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## UNIVERSITY-INDUSTRY LINKAGE AND GRADUATE EMPLOYMENT IN CROSS RIVER STATE, NIGERIA

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### ABSTRACT

*This study examined university-industry linkage and graduate employment in Cross River State, Nigeria. One research question and one null hypothesis was stated to guide the study. Survey research design was adopted for the study. The population of the study consisted of all the 64 head of academic departments in the University of Calabar. Accidental sampling technique was adopted to get the sample of 50 head of academic departments. An instrument titled "University-Industry Linkage and Graduate Employment Questionnaire (UILGEQ)" was used for data collection. Data collected were subjected to statistical analysis using Multiple Regression analysis. Results obtained revealed that university-industry linkage in terms of curriculum review and students' internship are significant predictors of graduate employment. Based on the findings, it was concluded that graduate unemployment will be highly reduced, if there is a high level of collaboration between the universities and industries in Cross River State. It was recommended that universities should collaborate with industries in the periodic review of the curriculum so as to prepare students for the world of work.*

**Keywords:** *University, Industry, Linkage, Curriculum Review, Students' Internship*

### INTRODUCTION

Universities are among other things, supposed to be the highest training grounds for the requisite human capital for national development. They are supposed to produce graduates, worthy in character and in learning who are to provide the intellectual as well as the skilled bases for societal progress and development. In the contemporary global order, in which skill acquisition and innovations are the engine of socio-economic growth and development. A country that ignores the all-round development of her youths is only at her own developmental peril. With increased globalization, people seem to have seen the need to increase wealth creation especially within the developing nations such as ours. It has also become evident that neither the government nor the formal sector can supply the necessary job creation without the sustained effort and partnership between all sectors of the economy including the universities. Unfortunately, there are persistent and strident complaints that the products of Nigerian universities are unemployable and indeed, half-baked (Kayode, 2009; Adeyemo, Ogunleye, Oke & Adenle, 2010); 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 to the extent

that even the National Universities Commission, doubts the ability of our graduates to meet employers requirements (NUC, 2004 cited in Adedipe, 2010). The situation is of such concern that hundreds of unemployed university graduates mounted a demonstration in front of the presidential offices in Abuja in 2000, demanding that government provide them with jobs. Employers complain that graduates are poorly prepared for work. They believe that academic standards have fallen considerably over the past decade and that a university degree or a polytechnic diploma is no longer a guarantee of communication skills or technical competence.

Despite the upsurge number of tertiary institutions, enrolment rate and increased graduate turnout, the issues of graduate unemployment and underemployment with their attendant consequences (such as increased crime rate, unfulfilled dreams, suicide, impaired financial position among others) are posing a great challenge to many developing countries of which Nigeria is one. According to Fajana (2000), unemployment refers to a situation where people who are willing and capable of working are unable to find suitable paid employment. It is one of the macro-economic problems which every responsible government is expected to monitor and regulate. The higher the unemployment rate in an economy the higher would be the poverty level and associated welfare challenges. Abiodun (2010) regards unemployment as the proportion of the labour force, expressed in percentage, which is not employed at any given point in time. Graduate unemployment, therefore, refers to the unemployment among people who have graduated from universities and who are qualified to work but do not work at any given point in time. Graduate unemployment also refers to a situation where university graduates, after finishing their National youth Service Corps (NYSC), and are willing and able to work but fail to secure jobs. In Nigeria, national unemployment rate escalated from 11.9 percent in the year 2005 to 14.9 percent in 2008. As at 2009, the rate had increased to 19.7 percent (National Bureau of Statistics, 2010). This situation is seen as a generalized waste of human resources. Nigeria faces a major problem of graduate unemployment. Young men and women leave the Universities and Polytechnics every year with very little hope of securing jobs. Hoping to improve their chances of employment, some recycle themselves into postgraduate programmes. 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 such as cultism. Since the 1980s, unemployment has continued to remain one of the most cancerous socio-economic problems inhibiting the progress of Nigeria, as a nation and Sub-Sahara Africa. Unemployment is apparently one of the major causes of social vices such as fraud, kidnapping, armed robbery, destitution, prostitution, terrorism, political thuggery and so on.

