ISSN: 4481-4318
Volume 10, Number 1, 2024
International Journal of Business Education and Development Studies

TECHNOLOGY INTEGRATION AND JOB MARKET SKILLS: A MODERATION ROLE OF INSTITUTIONAL POLCY OF BUSINESS EDUCATION GRADUATES IN TERTIARY INSTITUTIONS IN RIVERS STATE

Dr. Wagbara, Sampson Owazuaka & Mary Dike-Omeme
Department of Business Education, Ignatius Ajuru University of Education, Rumuolumeni, Port Harcourt, Nigeria

Email: sampsonwagbara@gmail.com

ABSTRACT

The study investigated the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State. A correlational research design was used to carry out the study. The population of the study consisted of 3,763 undergraduates from tertiary institutions in Rivers State. The sample size consisted of 351 undergraduates. Simple random sampling technique was used to select the respondents. A Technology Integration and Job Market Skills Acquisition Questionnaire (TIJMSAQ) was used for data collection. The instrument was validated and tested for reliability, with a reliability index of 0.882 derived through Cronbach's alpha. Pearson's Product Moment Correlation was used to answer the research questions, while the null hypotheses were tested using regression analysis at the 0.05 significance level. The findings of the study revealed, among that, Institutional Policy significantly moderate between the relationship of technology integration and technological skills of business education graduates in tertiary institutions in Rivers State, The study concluded that the technology integration tools moderately contribute to the development of technological skills for business education graduates in tertiary institutions in Rivers State. The study, therefore, recommended, among others, that there is a need for tertiary institutions in Rivers State to prioritize the integration of multimedia tools in their business education curriculum, and tertiary institutions should prioritize the integration of online learning platforms into their curriculum to enhance the technological skills of business education graduates.

Keywords: Technology Integration, Job Market Skills, Institutional Policy, Business Education Graduates

INTRODUCTION

Education at the tertiary education level in Nigeria is considered a crucial stage in preparing individuals for the job market. As such, the curriculum needs to be designed in a way that equips students with the necessary knowledge and skills to succeed in their chosen careers. Sometimes, these curricula are used for a very long time without recourse to updating or adapting them to the changing demands of the job market. However, how the interplay of outdated curricula and the job market affects the employability of Nigerian graduates remains unclear. Therefore, the problems that are envisaged by this study include (1) The lack of access to up-to-date technology and resources for students and lecturers; and (2) The limited training and knowledge of technology integration among business education graduates.

No doubt, the COVID-19 era brought about a sudden shift to remote learning and required the use of technology to make that possible. Specifically, one area that the COVID-19 era exposed was the lack of access to up-to-date technology and resources for students and lecturers at different cadre levels. Some, business education departments, if not all, lack technology like smart classrooms, online learning platforms, and advanced software tools that are essential for enhancing the skills and knowledge of business education graduates. As such, graduates from schools with this challenge may not be expected to be as competitive in the job market compared to those from institutions that have invested in modern technology and resources.

The limited training and knowledge of technology integration among business education graduates is another challenge that makes their ability to adapt to the rapidly changing business landscape more difficult. For instance, most business education graduates are not proficient in using data analytics tools and software, which are crucial for making informed business decisions in today's data-driven world. Additionally, some even lack the skills to effectively utilize social media platforms and digital marketing strategies, which are essential for reaching and engaging with customers in the digital age. With these deficiencies among graduates, can these tertiary institutions boost their preparation of students adequately for the demands of the modern business landscape?

Therefore, based on the foregoing, it becomes imperative to assess the extent to which tertiary institutions are equipping students with the necessary skills and knowledge required to thrive in the modern business landscape. The "unemployable" label that employers frequently slap on graduates serves as the inspiration for this assessment. It is against this backdrop that the relationship between technology integration and the job market skills of business education graduates in tertiary institutions in Rivers State needs to be evaluated.

Purpose of the Study

1. Ascertain the extent to which institutional policy moderate the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State.

Research Question

1. What is the extent to which institutional policy moderate the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State?

Hypothesis

1. There is no significant extent to which institutional policy moderate the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State.

