# **Evaluation of Lecturers' Proficiency in the use of Electronic Aids for Instructional Delivery in Business Education**

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#### Abstract

The study evaluated lecturers' proficiency in the use of electronic aids in the instructional delivery in business education in South-South, Nigeria. Two research questions and two hypotheses guided the study. The study adopted descriptive survey research design. The population of the study consisted of all 247 business education lecturers of both federal and state owned colleges of education in the region. A checklist was used to obtain data from the respondents. The observational checklist was titled: Checklist Business Education Lecturers Proficiency in visual aid for Instruction (CBELPVAI). The checklist was validated by three experts representing one each in business education, science education and computer education departments. Mean and standard deviation were used to answer the research questions while t-test was used to test the hypotheses at 0.05 level of significance. The study revealed that lecturers in business education in colleges of education in the sampled area have low proficiency in the use of Power Point, whereas they are proficient in the use of Microsoft excel for instructional delivery. It was recommended among others that business education lecturers should ensure that their students are taught the rudiments of e-visual skills to enhance their self-reliance capacity. Business education students should be sensitized that their intellectual capacity rather than their institution ownership is the catalyst for stimulating their performance or excellence in the world of work. Institution owners should encourage new discovery with high potentials for lecturers in business education and also ensure that the programme is fully funded.

**Keywords:** Lecturers proficiency, Instructional delivery, Business education, Intellectual capacity

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## **Background to the Study**

Business education is that aspect of the total educational programme that provides knowledge, skills, understanding and attitudes needed to perform effectively in the business world as it provides consumer goods and services that businesses offer (Okoli, 2010). Ekoh (2015) affirmed that business education is education for self-reliance, self-independence, self-sufficiency, a programme that prepares individuals with relevant and indispensable skills to survive in any terrain irrespective of the economic situation. Ozoemena (2013) posited that it is a planned programme of course and learning experiences that begin with the discovery of career options, supports basic academic and life skills, and enables the achievement of high academic standards, leadership, preparation for industry and continuing education.

In view of the above projections therefore, for the business education lecturers' in colleges of education to maintain high standard in knowledge dissemination and preparation of their students to fit into the world of work upon graduation, they must embrace the technicalities and be proficient in the use of visual aid like power point and Microsoft excel in instructional delivery.

Power point is highly relevant in the society today and is an incredible instrument for instilling inclination for improved adequacy in educating and learning. Capability in power point introduction ensures simple business, productive and successful occupation execution. The appearance of mixed media projectors through ICT gadgets has activated new approaches in instructing and learning of Business Education, in this manner making dying the old customary homeroom strategies. Yilji and Wakdat (2008) argued that the world is being driven by globalization, innovation and gadgets in that capacity the nearness of developments in PowerPoint introductions has made a glaring requirement for teachers to get more PowerPoint introduction abilities and so as to raise the bore of alumni that will fit decisively into the cutting edge testing work patterns (Okorie & Wagbara, 2016).

Mbaezue (2010) explained that the use of power point presentations has prompted improved instructing and learning in Business Education, just as students' interest. Nwosu and Mbaezue (2016) opined that PowerPoint capability upgrades the productivity and viability of instructing and learning by and large and business training specific. In a similar vein, Owobi (2008) noticed that ICT is one of the world's quickest developing ventures in perspective on the way that it can make open door for humankind to store, recover, process, disseminate, control, survey, update and investigate information freely. Azuka (2015) enthused that the most up to date innovation that enables people to attempt things in physical and virtual homerooms is the PowerPoint innovation. PowerPoint is one of the most up to date innovations or programming that enables instructors and mentors to show their exercises in graphical configuration to go with an oral introduction. It is normally utilized in Business instruction to make talk notes, oral introductions, speaker notes, and diagrams. PowerPoint can house a variety of data including diagrams, audio effects, video, content and outlines. Slope, Arford, Lubitow and Smollin (2012) portrayed that a decent number of instructors are progressively utilizing PowerPoint in their instructional conveyance.

Similarly, Hess (2005) contended that using spreadsheet based modeling for teaching business courses does not only provide a means of enhancing understanding and retention but it is also bound to improve employability of students as they become more adept in their use of analysis tools widely used in today's work environment.

