UNIVERSITY LECTURERS' UTILIZATION OF INNOVATIVE PEDAGOGY AND UNDERGRADUATES' EMPLOYABILITY SKILLS OUTCOME IN CROSS RIVER STATE, NIGERIA

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Abstract

The study investigated the composite predictive relationship between university lecturers' utilization of innovative pedagogy and undergraduates' employability skill outcomes in Cross River State, Nigeria. One hypothesis was formulated for the study and correlation research design was adopted. The population of the study consists of 14,608 final year students in public universities in Cross River State (9,887 final year students in the University of Calabar UNICAL and 4,721 final year students in the University of Cross River State UNICROSS). The study adopted multi-stage sampling technique. Stratified sampling technique was first used to divide the population into two strata: UNICAL and UNICROSS. The next stage was the utilization of Taro Yamane formula for sample size determination which gave a sample size of 389. Simple random sampling technique was then used to select 389 students from the study population, where 263 students representing 67.68% were drawn from UNICAL while 126 students representing 32.32% were drawn from UNICROSS. An instrument titled: "University Lecturers' Utilization of Innovative Pedagogy and Undergraduates' Employability Skill Outcomes Questionnaire (ULUIPUESOQ)" was administered for data collection. The instrument was subjected to face validity and Cronbach Alpha reliability method. Data collected were subjected to multiple regression analysis and results tested at .05 level of significance. The results revealed that university lecturers' utilization of the identified innovative pedagogy significantly predict undergraduates' employability skill outcomes in Cross River State. It was concluded that innovative pedagogical approaches are sine qua non for the acquisition of employability skills by university undergraduates to stem the wave of rising graduate unemployment in Nigeria. It was recommended among others that university lecturers should be motivated through incentivized periodic training and re-training on how to utilize a mix of innovative pedagogical approaches for eventual transmission of relevant knowledge and employability skills to undergraduates.

Keywords: *Lecturers' utilization, Innovative pedagogy, Undergraduates' employability, Skills outcome, Nigeria*

Introduction

Stakeholders of education-to-employment value-chain in Nigeria are consistent in their expression of discontent, disappointment, and disenchantment over the mismatch between university graduates' competence and employers' needs. Worse still is the rising rate of graduate unemployment occasioned by being ill-equipped with relevant skills and abilities to function effectively. These skills are not job-specific, but play an important role in improving employees' performance and value-addition in the workplace as well as have an impact on ability to progress in ones' career. Employability skills are held in high esteem by employers because they are more difficult to teach than job-specific

skills. Some of these skills or abilities are instinctive, while others are acquired through education and training.

Changing global paradigms are replete with fluctuating economic indices leading to estimation by the World Economic Forum in 2020 that 85 million jobs may be displaced by 2025 due to a shift in the division of labour between humans and machines (Claus, 2020). The Forum outlined top ten skills that will be in high demand to include: analytical thinking and innovation; active learning and learning strategies; complex problem-solving; critical thinking and analysis; creativity, originality and initiative; leadership and social influence; technology use, monitoring and control; technology design and programming; resilience, stress tolerance and flexibility; reasoning, problem-solving and ideation. There is need for undergraduates as prospective job seekers to be more flexible to the growing number of career changes experienced through life because of the increase in short term contracts, outsourcing, retrenchment and downsizing, as well as the prevailing economic downturn in Nigeria occasioned by depreciation of naira, rising interest rate, increase in cost of energy, among others.

Employability skills are skills acquired by undergraduates in order to increase their chances of gaining employment upon completion of their academic cycle or being awarded a degree for successful performance of their roles in the work place once they have found employment. Employment and employability is not the same thing. Being employed means having a job whereas being employable means having the attributes needed to maintain employment and progress in the workplace (Onyeike & Onyeagboko, 2014; Akinbode & Oyelude, 2020; Odoh, et al, 2021; Okoye & Nwagu, 2022). To be employable is to possess soft skills which are not job specific yet, could give one an edge over others who do not have them.

Regrettably, there are persistent and vociferous complaints that most products of Nigerian universities are unemployable and indeed, half-baked; full of too much theory and little practical content; of dubious quality, even though we are having more education and deficient in knowledge, skills and attitude. Hoping to improve their chances of employment, some recycle themselves into postgraduate programmes while others who do not see any hope of self-sustenance outside the university, devise ways of remaining within the system but engage in various anti-social activities. This situation has not only posed a great challenge to the economy but also retarded the economic growth of the country. Persistent graduate unemployment wastes human resources that could contribute to economic progress in the short-run, widespread unhappiness (of which rising suicide rates are a symptom) and social discontent among the youth, which may leave long term scares on the working adults of the next generation (Akeke & Ofem, 2016; Ameh & Okpa, 2018).

