability to use educational cloud services to manage.	2.75	0.65	Highly Required
25.	Ability to use educational cloud services to process data.	2.96	0.78	Highly Required
26.	Ability to use audience response pads.	2.85	0.93	Highly Required
27.	Ability to create online interactive video instructions.	3.01	0.75	Highly Required
28.	Ability to create online interactive audio instructions.	3.02	0.83	Highly Required
<b>Grand Mean</b>		<b>2.80</b>	<b>0.81</b>	<b>Highly Required</b>

In table 1, all the 28 items on interactive technology competencies required by business education graduates have a mean score which ranges from 2.55 – 3.04 which is higher than 2.50. Therefore, all the items are highly required.

### Result of Hypotheses

1. There is no significant difference in the mean rating between male and female lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria.

**Table 2:** T-test Result on the mean rating between male and female lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria.

Variables	N	$\bar{x}$	SD	Df	t-cal.	t-value	Decision
Male Lecturers	78	2.84	0.92	144	1.56	1.96	Not significant
Female Lecturers	66	2.75	0.97				

In table 2, since the t-calculated is 1.56 which is less than table value 1.96, the hypothesis which states that there is no significant difference in the mean rating between male and female lecturers on the interactive technology competencies required by business education graduates in Universities, South-South Universities, Nigeria is therefore retained and accepted.

2. There is no significant difference in the mean rating between State and Federal University lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria.

**Table 3:** T-test Result on the mean rating between State and Federal University lecturers on the interactive technology competencies required by business education Graduates in Universities, south-south, Nigeria.

Variables	N	$\bar{x}$	SD	Df	t-cal.	t-value	Decision
State Universities Lecturers	85	2.76	0.84	144	1.47	1.96	Not significant
Federal Universities Lecturers	59	2.67	0.91				

In table 3, since the t-calculated is 1.47 which is less than table value 1.96, the hypothesis which states that there is no significant difference in the mean rating between State and

Federal University lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria is therefore retained.

3. There is no significant difference in the mean rating between Experienced and Less Experienced lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria

**Table 4:** *T-test Result in the mean rating between Experienced and Less Experienced Lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria.*

<b>Variables</b>	<b>N</b>	<b>Mean</b>	<b>SD</b>	<b>Df</b>	<b>t-cal.</b>	<b>t-value</b>	<b>Decision</b>
Experienced Lecturers	105	2.71	0.87	144	1.51	1.96	Not significant
Less Experienced Lecturers	39	2.66	0.85				

In table 4, since the t-calculated is 1.51 which is less than table value 1.96, the hypothesis which states there is no significant difference in the mean rating between more Experienced and Less Experienced Lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria is therefore retained.

### **Discussion of findings**

The study is focused on interactive technology competencies required by business education graduates in Universities, South-South, Nigeria as perceived by lecturers. The findings are; ability to use interactive white boards for teaching, ability to use electronic board for teaching, ability to use interactive forms on the web to create feedback, ability to organize video conferencing on Skype, ability to organize video conferencing on Team, ability to organize internet phone chat on Speak, ability to use interactive on-line survey tools, ability to use student response systems on clickers, ability to use student response systems wireless learning, Ability to use student response systems calculator systems, ability to use instant messaging/chat room for content delivery, ability to use interactive multimedia and presentation application for teaching, ability to use simulations for teaching, ability to use virtual worlds on Elemental, ability to use virtual worlds on Second Life, ability to use virtual worlds on Civilization, ability to use interactive collaborative editing software on Google Docs, ability to use interactive collaborative editing software on Wikis, ability to use online student video projects using YouTube, ability to use online student video projects using Google Video, ability to use Web 2.0 interactive tools for teaching, ability to use interactive E-book, ability to use educational cloud services to store, ability to use educational cloud services to manage, ability to use educational cloud services to process data, ability to use audience response pads, ability to create online interactive video instructions, ability to create online interactive audio instructions. All the items mentioned are highly required by business education graduates. This study is in tandem with the earlier studies of Adeola (2017), Umoru & Zakka (2019) which identified similar interactive technology competencies required by office Technology and Management graduates in the Polytechnics.

The result of the null hypotheses are; there is no significant difference in the mean rating between male and female lecturers on the interactive technology competencies required by business education Graduates in Universities, South-South, Nigeria; there is no significant difference in the mean rating between State and Federal University lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria; there is no significant difference in the mean rating between Experienced and Less Experienced lecturers on the interactive technology competencies required by business education graduates in Universities, South-South, Nigeria.

### **Conclusion**

Business education graduates require immensely interactive technology competencies in Universities, South-South, Nigeria. Therefore Business education lecturers should expose the students to these competencies to enable them have indebt knowledge on how to use them after graduation.

### **Recommendations**

The following recommendations are made for the study;

1. Business education lecturers should expose the students on how to use interactive on-line survey tools to enable them to be more competent.
2. Business education lecturers should expose the students on how to create online interactive audio instructions.
3. Business education lecturers should give the students adequate exposure on how to use interactive collaborative editing software on Google Docs to enhance learning.



## References

- Adeola, K.L. (2017). Computer anxiety and self concept as correlates of teacher's attitudinal disposition towards interactive digital technologies. *Nigerian Journal of Business Education*, 4(2), 296-304.
- Borup, J. & Graham, C. (2013). The nature of adolescent learner interaction in a virtual high school setting. *Journal of Computer Assisted Learning*, 29 (2), 153-167. Retrieved February 23, 2018 from <https://www.learntechlib.org/p/148377>.
- Emesoba, N. (2018). An evaluation of equipment for the teaching and learning of business studies in public junior secondary schools in Enugu State. *International Journal of Vocational and Technical Education*, 10 (7), 54-60.
- Hobbs, R. (2010). *Digital and Media Literacy: A Plan of Action*. Washington, DC: The Aspen Institute. Retrieved on 23<sup>rd</sup> February, 2018 from [http://www.knightcomm.org/wpcontent/uploads/2010/12/Digital\\_and\\_Media\\_Literacy](http://www.knightcomm.org/wpcontent/uploads/2010/12/Digital_and_Media_Literacy).
- Kennewell, S. (2015.) *Interactive Teaching with Interactive Technology*. <https://www.researchgate.net/publication/267953098> Retrieved on 23<sup>rd</sup> February, 2018.
- Nwanaka, C.R. & Amahule, S. (2011). Skills acquisition: Imperative for business studies educators among secondary schools in Rivers State. *Mediterranean Journal of Social Sciences*, 2(7), 37-44.
- Obiete, A.I., Nwazor, J.C. & Vin-Mbah F.I. (2015). Strategies for teaching business education students in Nigerian tertiary institutions for cooperate governance. *Journal of Education and Practice*, 6 (18), 170-175.
- Umoru, T.A. & Zakka, D.D. (2019). Interactive technology competencies required by teachers of office technology and management for improved secretarial outcomes in polytechnics in North-Central Nigeria. *Nigerian Journal of Business Education* – 6(2), 14-23.
- Vaterlaus, J.M. (2018). Parental mediation of adolescent technology use. *Encyclopedia of Information Science and Technology*. Fourth Edition. Retrieved on 23<sup>rd</sup> February, 2018 from <https://www.igi-global.com/chapter/184406>.