Bradbard, Alvis and Morris (2014) identified Microsoft Excel to be more important than the other technology resources in the teaching and learning of accounting education. Specifically, Microsoft Excel features that make it so important are: cell formatting, print formatting, basic formulas, manage worksheets etc. Elrod, Pittman, Norris and Tiggeman (2015) noted that coverage of Microsoft excel in experiential learning was the most widely implemented mode of instruction. This is essential considering that Microsoft Excel is a practical tool and not a theoretical construct. It is necessary that accounting educator's attempts to meet the expectations of practitioners regarding new hires possessing Microsoft Excel skills.

Spraakman (2011) explained that one method of improving the Excel skills of students may be to incorporate active or experiential learning components into the classroom in order to reach a larger portion of students. Brewer, Sorensen and Stout (2014) pointed out that Microsoft Excel is useful across all functional areas: managerial, audit, tax and advisory. Additionally, educators teaching managerial/cost accounting, auditing or tax can also prioritize their planning efforts for other technology applications based on the practitioner importance ratings in each employment category to better align the curriculum to the demands of that particular consistency (Gray & Todaro, 2016)..

## Statement of the Problem

Business education which is a programme of study introduced in Nigeria's tertiary institution to curb the unemployment challenge and redirect the thought of the graduates towards job creation by instilling in them suitable skills that will positively impact on the economy. The goals and objectives of the programme are laudable. Despite the introduction of this lofty programme, the unemployment situations seem unabated this is because most graduates of Business Education still roam the street and major cities looking for white collar job. For instance, Robinson and Kennedy (2014) observed that the unemployment rate in our country as 2011 has risen up to 23.9 percent This could be adduced to the fact that majority of the job seekers could be graduates that never acquire the right skills or may have been taught by lecturers that are not proficient in the use of electronics teaching aids.

Many scholars have spoken about the disconnection between this and the current reality. Adekunle (2012) observed that there is inadequacy in the Business Education program because of failure to coordinate ICT in its instructional conveyance. This was upheld by Iwu (2016) who set that Business Education educational plan is shy of gathering the desires in workplace as ICT is not incorporated in its teaching and learning.

Arguably, most lecturers who are charged with the responsibilities to teach business education in colleges of education may not be proficient or may not have acquired the proficiencies needed in the use of visual aid in instructional delivery or do not understand the general

coordination and applications of e-systems in teaching and if this situation continues unabated, it will leave no doubt to question the significance of business education in our educational setting. Herein lies the credence to evaluate business education lecturers proficiencies in the use of e-visual aid in instructional delivery in business education.

# **Research Questions**

- 1. To what extent does a business education lecturer in college of education proficient in the use of PowerPoint to enhance instructional delivery?
- 2. To what extent does a business education lecturer in college of education proficient in the use of Microsoft Excel to enhance instructional delivery?

## Hypotheses

- 1. There is no significant difference in the mean rating of business education lecturers' proficiency in the use of PowerPoint for instructional delivery based on ownership.
- 2. There is no significant difference in the mean rating of business education lecturers' proficiency in the use of PowerPoint for instructional delivery based on ownership.

#### Method

This study adopted the descriptive survey research design. An observation checklist titled: Observational Checklist Business Education Lecturers Proficiency in the Use of visual aid for Instruction (CBELPVAI) was used to obtain data from the respondents. The population of the study comprised of all the 247 Business Education lecturers in colleges of education in South-South, Nigeria was used for the study. A census sampling technique was used to select the entire sample of 247 Business Education lecturers in Colleges of Education. Mean and standard deviation were used to answer the research questions, whereas Analysis of variance ANOVA was used the test the hypotheses at 0.05 level of significance.

Copies of the observational checklist were given to one expert in Computer Science department, one business educator for face and content validity.