Dabalén, Oni and Adekola (2000) studied the labour market prospects of University graduates in Nigeria and found the unemployment rate for graduates to be around 25% while their prospects for employment have worsened over time. According to Andrew, Bankole, and Olatunde (2000), a large mismatch appears to exist between university output and labor market demand. At the same time, their findings showed that the employment prospects of recent graduates have clearly deteriorated, primarily because of the weak Nigerian economy, the policy environment, and inadequate level of skilled human resources, especially the quality of the university-trained portion of the work force. It appears that rather than producing graduates who are thinking and doing new things (Fisher, 2002), universities are creating a generation of pen-pushers, without the skills and expertise necessary for meaningful contribution to the world of work (Ogunyemi, 1998), concentrating mainly on passing exams and not on practical skills (Okebukola, 2015), and using outdated curriculum (Bamiro, 2010). Farooq (2011) concluded that either educational institutions are producing graduates irrelevant to market demand, or they develop inadequate skills among students compared to market requirements. O' Higgins (2001) proclaimed that the longer the unemployment period, the greater the cost to the person and to the society, in terms of physiological and psychological damage and negative effect on marriage and family. The majority of authors concurred that sustained unemployment imposes significant economic, personal and social costs that include: loss of current output, social exclusion, the loss of freedom, skill loss, psychological harm, ill health and reduced life expectancy, loss of motivation, the undermining of human relations and family life, loss of social value and responsibility (Anderson, 2002 & Larsen, 2003).

For most developing countries like Nigeria, governments and policy makers are increasingly finding it difficult to deal successfully with graduate unemployment. This high rate of unemployment can be blamed on the lack of adequate provision for job creation in the development plans, the ever expanding educational growth and the desperate desire on the part of youths to acquire university education irrespective of course and course contents. As a result, a number of skills acquired from the university appear dysfunctional and irrelevant. With each passing academic year, more and more graduates are being turned out from the various universities in the country. Nigeria, according to pronouncements from government circles and vision 20, 2020, wishes to be amongst the twenty economically viable countries of the world by the year 2020. This would certainly be difficult to achieve when able bodied men and women who graduated from Nigerian universities are unemployed or and unemployable. In order to make Nigerian graduates employable, it is important that

governments at various levels review educational curricula. Education and schooling must be related to work. A large number of those graduating from the university system seems not to have any specific jobs into which they could be placed on graduation. The Governments in Nigeria had attempted to curb graduate unemployment, especially, through the National Directorate of Employment (NDE), N-Power programme, encouragement of entrepreneurial courses in academic curricula of universities, crafts and technical vocations, National Youth Service Corps Scheme and so on and so forth. As laudable as these programmes have been, the effect of the programmes have not been very significant.

However, much attention seems not to be given to university-industry linkages as a veritable tool for solving the unemployment problem in Nigeria. University-industry linkage is the collaboration between formal education and meaningful industrial work experience, which enable students to acquire knowledge, skills and appropriate attitude to work (Odu, 2010). Collaboration between universities and industries is critical for skills development (education and training), the generation, acquisition, and adoption of knowledge (innovation and technology transfer), and the promotion of entrepreneurship (start-ups and spin-offs). The benefits of university-industry linkages are wide-reaching: they can help coordinate research and development agendas and avoid duplications, stimulate additional private research and development investment (additionality effect), and exploit synergies and complementarities of scientific and technological capabilities. University-industry collaboration can also expand the relevance of research carried out in public institutions, foster the commercialization of public research and development outcomes, and increase the mobility of labor between public and private sectors. Adepoju and Adedeji (2015) opined that a weak relationship exists between the universities and industries in Nigeria. They also stated that university-industry relationships could significantly reduce the level of unemployment among graduates in Nigeria. Ishengoman and Terje (2016) examined university-industry linkage activities that can stimulate the likelihood of employability among students in Tanzania. The results revealed that university-industry linkage activities were strongly perceived to raise the employability of students, in particular student internships in companies followed by joint projects and the involvement of companies in modernizing university curricula. Adoption and diffusion internship strategies were suggested for foreign companies and for local firm respectively, as vehicles for increasing employability. Akinyemi, Ofem and Ikuenomore (2012) analyzed the extent of the mismatch between graduate turnout vis-a-vis their skills and graduate employment in Nigeria. The study found that graduate turnout outpaced the graduate employment rate over the years in Nigeria. The increase in