Oviawe, et al, (2017); Babatunde, et al (2021), observed that education and training as the fulcrum for graduate turnout is carried out with 21st century pedagogical approaches within a technologically enhanced environment. Good pedagogical methods make the subject content easier to understand and apply, while inappropriate methods can ruin the understanding and application of some topics or subjects (Ezenwafor & Ihejirika, 2022; Iro-Idoro & Jimoh, 2022). Therefore, deliberate effort by teachers or facilitators at all levels of education in the utilization of appropriate pedagogy for the promotion of meaningful learning cannot be overemphasized. In light of the above, Doherty and Chijioke, (2020), define pedagogy as any activity that is consciously designed by a facilitator of any learning programme to enhance effective learning in the students. The ultimate goal in designing pedagogy is the motivation of students to acquire not only knowledge but “soft or employable skills” that will engender success and productivity in their transition to the world of work.

The adoption of active pedagogical approaches by lecturers therefore, cannot be achieved without the establishment of a conducive and equitable learning environment that will enhance control of learning for the learners. Universities are concerned with the utilization of pedagogical strategies to enhance the development of competences for graduate employability. Graduate employability and competence development around the world depends on a strong sense of innovative pedagogy and collaborative practices implemented in higher education (Ofem, et al, 2017).

Innovation is the act of looking beyond the status quo with a view to developing a novel idea capable of improving a system or organizational output for service-delivery. From the foregoing therefore, innovative pedagogy is a learning approach that defines how knowledge, skills, and attitudes are produced, assimilated, and used by learners in a manner that equips the learner with relevant knowledge to function in a local, national and global socioeconomic space (Adesoji & Sangoleye, 2017; Doherty & Chijioke, 2020; Pitan & Muller, 2023). Innovative pedagogy is a 21st century mix of teaching methods that may be taken together to meet the needs of the learner both in formal and informal learning space.

With change in work demand, employers of labour are looking for innovative ways to gain a competitive edge in an innovative-based environment. The changing work demand must however, reflect how future generations are educated. The adoption of innovative instructional strategies can push for the actualization of this demand. The 21st century pedagogical approach is learner-centred and activity-based. This suggests a paradigm shift from the traditional approach which used to be teacher-centred to the innovative approach which is learner-centred. Although a plethora of pedagogical approaches exist in the instructional space. In the context of this study however, the following are selected for focus and they include: the e-learning approach, industry-based approach, blended learning approach, and problem-solving approach.

Despite all the interventions by education-to-employment stakeholders through policies and programmes, the problem of undergraduates' employability skill outcomes still remains intractable. This unacceptable situation is quite evident from the hundreds of thousands of graduates that are still unemployed many years after graduation. It is the consideration of the above scenario that the curiosity of the researchers is aroused to seek and establish ways and means of solving this problem by embarking on this study to determine the relationship between university lecturers' utilization of innovative pedagogy as regards: e-learning approach, industry-based approach, blended learning approach, problem-solving approach and undergraduates' employability skill outcomes.

Statement of the problem

It is no contradiction that Nigeria is the most populous black nation in the world. In addition to the natural endowment, the nation is rich in critical manpower spanning various sectors of the economy and contributing to gross domestic product (GDP). From extant policy documents, universities are mandated to provide the nation's manpower needs, a duty the former outperforms annually in terms of quantity of graduates turnout.

However, university graduates in Nigeria find themselves in a state of agitation and tumult due to rising unemployment rate occasioned by colossal yearly graduate turnout with no commensurate opportunity in the already over-saturated labour market for absorption. The situation has assumed an untoward dimension leading to anxiety among the unemployed that criminality and inequality is exacerbated, posing threat to national security and cohesion. Apart from hearing through the grapevine, employers in several forums are consistent in reiterating the lack of relevant employability skills as a major factor responsible for spike in graduate unemployment. Most employers look for employability skills and other qualities in prospective employees in addition to academic qualification. Some who are already employed are unable to carry out their task and duties effectively and efficiently due to lack of job-specific skills to undertake assigned responsibilities. This scenario compromises organizational productivity and denies its victims (the unemployed) their genuine means of livelihood. In order to survive, they engage in various forms of criminality which threaten the corporate peace of the nation.

