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Impact of Teaching and Learning with New Technologies on Business Education Students' Employability Skills in the Digital Era

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Abstract

The emergence of new technologies has brought about changes in job skills. This study was necessitated by the need to ensure that business education students are adequately exposed to new technologies which will enable them develop employability skills required in the present digital era. Two research questions guided the study and four hypotheses were tested. The study adopted a survey research design. The entire population of ninety-eight (98) lecturers of business education in the universities in South-East, Nigeria was studied. A four-point rating questionnaire, titled "Impact of teaching and Learning with new technologies on business education students' employability skills (ITLNTBESES) was used to collect data for the study. The instrument was subjected to face validation by three experts. Internal consistency method was used to determine the reliability coefficient values of 0.86 using Cronbach Alpha reliability test. Copies of the instrument were administered to the subjects with the help of two research assistants through on the spot completion and retrieval method and 92 copies (representing 96%) were duly completed, retrieved and used for analysis. Mean and standard deviation were used to answer the research questions while null hypotheses were tested at 0.05 level of significance using t-test statistics. The findings of the study revealed among others that new technologies influence the development of employability skills to a high extent. The study concluded that teaching and learning with new technologies impact positively on business education students' employability skills in the digital era.

Keywords: *Teaching, Learning, New Technologies, Employability Skills*

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Background to the Study

New technologies are automated gadgets or computerized machines that radically changes the way something is performed or work is done (Dikeocha, Efughi, Peters and Eneremadu, 2023). These technologies provide methods different from what is previously used. The method they provide offers significant improvement in production and performance. According to Timya, Wetnwan and yongsunshikfu (2019), new technologies imply new exploration and application of concepts, principles and processes for the improvement of human life. They are set of productive technologies which offer a significant improvement over the established "technology' for a given process in a specific historical context (Olayanju, 2016). New technologies consist of computers, scanners, power point, software, internet facilities, slide projectors, mobile/cellular phones, reprographics, interactive whiteboard, electronic board, overhead projector, CD ROMS and video diskette (Dikeocha, et al, 2023). Emergence of new technologies have enhanced effective teaching and learning.

Teaching refers to related activities designed by teacher for the learners in order to enable the learners concretize knowledge. Clark and Starr in Anyanwu, Izuagba, Obiefuna and Afurobi (2019) defines teaching as an effort aimed at helping the learner acquire skills, attitude and knowledge which hitherto they do not have. This definition implies that teaching is meant to change the behaviour of the learner in a determined direction. According to Rajagopalan (2019) teaching is intimate contact between a more mature personality and a less mature one which is designed to further the education of the later. Buttressing more on the concept of teaching Gage in Rajagopalan (2019) asserts that it is a form of interpersonal influence aimed at changing the behaviour potential of another person. In a nutshell, teaching is the process of imparting knowledge, skills, values, attitudes to another person or group of people.

Suffix it to state here that these concepts of teaching vary from the modern approach to teaching. Presently the teacher is no longer seen as the repository of knowledge rather a facilitator. Modern approach to teaching and learning sees teaching as a method of helping learners to construct, form or reconstruct knowledge based on personal experience from activities or interaction with individuals and materials within the learning environment (Okeke and Dikeocha, 2024). This means the learner play active role in the teaching and learning process. Learning on the other hand is a permanent change in behaviour as a result of knowledge, idea, skill, value and experiences acquired. The knowledge, idea, skill, value and experiences acquired enables the learner to modify his world view or perform a task. Onwuka in Anyanwu et al (2019) defines learning as a permanent acquisition and habitual utilization of the newly acquired knowledge or experiences. Thus, it means that the change brought about by learning is not a momentary change but a permanent one. Learning according to Behlol and Hukam (2010) is a personal act of individual to fully utilize his potential. Kendra (2022) asserts that it is a relatively lasting change in behaviour that is the result of experience. Buttressing more on this, Drew (2024) noted that active learning is an instruction method in which students engage with the material directly.

Teaching and learning business education is aimed at providing learners with the knowledge and skills which they will require to perform both as paid employed or self-employed

individuals. Hence, business education is concerned with teaching the skills, attitudes and knowledge needed for successful business career. Oguegbulu (2013), view business education as a form of vocational education that is dictated towards developing the learner to becoming productive in teaching, paid employment and self-employment. According to Aina in Dikeocha and Onwukwe (2011), business education is an education training system that encourages the beneficiary to acquire skills that fits into the world of work. Implicit in these definitions is that business education provides her recipients with employability skills which they require in the world of work.