#### Results

**Table 1:** Mean and standard deviation of how business educations in college of education lecturers are proficient in the use of PowerPoint to enhance their instructional delivery

S/N	Item	VP	P	LP	NP	X	SD	Interpretation
1	Opening a PowerPoint environment	21	38	68	120	1.83	0.97	LP
2	Creating slides using different layout	24	53	76	94	2.02	0.98	P
3	Adding titles and subtitles to a slide	19	33	82	113	1.82	0.92	LP
4	Changing font and sizes of text in a slide	21	36	79	111	1.86	0.95	LP
5	Setting up presentation	38	47	64	98	2.10	1.09	P
6	Creating and selecting objects in a presentation	23	34	68	122	1.83	0.98	LP
7	Moving and resizing objects	18	31	66	132	1.74	0.93	LP
8	Changing object attributes in a presentation	26	35	75	117	1.82	0.95	LP
9	Formatting and editing presentation using a template		32	84	115	1.79	0.90	LP
10	Inserting images in a presentation	18	28	93	108	1.82	0.91	LP
11	Adding sounds to a presentation	11	23	118	95	1.79	0.89	LP
12	Customizing animations in a presentation	13	24	98	112	1.74	0.81	LP
13	Running a slide show	15	22	108	102	1.79	0.83	LP
14	Remaining a slide show	17	25	96	109	1.79	0.76	LP
15	Printing out and storing a slide presentation	14	28	84	121	1.73	0.87	LP
16	Making a presentation using slides and projection	19	34	93	101	1.88	0.91	LP
	Grand Mean	19	33	85	110	1.84	0.92	LP

Source: Research data, 2018

Data in Table 1 indicated that the mean value for items 2 and 5 fall within the region of proficiency, while items 1, 3, 4, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15 and 16 fall within the region of low proficiency. However, the grand mean of 1.84 fall within the region of low proficiency. Hence, lecturers in business education in colleges of education in the South-South, Nigeria observed in the study have low proficiencies in the use of Power Point for instructional delivery in business education. The standard deviation indicated the extent of consistency of scores of lecturers in business education on their observed proficiency in the use of Power Point for instructional delivery in colleges of education in South-South, Nigeria.

**Table 2:** Mean and standard deviation on how Business Education in College of Education lecturers is proficient in the use of Microsoft Excel to enhance instructional delivery

S/N	Item	VP	P	LP	NP	X	SD	Interpretation
1	Understands the structure of a spreadsheet	41	52	68	88	2.21	1.07	P
2	Enters data	52	60	61	74	2.36	1.11	P
3	Formats data in a cell	54	58	69	66	2.40	1.10	P
4	Generates appropriate graph	56	57	73	61	2.43	1.09	P
5	Edits data in an existing record	64	55	71	57	2.51	1.09	P
6	Adds/deletes record	67	64	59	57	2.57	1.11	P
7	Locates specific record(s) using find function	51	56	65	75	2.33	1.11	P
8	Opens and uses a commercial database	43	57	61	86	2.23	1.09	P
9	Chooses appropriate data types for fields	48	53	59	87	2.25	1.03	P
10	Undertakes basic calculations	38	48	63	98	2.10	1.09	
	Grand Mean	51	56	65	75	2.34	1.11	P

Source: Research data, 2018

Data in Table 2 reveals that the mean values of item 1, 2, 3, 4, 5, 6, 7, 8, 9 and 10 fall within the region of proficiency. Also, the grand mean of 2.34 fall within the region of proficiency. Hence, lecturers in business education in colleges of education in South-South, Nigeria observed in the study are proficient in the use of Microsoft Excel in instructional delivery in business education. The standard deviation reveals the extent of consistency of scores of the lecturers in business education on their observed proficient in the use of Microsoft Excel for instructional delivery in colleges of education in South-South, Nigeria.

**Table 3:** t-test analysis of mean rating of business education Lecturers on their Proficiency in the use of Power Point in Instructional Delivery based on Ownership