In light of the above, stakeholders have continued to convene and brainstorm factors responsible for the ugly trend with a view to present solution-oriented strategies in reducing the spate. Government's recent policies and programmes such as the Subsidy Reinvestment and Empowerment Programme SURE-P, Youth Enterprise with Innovation in Nigeria YOUWIN, N-Power, the National Development Plan (2021-2025), the National Youth Skills Programme, and the Nigerian Youth Employment Action Plan (2021-2024), among others, seem not to have yielded positive result. Therefore, the poser that this

present study seeks to provide answer to is: to what extent do innovative pedagogical approaches compositely predict undergraduates' employability skill outcomes?

Purpose of the Study

The main purpose of this study is to find out the composite predictive relationship between university lecturers' utilization of innovative pedagogy (utilization of e-learning approach, utilization of industry-based approach, utilization of blended learning approach and utilization of problem-solving approach) and undergraduates' employability skill outcomes.

Hypothesis

There is no significant composite prediction of university lecturers' utilization of innovative pedagogy (utilization of e-learning approach, utilization of industry-based approach, utilization of blended learning approach and utilization of problem-solving approach) and undergraduates' employability skill outcomes.

Literature Review

E-learning stands for electronic learning. It is any technologically mediated learning using computers whether from a distance or in a face-to-face classroom setting. It is a shift from traditional education or training to information communication technology-based. It is a personalized, flexible, individualized, self-organized, and collaborative learning based on a community of learners, facilitators and experts (Mgbere, 2016; Ofem,et al, 2023). As an emerging innovative pedagogical approach, the teaching profession is evolving from the emphasis on teacher centered instruction to student-centered instructional learning environment. Educational service delivery in this era prepares graduates who will not lack the required mental preparation that will enable them engage in job creation for themselves and others.

A study by Metilda & Neena, (2017), analyzed the impact of digital technology on learning to enhance the employability skills of business management graduates from three different contexts: Tamilnadu, Karnataka and PGDM institutes. The sample data of the study was business management graduates of different institutions. Their skill level was evaluated using a self-assessment instrument compared with the expected skill level from the employers of selected sectors of industry. Result from the study showed lower digital skills and large variation in employability level due to the variation in digital skills. The study concluded that digitized e-learning have its impact on the development of the process skills which reflects on the employability of the graduates.

Industry-based pedagogical approach is work-integrated learning which encourages undergraduates to reflect on their own learning, gain a better understanding of the world-of-work and the profession related to their area of specialization and learn how to conduct and manage themselves in different context, all, vital to graduate employability (Mcllveen, et al, 2011). This approach pushes undergraduates to integrate theory with practice by providing opportunities for practicing acquired knowledge and skills and problem-solving (Weisz and Smith, 2005). It is an instructional approach applied across higher educational institutions in developed countries like the United Kingdom and United State of America. It is a collaborative learning approach where undergraduates are exposed to theory in classroom and practical in the workplace or industry. In other words, knowledge is acquired from the classroom while skill is built from the workplace. In Nigeria and other developing nations, most universities' management abandons undergraduates proceeding on industrial work experience to their fate. These students search for space in several Ministries, Departments, Agencies and Commissions (public and private) for the acquisition of practical experience and skill development.

Okolie, et al (2019), investigated why higher education institutions have problems with teaching generic skills. This study drew on in-depth interviews which were conducted in three phases. By adopting a qualitative approach, based on interviews with senior academics, industry executives and final year undergraduates, this study found that many of HEIs do not facilitate the teaching of high-level

generic skills in their programmes. Some of the factors attributed to this include poor learning environment, lack of staff with industry experience and over-dependence on 'theoretical content' teaching. The findings are significant for re-orienting higher education curriculum to align with the needs of the industry and society.

Yusuf, et al (2018), examined lecturers' perspectives on enhancing university graduates' employability in Nigeria. Descriptive survey design was adopted in the study. Simple random sampling technique was used in selecting 120 lecturers who constituted the sample. Descriptive statistics was used in answering the research question while t-test and Analysis of Variance (ANOVA) was used in testing the hypotheses. It was found among others that majority of the lecturers agreed that there is need for undergraduates to acquire transferable skills and a broad-based experience. Based on findings of the study, it was recommended among others that the school authority should expose undergraduates to internship and work experience scheme irrespective of their field of study.