the graduate unemployment rate was largely attributed to the mismatch between graduate employee skills and those skills required for performance in the modern workplace. The study also found that inadequate technical knowledge, deficient English proficiency and lack of critical thinking on the part of graduate employees coupled with high technological drive of most organizations in response to tougher competition in the competitive markets are the factors responsible for graduate unemployment in Nigeria. The study therefore recommended that the issue of mismatch between graduate turnout vis-a-vis their skills and graduate employment should be seriously addressed by taking a three-dimensional approach that involves the tertiary institutions, the government, and the labour market. The tertiary institutions in collaboration with the government and the labour market should plan their curriculum in such a way that employable skills that match up to the requirement of jobs in the present day workplace are inculcated into students while undergoing their courses of studies.

Okolocha and Ibik (2014) examined supervisors' rating of strategies for improving school-industry linkages in vocational education in tertiary institutions in Anambra state. Findings showed that supervisors of industries considered training and administrative strategies important for improving school-industry linkages in vocational education in tertiary institutions in Anambra state. It was concluded that the adoption of training and administrative strategies will facilitate school-industry linkages in vocational education. The researchers recommended amongst others that management of tertiary institutions should utilize all available administrative machinery to ensure effective SIWES implementation. Izueke and Nzekwe (2013) investigated the effectiveness of the implementation of Students' Industrial Work Experience Scheme (SIWES) as a policy measure to bridge the gap between theory and practice as it exists in the world of work, and offer graduates employability skills; the extent of cooperation between the universities and placement organizations in the implementation of the SIWES; and what factors contended against the implementation of SIWES. The findings showed that the implementation of SIWES policy in Nigeria was ineffective. The study further revealed that there was no significant cooperation between the universities and placement organizations in the implementation of SIWES. Lastly, the study revealed that the ineffective implementation of SIWES was worsened by over reliance on paper qualifications especially by government employers. They recommended greater cooperation between universities and employment organizations in designing academic curricula, and less emphasis on paper qualifications by government employers is highly recommended. Okolocha and Okolocha (2012) in their study found that student's industrial work experience

scheme (SIWES) was an important programme that can help to bridge the gap between school life and the world of work by blending meaningful job experiences with related instructions learnt in the classroom. Ezeji and Okorie (1999), while stressing the importance of skills acquisition in national growth, emphatically contended that, 'Nigeria's social and economic problems will be drastically reduce if people are given adequate training in skills, raw material, machineries and equipment'. It is only with skilled men that materials can be harnessed, manipulated and transformed into products.

Ahmed, Ab-Rahim and Abdullah (2015) explored how institutions of higher learning, industries and businesses work together to accomplish mutual goals, intended to help shape and inform up-to-date curriculum and course design. The aim was to improve mutual understanding and exchange of ideas between the education and business sectors that can lead to produce professional work-ready graduates. The four emergent themes as characterized by the participants views on collaborative efforts between business and Education were identified as; cooperative study programme, technical support and programme delivery, representation in the institution governing council and collaboration through shared facilities. The benefits students receive from these industry-academia programs (partnerships) go far beyond those that emerge from classroom lectures and textbook case studies. Instructors or lecturers who cite current, relevant research results are able to provide undergraduates, graduate students, and executives with direct examples of theoretical concepts applied to the real world (Stank, 2004). For effective university – industry collaborative exercise to prevail in Nigeria, there must be total commitment from both parties in areas such as joint needs assessment, joint organization and placement of students in relevant industries, joint training arrangement, properly organized field trips and excursion; curriculum review, programme design and development, and joint research on new innovations. However, new knowledge acquired and several researches conducted in the universities end up as paper work due to the gap in the relationship between the industries and the university. As a result, the economic system becomes affected, due to lack of innovations which invariably prevent expansion, creation of new industries and the few industries become depressed and eventually collapse. This means that there is need to create a strong linkage between the educational sector and the productive sector that requires the skills and knowledge of graduates from universities and other higher education institutions to increase productivity, scientific and technological innovations that promote real and sustained economic growth and social development.