Employability skills are abilities gain through learning and training which enable an individual make meaningful contributions towards organizational goals. According to Overtoom (2017) employability skills are vital, practical and enabling knowledge, skills and attitudes needed for job success for all business education students. Toland (2014) asserts that they are the fundamental knowledge and abilities needed to succeed in the work force, find a job, grow professionally and perform duties successfully. Fajaryati, Budiyono, Akhyar and Wiranto (2020) added that employability skills are indispensable in the current era of technological disruption and globalization.

Explosion in technology has brought about innovation and changes. These has also affected the way jobs are performed both in business and industry. With the present realities on ground, there is need to equip business education students with innovative employability skills. Innovative employability skills are skills required for effective management of modern office and participation in today's business world. The skills are essential for preparing business education students so that they will be well equipped to face the world of work of the digital era. Digital era is the information or computer age. It is a period of information-based economy where computer and other technology devices are used as medium of communication. Salami and Kehinde (2022) noted that digital era is characterized by technology which increases the speed and breadth of knowledge turnover within the economy and society. In this era, information is sent and received electronically using new technologies. For business education students to possess the ability to perform in the work place of now after graduation, the need for lecturers of business education to adequately expose them to these new technologies that will equip them with innovative employability skills becomes paramount.

Lecturers of business education are those trained, employed and deployed to teach business education in universities in south-east Nigeria. There are state owned universities and federal owned universities. State owned universities are established, owned, controlled and funded by state government while federal universities are established, owned, controlled and funded by the federal government. Business Education in universities in South-East Nigeria have both male and female lecturers. In a study that aimed at determining the impact of teaching and learning with new technologies on business education students' employability skills in the digital era, general opinions are necessary for drawing logical conclusion. Gender refers to the social and psychological dimension of being female or male. Madaki-David and Onyema

(2016) viewed gender as a term describing behaviours and attributes expected of an individual on the basis of being born either a male or female. Gender is used to analyze the roles, responsibilities, constraints, opportunities and needs of women and men in all area and in any given social context. Needs of male and females most times vary. These variations may affect the opinion of male and female business education lecturers in the study.

Business education is aimed at providing her recipients with marketable skills that will enable them make better contributions in the society either as self-employed or paid employed individuals. One of its objectives is to produce skilled manpower who will function effectively in every sector of the economy. Presently there are a lot of changes in job skills as a result of digitalization. To fit in with the demands of today's job, the need to expose business education students to new technologies becomes necessary. Over the years, the teaching and learning of business education have become more theoretical than practical as observed by the researcher. The reason being that lecturers and students are either not provided with the learning machines and equipment or the available machine and equipment are not adequately utilized for teaching and learning. The effect of these will be the production of business education graduates who lack the innovative practical skills required to perform in today's digital office and business. It is this challenge of lack of proper exposure of business education students to new technologies during teaching and learning that necessitated the need to determine the impact of teaching and learning with new technologies on business education student's employability skills in the digital era. Specifically, the study sought to identify the innovative employability skills required by business education students in the digital era and the extent new technologies influence the development of employability skills of business education students.

Research Questions

The following research questions guided the study:

1. What are the innovative employability skills required by business education students in the digital era.
2. To what extent do new technologies influence the development of employability skills of business education students.

Hypotheses

1. There is no significant difference in the mean responses of male and female lecturers on the innovative employability skills required by business education students in the digital era.
2. There is no significant difference in the mean responses of lecturers of federal owned universities and lectures of state-owned universities on the extent new technologies influence the development of employability skills of business education students.

Methods

The study adopted a descriptive survey research design. The area of the study was South-East Nigeria consisting of five states namely Imo, Anambara, Enugu, Abia and Ebonyi. Population

of the study consisted of Ninety–Eight {98} business education lecturers in all the public universities in the area of study. A census survey sampling technique was adopted. The instrument for data collection was a four-point scale questionnaire titled impact of teaching and learning with new technologies on business education students' Employability Skills (ITLNTBESES). The instrument was validated by three experts. The entire items numbering twenty-four (24) yielded a reliability coefficient of 0.84. this was obtained using cronbach Alpha reliability test. A total of ninety-eight (98) copies of the instrument for data collection were distributed with the help of two research assistants through on the spot completion and retrieval method. Only ninety-two (92) copies of the instrument distributed were completed, retrieved and used for analysis. The analysis was done with the statistical package for social science (SPSS). Mean and standard deviation were used to answer the research questions and determine the closeness of the respondents from the mean while t-test was used to test the null hypotheses at 0.05 level of significance. A null hypothesis was accepted where the p-value was equal to or greater than the alpha level of 0.05 and rejected where p-value was less than the alpha level.