Conceptual Framework

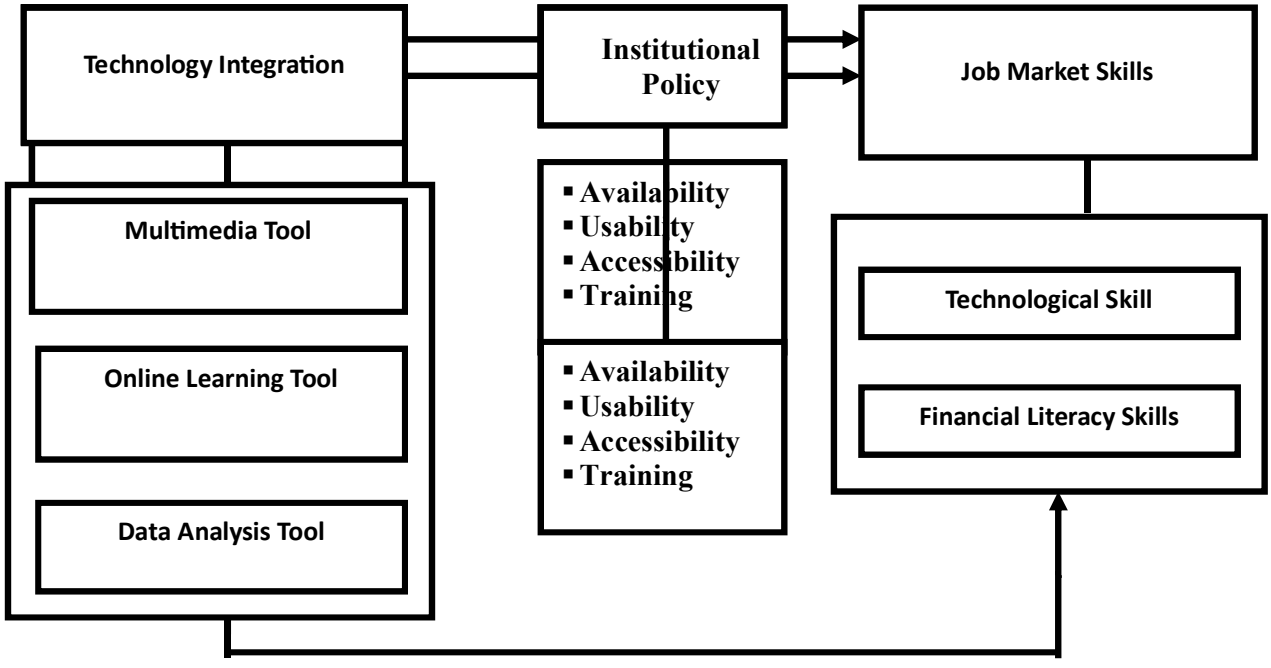

Figure 2.1: Conceptual Framework of the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State
Source: Grand-Clement (2017) and Abraham-Ibe (2021).

Concept of Technology Integration

To address the investigation of technology integration in the teaching and learning of Business Education in Nigerian tertiary institutions, it is necessary to have a clear understanding of multi-dimensional conceptualizations or various understandings of technology, as well as increased attention to technology integration in teaching and learning and a proper understanding of the role of technology in the teaching and learning of Business Education. Since humans began to distinguish themselves from other animals, technology has changed the way people live (Australian Academy of Technological Sciences and Engineering [ATSE], 2013). Also, technology can be viewed as the result of creative thinking or as the application of knowledge to solve everyday problems and capitalize on opportunities as they arise (ATSE, 2013).

Some have referred to technology as a computer, while to others it is machines and gadgets; both ideas can be regarded as layman's views about what technology really is (Grübler, 2013; Chan, 2012). Technology is considered a way of thinking; it refers to how humans think about something in terms of finding proper and lasting solutions to a problem (ATSE, 2013). Similarly, technology in any educational setting is referred to as human thought processes in improving the quality of teaching and learning. Therefore, in the context of this present study, technology means a look at alternatives or innovative ways of introducing strategies to improve the quality of teaching and learning in educational settings.

Many scholars have views on the role of information and communication technology in teaching and learning activities and have offered differing understandings or definitions to help us properly comprehend what technology is all about. For instance, Bamdele (2016) believes that technology encompasses a range of technologies as well as their application, which includes all aspects of the use of computers, microelectronic devices, satellites, and communication technology. While the national policy for information technology (2011) states that technology is any equipment or interconnected system equipment that is used in the automatic acquisition, storage, manipulation, management, control, display, switching, and transmission of information, Aduke (2018) describes technology as tools that comprise electronic devices that are utilized for the information and communication needs of institutions, organizations, students, and individuals.