Blended learning approach is an innovative concept that embraces the merits of both traditional classroom teaching and ICT supported learning. Blended learning is e-learning combined with other training methods. It has a great deal of latitude for collaborative learning, constructive learning and computer assisted learning.

A study by Ibrahim and Dandago (2013), investigated the effect of technological advancement on the employability of business education graduates in Nigeria labour market. The study developed four specific objectives and four null hypotheses. Descriptive survey design method was adopted with a four-rating structured questionnaire titled: "Modern Technology and Employability Skills" (MTES), to generate data from 89 respondents that participated in the 2012/2013 business education postgraduates' entry examination. Data collected were coded using SPSS to run Pearson Product Moment Correlation Coefficient to test null hypothesis one. Chi-square was used to test null hypothesis two, while ANNOVA was used to test null hypotheses three and four respectively. All the four hypotheses were tested at 0.05 level of significance. The analysis revealed, among other findings, that business education curriculum contents in Nigeria do not equip students with generic skills required for their employability in Nigerian labour market in the present advanced technological era. Based on the findings, the researchers recommended that all the major skills in the modern technologies needed by the Nigerian labour market should be integrated into the curriculum of business education programme in Nigerian universities.

A case study by Poon (2013), reported the use of blended learning as a delivery method at Nottingham Trent University in the United Kingdom. The study examined the benefits that blended learning provides to students' learning experiences. Data was collected through interviews from lecturers and responses from students to a questionnaire survey. Findings from analyzed data revealed a common view between the students and lecturers: that, blended learning provides flexibility for students. Both groups found the use of a broad range of teaching methods assisted students' learning. The study further found that students with different learning paces and styles benefited from using various learning methods in order to maximize their learning ability and potential. These common views were similarly shared by Garrison and Kanuka (2004), that, blended learning encourages flexibility. The authors further expressed the view that blended learning was a fovourable delivery method, particularly for part-time or distance learning courses with students studying off site.

Problem-solving refers to the ability to handle difficult or unexpected situations in the workplace as well as complex business management challenges. Problem solving is another innovative pedagogical approach which is deployed as a teaching strategy that employs the scientific method in searching for information. Critical thinking and problem-solving top the list of skills that employers believe will grow in prominence in a couple of years. These have been consistent since the first report in 2016 by World Economic Forum (Claus, 2020).

A survey by Oduma (2010), on business education graduates and employers expectations for gainful employment examined employers' expectations of the general work competences needed by business education graduates for gainful employment in organizations. Descriptive survey design was

adopted for this study. The respondents consisted of employers of labour (Chief Executive Officers) responsible for employment exercises which were drawn randomly from government and private establishments in Ebonyi State, Nigeria. Two hundred and eighty (280) Chief Executives were used in this study to serve as the sample for the study. The instrument for data collection was a structured questionnaire developed by the researcher. Weighted mean and standard deviation were used in answering research questions. The study revealed, among others, that employers of labour desired business education graduates to possess ICT skills, leadership competencies and problem-solving skills as pre-requisite for gainful employment in establishments and organizations. It was recommended, among others, that business education programme in tertiary institutions should be restructured to enable the recipients acquire cluster of general work competencies or organizational behaviours desired by employers of labour.

A mass of empirical studies reviewed indicated that universities lecturers' utilization of innovative pedagogy has significant influence on undergraduates' employability skill outcomes. However, most of the works of literature reviewed are from studies where innovative pedagogy and undergraduates' employability skill outcomes have more or less taken firm roots. From much of empirical studies reviewed, sample subjects were drawn from students and lecturers as well as the employment industry of developed nations. Consequently, the results of their findings could seem overblown compared with this present study where sample is drawn from university lecturers whose innovative pedagogical experience is just budding.

Methodology

The correlation research design was adopted for the study. The correlation design is suited because the study examined the relationship between university lecturers' utilization of innovative pedagogy and undergraduates' employability skill outcomes as at the time of this study. The population of the study consists of 14,608 final year students in public universities in Cross River State (9,887 final year students in the University of Calabar, UNICAL and 4,721 final year students in the University of Cross River State UNICROSS).

The study adopted a multi-stage sampling technique. Stratified sampling technique was first used to divide the population into two strata (University of Calabar and University of Cross River State). The next stage was the utilization of Taro Yamane formula for sample size determination which gave a sample size of 389. Simple random sampling technique was then used to select 389 students from the study population. The sample size of the study was 389 students drawn from the two public universities in the study area. 263 students, representing 67.68% was drawn from UNICAL while 126 students representing 32.32% was drawn from UNICROSS.