S/N	Variable	N	X	SD	Df	t-cal	t-crit	Decision	Remark
1	Federal	109	2.98	0.75	245	-1.78	1.96	Accept H <sub>0</sub>	Not Significant
	State	138	3.14	0.67					
2	Federal	109	2.92	0.85	245	-0.83	1.96	Accept H <sub>0</sub>	Not significant
	State	138	3.00	0.66					
3	Federal	109	2.75	0.84	245	-3.01	1.96	Reject H <sub>0</sub>	Significant
	State	138	3.05	0.71					
4	Federal	109	3.13	0.73	245	-1.04	1.96	Accept H <sub>0</sub>	Not significant
	State	138	3.23	0.68					
5	Federal	109	3.14	0.81	245	-0.92	1.96	Accept H <sub>0</sub>	Not significant
	State	138	3.23	0.64					
6	Federal	109	3.32	0.79	245	-1.25	1.96	Reject H <sub>0</sub>	Significant
	State	138	3.44	0.72					
7	Federal	109	3.36	0.82	245	0.12	1.96	Accept H <sub>0</sub>	Not significant
	State	138	3.35	0.73					
8	Federal	109	2.84	0.85	245	-3.67	1.96	Reject H <sub>0</sub>	Significant
	State	138	3.20	0.68					
9	Federal	109	3.09	0.82	245	-2.62	1.96	Reject H <sub>0</sub>	Significant
	State	138	3.34	0.71					
10	Federal	109	3.25	0.81	245	-0.74	1.96	Accept H <sub>0</sub>	Not Significant
	State	138	3.32	0.66					
11	Federal	109	3.25	0.81	245	-1.37	1.96	Accept H <sub>0</sub>	Not Significant
	State	138	3.39	0.80				•	· ·
12	Federal	109	3.14	0.80	245	-0.78	1.96	Accept H <sub>0</sub>	Not Significant
	State	138	3.22	0.76				•	Ü
13	Federal	109	2.93	0.82	245	-1.20	1.96	Accept H <sub>0</sub>	Not Significant
	State	138	3.06	0.85				1	Ü
14	Federal	109	2.83	0.91	245	-2.15	1.96	Reject H <sub>0</sub>	Significant
	State	138	3.06	0.76				,	Ü
15	Federal	109	2.92	0.95	245	-1.80	1.96	Accept H <sub>0</sub>	Not Significant
	State	138	3.11	0.69				1	<i>O</i>
16	Federal	109	3.10	0.88	245	-0.36	1.96	Accept H <sub>0</sub>	Not Significant
	State	138	3.13	0.71		•			
t-test	Federal	109	3.05	0.80	245	1.49	1.96	Accept H <sub>0</sub>	Not significant
Summary	State	138	3.20	0.76					<i>5</i>

**Source:** Research data, 2018

Data on Table 3 revealed the calculated t-values on mean rating of Lecturers on their proficiency in the use of Power Point for instructional delivery in Business Education in Colleges of Education in South-South, Nigeria based on their ownership. An observation of the summary of the calculated t-value in Table 4 above shows that the calculated t-value (1.49) is less than the critical t-value (1.96) at 0.05 level of significance. Since the calculated t-value (1.49) is less than the critical t-value (1.96), the null hypothesis is accepted. The alternate hypothesis is however, rejected. The result is that the mean rating of lecturers on their competencies in the use of Power Point for instructional delivery in Business Education in sampled Colleges does not significantly differ based on their ownership.

**Table 4:** t-test analysis of mean rating of Lecturers proficiency in the use of Microsoft Excel in Instructional Delivery based on Ownership

S/N	Variable	N	X	SD	Df	t-cal	t-crit	Decision	Remark
1	Federal	109	3.33	0.88	245	-2.71	1.96	Reject H <sub>0</sub>	Significant
	State	138	3.59	0.64					
2	Federal	109	3.49	0.71	245	0.27	1.96	Accept H <sub>0</sub>	Not
	State	138	3.47	0.70					significant
3	Federal	109	3.14	0.74	245	-3.69	1.96	Reject H <sub>0</sub>	Significant
	State	138	3.46	0.61					
4	Federal	109	2.97	0.64	245	-1.77	1.96	Accept H <sub>0</sub>	Not
	State	138	3.13	0.73					significant
5	Federal	109	3.03	0.71	245	-1.74	1.96	Accept H <sub>0</sub>	Not
	State	138	3.18	0.64					significant
6	Federal	109	2.73	0.84	245	-2.31	1.96	Reject H <sub>0</sub>	Significant
	State	138	2.97	0.76					
7	Federal	109	2.90	0.75	245	-1.19	1.96	Accept H <sub>0</sub>	Not
	State	138	3.02	0.81					significant
8	Federal	109	3.03	0.90	245	-1.10	1.96	Accept H <sub>0</sub>	Not
	State	138	3.15	0.95					significant
9	Federal	109	3.17	0.90	245	-0.95	1.96	Accept H <sub>0</sub>	Not
	State	138	3.27	0.76					significant
10	Federal	109	2.94	0.88	245	0.16	1.96	Accept H <sub>0</sub>	Not
	State	138	2.92	0.78					significant
t-test	Male Lecturers	109	3.07	0.83	245	1.58	1.96	Accept H <sub>0</sub>	Not
Summary	Female Lecturers	138	3.22	0.89					significant