The term "technology" includes any equipment or interconnected system or subsystem of equipment that is used in the automatic acquisition, storage, manipulation, management, movement, control, display, switching, interchange, transmission, or reception of data or information (Nigerian Federal Ministry of Education, 2014). Technology refers to people's thinking about things to find proper and lasting solutions to a particular problem. Technology in any educational setting refers to human thought processes for improving the quality of teaching and learning (Bijker, 2019). In education, the above discussions imply that technology is a way of looking at alternative or innovative ways of introducing strategies to improve the quality of teaching and learning. From the above discussion, one can conclude that technology is pervasive, touching almost every part of our lives, our communities, and our homes.

Job Market Skills

The concept of job market skills refers to the specific abilities and qualifications that are sought after by employers in the current job market. These skills can vary depending on the industry and job role but generally include a combination of technical knowledge, soft skills, and relevant experience. In today's competitive job market, having a strong set of job market skills is essential for standing out from other candidates and increasing your chances of securing

employment. In the context of business education, Agu and Kadunur (2016) defined job market skills as the abilities and competencies that enable individuals to effectively navigate and succeed in the job market. These skills go beyond just technical knowledge and include critical thinking, problem-solving, communication, adaptability, and leadership. In an ever-evolving job market, it is crucial for individuals to continuously develop and enhance these skills to remain competitive and meet the changing demands of employers.

According to Sakina (2016), job market skills are likened to employability skills, which are the set of skills, knowledge, and attitudes that make individuals more likely to gain employment and be successful in their chosen career. These skills are highly valued by employers as they demonstrate an individual's ability to not only perform the tasks required for a job but also contribute to the overall success of an organization. By continuously improving these skills, individuals can increase their employability and open up new opportunities for career growth. Therefore, from this perspective, job market skills and employability skills will be used interchangeably throughout this discussion.

It is important to note that job market skills encompass technical knowledge and expertise specific to a particular field, while employability skills refer to transferable skills such as communication, problem-solving, and teamwork that are applicable across various industries. Both sets of skills are crucial for individuals to thrive in today's competitive job market and secure long-term career success. Shuga (2010) explained that the main purposes for introducing business studies into the secondary school curriculum were to provide students with the knowledge, skills, and attitudes necessary to achieve success in their place of work, tertiary education, or training, as well as in their daily business lives. In furtherance, Eze (2011) was in support of this statement when he added that the goals of the business studies curriculum were to enable students to:

i. gain an understanding of business concepts through the study of subjects such as commerce,
   shorthand, office practice, bookkeeping, and computers;
ii. develop the skills, including critical thinking skills and strategies, required for self-employment;
iii. apply the knowledge, skills, and attitudes acquired through the study of business to a variety of of learning tasks and relate them to business phenomena on the local, national, and global levels; and
iv. develop lifelong learning skills that will help students adapt to technological advancements,
   the changing workplace, and the global economy (Sakina, 2016).

According to Yore and Knight (2016), employability skills are a set of achievements, skills, understanding, knowledge, and personal attributes that make graduates more likely to gain employment and be successful in their chosen occupations and/or areas of specialization, which benefits themselves, the workforce, the organization, the community, and the economy at large. It is the college's responsibility to identify and implement the appropriate soft skills training approach to help students with this transition.

Institutional policy of tertiary institutions for technology integration in Nigeria

Education is a fundamental human right and is enshrined in the 1948 Declaration of Human Rights (UNESCO, 2017). The need for quality education cannot be overemphasized, which is one of the United Nations' sustainable development goals. The goals are to provide quality education by ensuring inclusive and equitable education as well as promoting lifelong learning opportunities for all. As higher institutions in developed countries such as the UK, the United States, etc. continue to explore and adopt current trends in ICT such as mobile technology to improve the quality of education and learning experiences (Davidson & Lazaros, 2015), this is not the case in higher institutions in a developing country like Nigeria.

National Policy on Education

Studies have shown that Nigeria has expressed commitment to education, which has accounted for various policy initiatives such as the National Policy on Education (NPE) by the government, as education is considered an instrument preeminent for effective national development and social change (Bolaji et al., 2015). Yet, regardless of the indisputable evidence that education is crucial to the development of the nation, access to quality education is still a challenge in Nigeria (Odukoya et al., 2018). These challenges affect all levels of education, including tertiary education, which is made up of colleges of education, polytechnics, universities, etc. (NPE, 2013).