Results

Research Question One: What are the innovative employability skills required by business education students in the digital era?

Table 1: Respondents' Mean and Standard Deviation Ratings on the Innovative Employability Skills required by Business Education Students' in the Digital Era

S/N	Items on Innovative Employability Skills required by Business Education Students in the Digital Era	X	SD	Remarks
1	Interpersonal skills	3.65	0.48	Agree
2	Customer relation skills	3.51	0.50	Agree
3	Communication skills	3.67	0.47	Agree
4	Problem-solving skills	3.55	0.49	Agree
5	Creative and innovative skills	3.55	0.49	Agree
6	Self-management skills	3.43	0.47	Agree
7	Time management skills	3.52	0.51	Agree
8	Stress management skills	3.50	0.54	Agree
9	Leadership skills	3.34	0.63	Agree
10	Business analytical skills	3.71	0.45	Agree
11	Capacity building skills	3.47	0.54	Agree
12	Digital literacy skills	3.61	0.66	Agree
13	Information literacy skills	3.57	0.63	Agree
	Cluster Mean	**3.27**		**Agree**

The result in Table 1 revealed that all the items (1 – 13) with mean scores ranging from 3.43 – 3.71 were rated agreed by the respondents. The cluster mean of 3.27 summarized that respondent agreed on the innovative employability skills required by business education students in the digital era. The standard deviation scores of 0.47-0.66 indicate that the

difference between the mean scores were not much, therefore this shows that the items are homogeneous.

Research Question Two: To what extent do new technologies influence the development of employability skills of business education students?

Table 2: Respondents' Mean and Standard Deviation Ratings on the extent New Technologies Influence the Development of Employability Skills of Business Education Students

S/N	Items on the extent New Technologies Influence the Development of Employability Skills of Business Education Students'	X	SD	Remarks
14	Business education students confidently have the ability to effectively use digital communication tools for professional purposes	1.98	0.67	Very Low Extent
15	Learning with online collaboration platforms improve teamwork spirit among business education students	3.12	0.33	Very High Extent
16	Learning with new technology enhances business education students' problem –solving abilities	3.36	0.48	Very High Extent
17	With virtual reality experiences in class business education students' understanding of business concept and their application are enhanced	3.22	0.41	Very High Extent
18	Learning with new technologies enhances business education students' research and information literacy skills	3.47	0.50	Very High Extent
19	New technologies prepare business education students for the digital demands of the modern workforce	3.45	0.52	Very High Extent
20	Learning with technologies improves business education students' creativity and innovative thinking ability	3.14	0.35	Very High Extent
21	Learning with new technologies enhances business education students' ability to prioritize tasks and manage competing deadlines	3.13	0.33	Very High Extent
22	Critical thinking and analytical skills of business education students are improved with new technologies	2.65	0.56	Very High Extent
23	Learning with new technologies prepare business education students for use of technologies in global and multi-cultural business environment	3.17	0.38	Very High Extent
24	Learning with new technology improves business education students' ability to work independently and manage their time effectively	2.97	0.58	Very High Extent
	Cluster Mean	**3.06**		**Very High Extent**

The result in Table 2 showed that item 14 with a mean score of 1.98 was rated to a low extent, this means that business education students to a low extent confidently have the ability to

effectively use digital communication tools for professional purposes. More so, items 15 – 24 with mean scores ranging from 2.65 – 3.47 were rated very high extent. The cluster mean of 3.06 summarized that respondents rated that new technologies to a very great extent influence the development of employability skills of business education students. The standard deviation scores of 0.33-0.67 indicate that the difference between the mean scores were not much, therefore this shows that the items are homogeneous.

Table 3: t-test analysis of the significant difference in the mean ratings of male and female business educators on innovative employability skills required in the digital era

Variables	N	X	SD	df	t-cal	p-value	α-level	Remark
Male	38	51.84	0.36					
				90	14.782	0.052	0.05	Not significant
Female	54	42.06	4.06					

Table 3 revealed that at 0.05 alpha level and 90df, the p-value of 0.052 is greater than the alpha level of 0.05, t(90) = 14.782, p > 0.05, this means that the null hypothesis is not rejected. Therefore, there is no significant difference in the mean ratings of male and female business educators on innovative employability skills required in the digital era.