Source: Research data, 2018

Data on table 4 reveals that the calculated t-values on the mean ratings of lecturers on their proficiency in the use of Microsoft Excel for instructional delivery in Business Education in Colleges of Education in South-South, Nigeria based on their ownership. An observation of the summary of the calculated t-value in Table 12 above reveals that the calculated t-value (1.58) is less than the critical t-value (1.96) at 0.05 level of significance. Since the calculated t-value (1.58) is less than the critical t-value (1.96), the null hypothesis is accepted. The alternate hypothesis is however rejected. The result is that the mean rating of lecturers on their proficiency in the use of Microsoft Excel for instructional delivery in Business Education in Colleges of Education in South-South, Nigeria does not significantly differ based on their ownership

### **Discussions**

The findings from the result of the analysis of research question one in Table 1 revealed that lecturers in business education in colleges of education in South-South, Nigeria have low proficiency in the use of PowerPoint for instructional delivery. The above finding is in agreement with Azuka (2016) who emphasized that lecturers in polytechnics in South-East, Nigeria have low competence in the use of PowerPoint in instructional delivery.

The findings from the result of the analysis two in Table 2showed that lecturers in are proficient in the use of Microsoft Excel for instructional delivery. The above finding is in conformity with Ngwoke and Numonde (2011) who posited that lecturers in are competent in the use of Microsoft Excel in instructional delivery. Findings from Table 4indicated that there is no significant difference in the mean rating of lecturers in their proficiencies in the use of Microsoft Excel for instructional delivery based on ownership. The finding is in agreement with Okorie (2015) who stated that there is no significant difference in the competency of business educators in the use of Microsoft Excel in the teaching and learning with regards to ownership of the institution. On the other hand, the finding disagrees with Nwosu and Ogbomo (2012) that there is no significant difference in the competency of lecturers in the utilization of Microsoft Excel in the teaching and learning of business education based on ownership.

The result in Table 3 indicated that there is no significant difference in the mean rating of lecturers on their proficiency in the use of PowerPoint for instructional delivery based on ownership. The findings in Table 3 tends to agree with the finding of Enock (2013) who posited that majority of lecturers have low competence in the utilization of PowerPoint presentation in instructional delivery. In the same vein, Azuka (2016) indentified problems associated with lecturers' low competence in the use of PowerPoint in instructional delivery.

Table 4 indicated that there is no significant difference in the mean rating of lecturers on their proficiency in the use of Microsoft Excel for instructional delivery based on ownership. The finding is in support of Nwosu and Ogbomo (2012) that there is no significant difference in the competency of lecturers in the utilization of Microsoft Excel in the teaching and learning of business education based on ownership.

#### Conclusion

The study concludes that there is no significant difference on business education lecturers' proficiencies in use of e-visual aid in instructional delivery in colleges of education in South-South, Nigeria despite the difference in ownership of institutions their ability to acquire skills in the use of PowerPoint and Microsoft Excel could facilitate their students employability or self-reliance upon graduation.

#### Recommendations

Based on the findings of the study the following recommendations were proffered:

- 1. Business education lecturers should ensure that their students are taught the rudiments of e-visual skills to enhance their self-reliance capacity.
- 2. Business education students should be sensitized that their intellectual capacity rather than their institution ownership is the catalyst for stimulating their performance or excellence in the world of work.
- 3. Institution owners should encourage new discovery with high potentials for lecturers in Business Education and also ensure that the programme is fully funded.
- 4. Business education lecturers should ensure that their students are instructed in accordance with the same curriculum that is being used by other institutions in the country.

5. Both lecturers and students of business education programme should develop positive study habits that will enable them to be at par or in the same page with their fellow students irrespective of the institutions.