Quality in higher education refers to the value of the inputs into higher education systems: educators, instructional facilities, and evaluation procedures, which translate to the outputs (Asiyai, 2013). As seen in the policy document, one of the goals of tertiary education in Nigeria is to "provide accessible and affordable quality learning opportunities", to be achieved through quality teaching and learning and high standards in the quality of facilities, services, and resources (NPE, 2013 p. 26). It is evident from the NPE document that the Nigerian government has a keen interest in providing quality tertiary education. However, for more than 40 years since the policy came into existence, Nigeria has been unable to successfully implement it (Odukoya et al., 2018).

ICT Policy in Education

The Nigerian government is not oblivious to the role of ICT in higher education. As part of her education reform effort, ICT was implemented at all levels of education to improve teaching and learning, enhance higher education research, enhance collaboration, and improve the overall quality of education (Asiyai, 2013). As Odukoya et al. (2018) revealed, the Federal Executive Council approved a national IT policy in March 2001 and established the National Information Technology Development Agency (NITDA), charged with the responsibility of implementing the policy in the country.

The Federal Ministry of Education is responsible for the implementation of ICT policies in education and is advised by the National Council on Education, which is made up of the Federal Minister for Education, the State Commissioners of Education, and a Joint Consultative Commission on Education, who are essentially education officials. As stated in the policy document, some of the objectives include:

i. To integrate ICT into the national education curriculum.
ii. Introduce mandatory training and appropriate courses for ICT at all tiers of education.
iii. Foster an ICT-driven educational administration environment.
iv. Promote the development of instructional materials in electronic format.

To meet the objectives, the strategies outlined include:

1. Provide personal computers in public places (e.g., post offices, schools, public libraries, etc.) in small and large communities to help low-income segments of society gain access to the internet and for educational purposes.
2. Promote the incorporation of ICT within the education curriculum at all levels.

However, due to the challenges in the system, such as the lack of proper infrastructure to support the use of ICT in Nigerian schools (Egoeze et al., 2014), the implementation of these policies is unsustainable.

Research Methodology

The design for this study was a correlational design. According to Nworgu (2016), a correlational design is used to examine the relationship between two or more variables without manipulating them. The population of this study consisted of three thousand seven hundred and three (3,763) undergraduates from the three tertiary institutions in Rivers State. They included Rivers State University, Ignatius Ajuru University of Education and Federal College of

Education Technical (FCET), Omoku. The study adopted the simple random sampling technique to select the respondents for the study. The sample of the study consisted of 351 undergraduates from the selected institutions used for the study. The instrument for data collection was a self-structured 25-item questionnaire. Pearson's Product Moment Correlation was used to answer the research questions. On the other hand, regression analysis was used to test the hypotheses at the 0.05 significance level. The data analyses will be carried out using the Statistical Package for Social Sciences (SPSS) version 25.

RESULTS

Question one: What is the extent to which institutional policy moderate the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State?

Table 1: Regression analysis on the relationship of the extent to which institutional policy moderates the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State

Model Summary[b,c]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	0.732[a]	0.536	0.535	10.634	2.255

a. Predictors: (Constant), Technological Integration
b. Dependent Variable: Job Market Skills
c. Weighted Least Squares Regression - Weighted by Institutional Policy

Source: SPSS Computation, 2024.

Table 1 shows the extent to which institutional policy moderate the relationship between technological integration and job market skills among undergraduates in Rivers State-owned tertiary institutions. It further indicated that an r-value of 0.732 indicated a strong contribution of the independent variable (technology integration) to the dependent variable (job market skills) as moderated by institutional policy. This finding implies that institutional policy strongly moderates the relationship between technological integration and job market skills among undergraduates in Rivers State-owned tertiary institutions.

Hypothesis 1: There is no significant extent to which institutional policy moderate the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State.

Table 2: Summary of Analysis of Covariance on the relationship of the extent to which institutional policy moderates the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State

Dependent Variable: Job market skills

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	2937.187[a]	7	419.598	57.648	0.000
Intercept	1861.860	1	1861.860	255.799	0.000
Technological Integration	2868.690	1	2868.690	394.126	0.000
Institutional Policy	**62.275**	**6**	**10.379**	**1.426**	**0.204**
Error	2496.562	343	7.279		
Total	330337.000	351			
Corrected Total	5433.749	350			

a. R Squared = .541 (Adjusted R Squared = .531)

The result of Table 2 show the extent to which institutional policy moderate the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State. The result show that $F_6 = 1.426$, df = 343, and Sig = 0.204 > 0.05. Therefore, there is no significant extent to which institutional policy moderate the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State.