Table 4: t-test analysis of the significant difference in the mean ratings of business educators on innovative employability skills required in the digital era based on school ownership

Variables	N	X	SD	df	t-cal	p-value	α-level	Remark
Federal	49	51.22	1.40					
				90	30.841	0.102	0.05	Not significant
State	43	40.26	1.98					

Table 4 revealed that at 0.05 alpha level and 90df, the p-value of 0.102 is greater than the alpha level of 0.05, t(90) = 30.841, p > 0.05, this means that the null hypothesis is not rejected. Therefore, there is no significant difference in the mean ratings of business educators on innovative employability skills required in the digital era based on school ownership.

Table 5: t-test analysis of the significant difference in the mean ratings of male and female business educators on the extent new technologies influence the development of employability skills

Variables	N	X	SD	df	t-cal	p-value	α-level	Remark
Male	38	37.76	3.39					
				90	13.262	0.062	0.05	Not significant
Female	54	30.81	1.54					

Table 5 revealed that at 0.05 alpha level and 90df, the p-value of 0.062 is greater than the alpha level of 0.05, t (90) = 13. 262, p > 0.05, this means that the null hypothesis is not rejected. Therefore, there is no significant difference in the mean ratings of male and female business educators on the extent new technologies influence the development of employability skills.

Table 6: t-Test analysis of the significant difference in the mean ratings business educators on the extent new technologies influence the development of employability skills based on school ownership

Variables	N	X	SD	df	t-cal	p-value	α-level	Remark
Federal	49	36.67	3.64					
				90	11.040	0.018	0.05	Not significant
State	43	30.28	1.16					

Table 6 revealed that at 0.05 alpha level and 90df, the p-value of 0.018 is greater than the alpha level of 0.05, t(90) = 11.040, p > 0.05, this means that the null hypothesis is not rejected. Therefore, there is no significant difference in the mean ratings business educators on the extent new technologies influence the development of employability skills based on school ownership.

Discussion of Findings

The findings from research question one revealed that respondents agreed that the identified innovative employability skills are required by business education students in the digital era. These findings agree with Usman (2023) which revealed that interpersonal skills, problem-solving skills, creativity skills, innovation skills, human relation skills among others and employability skills in business education. Shafie and Nayan (2020) also revealed in their study that today's employers are concerned about finding good workers who have higher order thinking skills, problem solving skills, team spirit, self-management, integrity etc. In line with this finding also, the study by Eze and Ononye (2021) revealed that employability skills required of office technology and management (OTM) graduates by managers of small-scale enterprises in Anambra State are problem-solving skills and database management skills. The study also revealed that gender and institution ownership do not significantly affect the opinion of the respondents on the innovative employability skills required by business education students in the digital era.

Research question two findings showed that respondents rated that new technologies to a very great extent influence the development of employability skills of business education students. The findings of the study is in conformity with that of Ordu and Onyemekara (2022) which revealed that business education students can develop self-employability skills through utilization of computer to accomplish daily business operation, surf the internet for business opportunity, develop digital content for promoting self-business, using digital devices to identify digital related problem, analyzed digital problem, think out solution to digital

business problem and collaborate with peers using digital platform. Ordu and Onyemekara added that use of digital devices is expected to enhance business education students' digital skills. Similar to the findings of this study is the findings of Iwu (2019) which revealed that business education students need technology ability, thinking and analytical ability, team work ability among others for global work competition. The study by Balogun and Abiona (2018) also revealed that influence of ICT adoption during teaching and learning business studies in Junior Secondary Schools leads to student's exposure to employability skills and development. The result of hypotheses three and four revealed that there is no significant difference in the mean responses of male and female lecturers and state government and federal government owned colleges of education lecturers on extent new technologies influence the development of employability skills of business education students.

Conclusion

The study determined the impact of teaching and learning with new technologies on business education students' employability skills in the digital era. The study found out that business education students require the identified innovative employability skills in the present digital era and that new technologies to a very great extent influence the development of employability skills of business education students. Based on the findings, it was concluded that teaching and learning with new technologies has great impact on the development of employability skills in business education students' in this digital era.

Recommendation

1. To make graduates of business education relevant in the work place of now implementers of business education should inculcate in the student's innovative employability skills required in the present digital era.
2. To achieve the objective of business education in producing skilled mean power for business and industry all concerned should give serious attention towards the provision of new technologies required for effective and impactful teaching and learning of business education.

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