#### References

- Adekunle, C. O. (2012). An assessment of cognitive application of non-graded system of education among school teachers in Egbeda local government. *National Association of Evaluators and Researchers 9th annual conference proceedings*, 9-14.
- Azuka, E. B. (2016). Power point presentation as an alternative to traditional approach to teaching business education courses in tertiary institutions, benefits, challengers and challenges ad solutions. *Nigerian Journal of business education*, 3(2), 3-13.
- Bradbard, D. A., Alvis, C. & Morris, R. (2014). Spreadsheet usage by management accountants: An exploratory study. *Journal of Accounting Education*, *3*(4), 24-35.
- Brewer, P. C., Sorensen, J. E. & Stout, D. E. (2014). The future of accounting education. *Addressing the Competency Crisis, Strategic Finance*, *96*(2), 29-37.
- Ekoh, A. C. (2015). Traditional pedagogy to innovation pedagogy in business education: a challenge to business educators. *Conference proceedings, Association of Business Educators of Nigeria*, *2*(1), 86-94.
- Elrod, H., Pittman, K., Norms, J. T. & Tiggerman, T. (2015). Excel training and technology student learning outcome. *Academy of Educational Leadership Journal*, 19(2), 43-49.
- Emeasoba, N. C. (2014). Assessment of information and communication technology competencies possessed by office technology and management lecturers in tertiary institutions in Anambra and Enugu States, *International Journal of Education and Research*, 2(6), 461-469.
- Enock, A. I. (2013). Business education and ICT. *Journal of Contemporary Issues in Education,* 1(1), 105-128.
- Gray, A. & Todaro, S. (2016). Technology in the accounting classroom: Practitioner Expectations and Educator Practices. *International Journal of Business and Applied Social Science*, 2(1), 30-44.
- Hess, K. (2005). Spreadsheet-based modeling for teaching finance and accounting courses. Rochester: *Social Science Research Network*, *2*(4), 36-45.
- Hill, A., Arford, T., Lubitow, A. & Smollin, L. (2012). I am ambivalent about it": The dilemmas in PowerPoint. *Teaching Sociology*, 40(3), 242-256.

- Iwu, P. C. (2016). Integrating new technologies for improving the business education curriculum in tertiary institutions in Imo State. *Nigerian Journal of Business Education*, 3(1), 91-98.
- Mbaezue, A. N. C. (2010). ICT and business education in global economy. Enugu: JTC publishers.
- Ngwoke, D. U. & Numonde, D. (2011). Optimizing e-learning opportunities for effective education service delivery: A case for use of e-textbook in schools. In Onyegegbu, N. & Eze, U. (eds) optimizing e-learning opportunities for effective education service delivery. Publication of institute of education: University of Nigeria Nsukka.
- Nwosu, O. & Ogbomo, E. F. (2012). *ICT in education*. A catalyst for effective use of information: PNCA quarterly. The official publication of the pacific North West Library Association.
- Nwosu, B. O. & Mbaezue, A. N. C. (2016). PowerPoint competencies required by office technology management lecturers in South-East geo-political zone of Nigeria for efficient adaptation to emerging methodologies. *Nigerian Journal of Business Education*, 3(1), 205-215.
- Okoli, B. E. (2010). Towards effective development of entrepreneurship education in business education. *Journal of Business and Vocational Education*, 1(1), 20-24.
- Okorie, B. E & Wagbara, S.O (2016). Use of new technologies in the instructional delivery of business education: the perceptions of business educators in tertiary institutions in Rivers State. *Nigerian Journal of Business Education (NIGJBED)*, 3(1), 105-117.
- Owobi, A. E. (2008). Role of information communication and technology in the education of children with special needs. *Jos Journal of Education*, *2*(3), 84-87.
- Ozoemena, S. A. (2013). Vocational and technical education: A tool for sustainable development in Nigeria. *Journal of Education and Practice*, 4(25), 127-133.
- Robinson, O. O. & Kennedy, E. (2014). Perceptions of business education students on the relevance of entrepreneurship education at the colleges of education level. *JORIND*, *12*(2), 153-162.
- Spreaakman, G. (2011). Crisis in management accounting curricula. The unclear role of information systems and information technology. Rochester: *Social Science Research Network*: 2(7), 75–87
- Yilji, C. D. & Wakdak, K. R. (2008). Assessment of science teachers and the availability/effective use of ICT facilities in some selected secondary schools in Pankshin. *Journal of Women in Colleges of Education*, 11(2), 20-23