Discussion of Findings

The result in table 1 shows that institutional policy strongly moderates the relationship between technological integration and job market skills among undergraduates in Rivers State-owned tertiary institutions. Furthermore, the result of table 2 indicated that there is no significant extent to which institutional policy moderate the relationship between technology integration and job market skills of business education graduates in tertiary institutions in Rivers State. This finding is consistent with the study of Kehinde and Olatunde (2022) which revealed that there is no significant difference in the mean score of male and female business education graduates on e-commerce-related skills.

CONCLUSION

Based on the findings, it can be concluded that the technological integration tools moderately contribute to the development of technological skills for business education graduates in tertiary institutions in Rivers State. Additionally, the integration of this tool strongly contributes to the development of financial literacy skills. Furthermore, institutional policies must be put in place to maximize the benefits of these integrations and to ensure that graduates are well equipped with the necessary skills for the job market.

RECOMMENDATIONS

Considering the findings, discussion and conclusions of this study, the following recommendations are made:

1. The management of these tertiary institutions should review and revise their institutional policies to better support technological integration and the development of job market skills among undergraduates.
2. Tertiary institutions in Rivers State should incorporate online learning platforms and resources into their business education curriculum. This can be done by providing students with access to online courses, interactive learning materials, and virtual simulations that focus on financial literacy.
3. Tertiary institutions in Rivers State should consider incorporating data analysis integration into their business education curriculum to enhance the financial literacy skills of their graduates. This can be done by offering courses or modules specifically focused on data analysis and its application in the context of financial literacy.

REFERENCES

Abraham-Ibe, I.G. (2021). Business education skills: Imperative for job opportunities and sustainability of graduates in Nigeria. African Scholar Journal of African Sustainable Development (JASD-2), 23(2), 106-115.

Adekemi, A.A. (2001). Introduction to computer education technology, Ibadan: International Publisher Ltd. Adamawa State Post Primary Schools Management Board, (PPSMB, 2011). List of business studies teachers in junior secondary schools in Adamawa State.

Grand-Clement, S. (2017). *Education and skills in digital age.* RAND Corporation. www.rand.org/t/CF369

Kunakornsakul, H. & Pinit, P. (2012). 21st century skills of undergraduate students in science and technology: An iformation literacy assessment. *The Proceedings of International e-Learning Conference 2012(IEC2012)*, June 14 - 15, Muang Thong Thani, Thailand. Available at: http://support.thaicyberu.go.th/iec2012/proc.pdf.

Literat, I. (2011). Measuring new media literacies: Towards the development of a comprehensive assessment tool. Paper presented at Teachers College Educational Technology Conference (TCETC). New York, NY.

Lou, S., Shih, R., Liu, H. T., Guo, Y. & Tseng, K. (2010). The influence of the sixth grader's parent internet literacy and parenting style on internet parenting. *The Turkish Online Journal of Educational Technology, 9*(4): 173-184.

Nworgu, B. G. (2016). Education Research. *Basic Issues and Methodology: Ibadan: Wisdom Publishing*, *45*. Saddiquah, A. & Salim, Z. (2017). The ICT facilities, skills, usage, and the problems faced by the students of higher education. *EURASIA Journal of Mathematics Science and Technology Education, 13*(8), 4987-4994. Available at: http://dx.doi.org/10.12973/eurasia.2017.00977a

Ukaegbu, B. C. N. & Wegwu. B. J. (2019). Accessing library resources for ICT skill acquisition in Nigerian universities for ICT skill acquisition in Nigeriam universities. *The Information Technologist: An International Journal Information and Communication Technology (ICT),16*(1): 203-209

Ukpebor, C. O. & Emojorho, D. (2012). Information literacy skills: A survey of the transition of students from Secondary to University Education in Edo State, Nigeria. *Library Philosophy and Practice,* Paper 824, 1 - 8. Available at: http://digitalcommons.unl.edu/cgi/viewcontent.cgi?article=2073&context =libphilprac>

Umeano, N.E., & Ifi, C. C. (2019). Extent of integration challenges of new technologies in teaching business education courses in tertiary institutions. Nigerian Journal of Business Education (NIGJBED) 6(1), 235-245.

Tetep, A. S. (2019). Students' digital media literacy: Effects on social character. *International Journal of Recent Technology and Engineering (IJRTE), 8*(2S9), 394 – 399. Available at: https://www.ijrte.org/wp-content/uploads/papers/v8i2S9/B10910982S919.pdf