## STATEMENT OF THE PROBLEM

The issue of graduate unemployment in Nigeria has become a national concern as the unemployed youths tend to be more anxious, depressed and unhappy with their attendant sleeplessness than those with jobs. This situation has not only posed a great challenge to the economy but also retarded the economic growth of the country. The graduate unemployment in Nigeria is attributable to the fact that employees' education and skills acquired are inadequate to meet the demands of modern day jobs. This issue has become a phenomenal topic of discourse across professional gatherings in media and commentary reviews, employer surveys, national economic debates, social networks and employee forums. The employment difficulties facing graduates in Nigeria have negative consequences not just for the affected young people but for society as a whole. Persistent youth 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. In extreme cases, alienated youth, can cause social disruption in society, as evident in the increase in criminal gangs, armed robbery, kidnapping, cultism, drug addiction, militancy among other social vices. Despite government recent policies and programmes (Subsidy Reinvestment and Empowerment Programme SURE-P, Youth Enterprise with Innovation in Nigeria YOUWIN and N-Power), graduate unemployment remains a major challenge to the developmental process of the Nigerian economy. Graduate unemployment appears to be shooting up the sky as many Nigerian youths seem to graduate without the requisite skills or competencies that would enable them function in today's emerging society and empower them for the world of work after graduation. It is apparent that the role of university-industry linkage in reducing graduate unemployment cannot be overemphasized. Based on these, it is pertinent to raise the question, "how does university-industry linkage predict graduate employment in Cross River State?"

## RESEARCH QUESTIONS

1. How does university-industry linkage in terms of curriculum review and students' internship predict graduate employment?

## STATEMENT OF HYPOTHESES

1. University-industry linkage in terms of curriculum review and students' internship are not significant predictors of graduate employment.

## METHODOLOGY

Survey research design was used for the study to describe and interpret existing condition of the variables under study at the time of investigation using the opinion

of academic staff. The population of the study consists of all the 65 Head of academic Departments in the University of Calabar. Accidental sampling technique was adopted because the researchers administered the research instrument to academic staff who were willing to provide information. The sample size for the study consisted of fifty (50) head of academic departments gotten through accidental sampling technique. A questionnaire titled "University-Industry Linkage and Graduate Employment Questionnaire (UILGEQ)" was used for data collection. The instrument was divided into two sections – sections A and B. Section A was designed to elicit information on university-industry linkage with twelve items on a four point modified Likert scale type. Section B was designed to elicit information on graduate unemployment with six items. The instrument was subjected to face validity and Cronbach Alpha reliability. The reliability coefficient ranged from .78 to .89. Multiple regression analysis was used to analyze the data collected.

## RESULTS

University-industry linkage in terms of curriculum review and students' internship are not significant predictors of graduate employment. With multiple regression analysis, the composite and relative contributions of the two independent variables in predicting the dependent variable were determined. Summaries of the results are presented in Table 1.