Correlation research design was adopted as research design for this study while using students from the University of Calabar (UNICAL) and University of Cross River (UNICROSS) as subjects. An instrument titled: "University Lecturers' Utilization of Innovative Pedagogy and Undergraduates' Employability Skill Outcomes Questionnaire (ULUIPUESOQ)" was administered for data collection. The instrument was a four-point Likert scale of 'Strongly Agree' (A), 'Agree' (A), 'Disagree' (D) and 'Strongly Disagree' (SD) with the value of '4, 3, 2 and 1' for positively worded items. The instrument was divided into three sections: sections A, B and C. Section 'A' was designed to collect demographic data of respondents, section 'B' consists of 20 (twenty) items on innovative pedagogical approaches for undergraduates' employability skill outcomes, and section 'C' consists of 12 (twelve) employability skill outcomes as the expected result from the utilization of innovative pedagogy by university lecturers.

Data analysis

Data collected was analyzed using IBM SPSS version 26.0, which consist of Multiple Regression Analysis. This test statistics was used in testing formulated hypotheses.

Hypothesis one

There is no significant composite prediction of university lecturers' utilization of innovative pedagogy in terms of utilization of e-learning approach, utilization of industry-based approach, utilization of blended learning approach and utilization of problem-solving approach and undergraduates' employability skill outcomes in Cross River State.

The predictor variables in this hypothesis are innovative pedagogy in terms of e-learning approach, industry-based approach, blended learning and problem-solving, while the criterion variable is undergraduates' employability skills outcomes in Cross River State. To test this hypothesis, multiple regression analysis was used to analyze the data. The result of data analysis is presented in Table 1 and Table 2. Table 1 shows that the analysis of variance in the regression output produced an F-ratio of 28.151 ($p< .05$), which is statistically significant at .05 probability level (critical $F_{[4, 384]} = 2.10$). This means that the predictor variables (innovative pedagogy in terms of e-learning approach, industry-based approach, blended learning and problem-solving) are jointly potent in significantly predicting the variance in the criterion variable (undergraduates' employability skills outcomes in Cross River State). The result also shows a multiple regression coefficient (R) of .476 and a coefficient of determination (R^2) of .227. This implies that 22.7% of the variance in undergraduates' employability skills outcome in Cross River State is attributed to the variation in all the innovative pedagogical variables considered in this study.

This means that 77.3% of the variation in undergraduates' employability skills outcomes in Cross River State is attributed to other variables extraneous to the study. In the whole, given that F-value is 28.151 ($p<.05$) and R and R^2 are .476 and .227, which indicates that the multiple correlation coefficient differs significantly from zero, indicating a significant association between the predictor variables and the criterion variable. This means that innovative pedagogy in terms of e-learning approach, industry-based approach; blended learning and problem-solving jointly predict undergraduates' employability skills outcomes in Cross River State.

To find the relative contribution or predictive strength of the predictor variables (innovative pedagogy in terms of e-learning approach, industry-based approach, blended learning and problem-solving) in predicting the total variance in undergraduates' employability skills outcomes in Cross River State, a test of regression weight was carried out and the result is shown in Table 2. Table 2 indicates that innovative pedagogy in terms of e-learning approach ($t= 4.875$, $p< .05$) is the strongest predictor of the variance in undergraduates' employability skills outcome in Cross River State. The second strongest predictor is innovative pedagogy in terms of industry-based approach ($t= 3.897$, $p< .05$), the third strongest is innovative pedagogy in terms of blended learning ($t=2.825$, $p<.05$), and finally, innovative pedagogy in terms of problem-solving ($t= 1.754$, $p< .05$).

Thus, the multiple linear regression models were fitted based on the results of hypothesis tested in this study.