**Table 1**  
Multiple regression analysis of two sub-variables of university-industry linkage as predictors of graduate employment. (N = 50)

Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	24.972	2	12.486	4.451*	.000 <sup>b</sup>
Residual	131.848	47	2.805		
Total	158.820	49			

  

	B	Unstandardized Coefficients Std. Error	Beta	Standardized Coefficients t	Sig.
(Constant)	12.297	2.897		4.271*	.000
Curriculum review	.301	.119	.339	3.521*	.000
Students' internship	.212	.156	.182	3.357*	.000
R	.776				
R square	.610				
Adjusted R square	.593				
Std. Error of the Estimate	.3044				

Significant at .05 alpha levels



The above table revealed a significant p-value of .000 which is less than the .05 level of significance used for the study and F-ratio of 4.451. This showed a significant composite relationship between the two sub-variables of the independent variable with the dependent variable. The multiple  $r$  (correlation coefficient) that measures the strength of the association between the independent and dependent variable is .776, which shows a high correlation between the variables. The coefficient of determination  $R^2$  is .610 which shows a high power of the independents in predicting the dependent variable. With these results, the null hypothesis is rejected. This implies that, university-industry linkage is a significant predictor of graduate employment in Cross River State. The table further showed the relative contribution of each of the sub-variables of the independent in predicting the dependent variable. This is shown in significance of  $t$  and  $p$ -values; curriculum review  $t = 3.521$  ( $p = .000 < .05$ ) and students' internship  $t = 3.357$  ( $p = .000 < .05$ ). These show a significant relative relationship between each of the sub-variables of the independent variable with the dependent variable. Therefore, the null hypothesis is rejected on all the items. That is, university-industry linkage in terms of curriculum review and students' internship are significant predictors of graduate employment. This means that, the more the university-industry collaboration, the more unemployment problems are solved in Cross River State.

## DISCUSSION

Generally, the findings of this study revealed that there is a significant positive relationship between university-industry linkage in terms of curriculum review and students' internship and graduate employment in Cross River State. This is in line with Akinyemi, Ofem and Ikuenomore (2012) who asserted that the increase in the graduate unemployment rate was largely attributed to the mismatch between graduate employee skills and those skills required for performance in the modern workplace. They added that inadequate technical knowledge, deficient English proficiency and lack of critical thinking on the part of graduate employees coupled with high technological drive of most organizations in response to tougher competition in the competitive markets are the factors responsible for graduate unemployment in Nigeria. Similarly, the results revealed a significant relationship between university-industry linkage in terms of curriculum review and graduate employment. This result is in agreement with the findings of Ishengoman and Terje (2016) who opined that university-industry linkage activities raise the employability of students, in particular student internships in companies followed by joint projects and the involvement of companies in modernizing university curricula. This suggests that when universities and industries collaborate to review the curriculum to be practical oriented, students will be prepared for the world of work as it would make

them acquire the needed skills that will either make them set up their business or fit into the world of work with ease. Thereby reducing the problem of graduate unemployment in Cross River State. The result also showed that university-industry linkage in terms of students' internship relate significantly to graduate employment. The finding is in agreement with that of Izueke and Nzekwe (2013) who asserted that the implementation of Students' Industrial Work Experience Scheme (SIWES) will bridge the gap between theory and practice as it exists in the world of work, and offer graduates employability skills. They recommended greater cooperation between universities and employment organizations in designing academic curricula, and less emphasis on paper qualifications by government employers is highly recommended. Okolocha and Okolocha (2012) opined that student's industrial work experience scheme (SIWES) was an important programme that can help to bridge the gap between school life and the world of work by blending meaningful job experiences with related instructions learnt in the classroom.

## CONCLUSION

Based on the findings of this study, it can be established that university-industry linkage in terms of curriculum review and students' internship are significant predictors of graduate employment in Cross River State. It can therefore be concluded that graduate unemployment will be highly reduced, if there is a high level of collaboration between the universities and industries in Cross River State.

## RECOMMENDATIONS

Based on the conclusion of this study, the following recommendations were made:

1. Universities should collaborate with industries in the periodic review of the curriculum so as to prepare students for the world of work.
2. Industries should be encouraged to provide more opportunities for students' internship and training so that they can get real work experience of what had been taught in the classroom.

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