Undergraduates' employability skills outcome:

$UESO = 0.237_{ELA} + 0.199_{IBA} + 0.138_{BLA} + 0.092_{PSA} + 1.908$…….. (1)

Where:

UESO = Undergraduates' employability skills outcome
ELA = E-Learning approach
IBA = Industry-based approach
BLA = Blended learning approach
PSA = Problem solving approach

TABLE 1

Summary of multiple regression analysis of the relationship between innovative pedagogy in terms of e-learning approach, industry-based approach, blended learning and problem-solving and undergraduates' employability skills outcome in Cross River State

Model UESO	Sum of squares	Df	Mean square	F ratio	p–level	R	R^2	Adj R^2	SE
Regression	410.028	4	102.507	28.151	.000[b]	.476[a]	.227	.219	1.908
Residual	1398.245	384	3.641						
Total	1808.272	388							

a. Predictor variables: (Constant), Innovative pedagogy in terms of e-learning approach, industry-based approach, blended learning and problem-solving

b. Criterion variable: Undergraduate employability skills outcome in Cross River State

TABLE 2
Regression weights of the predictor variables

Variables	B	Std. Error	Beta	T	p-value	Rank
Constant	6.211	1.169		5.314	.000	
e-learning	.237	.049	.236	4.875	.000	1st
Industry based	.199	.051	.202	3.897	.000	2nd
Blended learning	.138	.049	.140	2.825	.000	3rd
Problem solving	.092	.053	.094	1.754	.000	4th

a. Predictor variables: (Constant), Innovative pedagogy in terms of e-learning approach, industry-based approach, blended learning and problem-solving.

b. Criterion variable: Undergraduates' employability skills outcome in Cross River State

Discussion

The result of hypothesis testing as presented in Table 1 shows that the predictor variables in terms of e-learning approach, industry-based approach, blended learning and problem-solving are jointly potent in significantly predicting the variance in the criterion variable in terms of undergraduates' employability skills outcomes in Cross River State. The result also shows a multiple regression coefficient (R) of .476 and a coefficient of determination (R^2) of .227. This implies that 22.7% of the variance in undergraduates' employability skills outcome in Cross River State is attributed to the variation in all the innovative pedagogy variables considered in this study. It goes to suggest that 77.3% of the variance in undergraduates' employability skills outcome may be attributed to extraneous variables not of interest at the time of undertaking the study, as they did not form part of the independent (predictor) variables.

Findings from the hypothesis testing from Table 1 result conform to Oduma (2010) survey which revealed, among others, that employers of labour desired business education graduates to possess ICT skills, leadership competencies and problem-solving skills as pre-requisite for gainful employment in establishments and organizations. Furthermore, result from Table 1 is in congruence with Okolie, et al (2019), whose study found that many of HEIs do not facilitate the teaching of high-level generic skills in their programmes. According to the study findings, some of the factors attributed to this include poor learning environment, lack of staff with industry experience and over-dependence on 'theoretical content' teaching. These findings are significant for re-adjusting university education curriculum to bring into line the needs of the industry and society.

Result from Table 2 analysis of the hypothesis indicates that innovative pedagogy in terms of e-learning approach ($t= 4.875$, $p< .05$) is the strongest predictor of the variance in undergraduates'

employability skills outcome in Cross River State. This is due to it being the most dynamic and enriching pedagogical approach compared to the rest of other predictor variables. The second strongest predictor is innovative pedagogy in terms of industry-based approach (t= 3.897, p< .05). This result agrees with Metilda & Neena, (2017), whose study showed lower digital skills and large variation in employability level due to the variation in digital skills. The study concluded that digitized e-learning have its impact on the development of the process skills which reflects on the employability of the graduates. Result from Table 2 analysis of the hypothesis is in harmony with Yusuf, et al (2018), whose study found among others that majority of the lecturers agreed that there is need for undergraduates to acquire transferable skills and a broad-based experience. The study further recommended among others that the school authority should expose undergraduates to internship and work experience scheme irrespective of their field of study.

Conclusion

Innovative pedagogical approaches are sine qua non for the acquisition of employability skills by university undergraduates to stem the wave of rising graduate unemployment in Nigeria. This study brings to the fore some of the potent innovative pedagogical approaches so that stakeholders in Nigeria's higher education landscape can harness their potential as channel to transmit relevant skills needed for employment. The study also underscores the strength of predictive independent variable in terms of percentage e-learning approach, industry-based approach, blended learning approach, and problem-solving approach on undergraduates' employability skills outcome.

Recommendations

University lecturers should be motivated through incentivized periodic training and re-training on how to utilize a mix of innovative pedagogical approaches for eventual transmission of relevant knowledge and employability skills to undergraduates.

Respective universities' management should give priority attention to providing the needed e-learning infrastructure as well as technical staff to address the current educational failure in the country.

Based on the findings of this study, the National Universities Commission and other allied regulatory agencies of higher education in Nigeria should review the current policy on e-learning versus the traditional face-to-face for the former to receive more attention in all ramifications.

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