BRIDGING THE SKILLS GAP AND TACKLING UNEMPLOYMENT OF VOCATIONAL GRADUATES THROUGH PARTNERSHIPS IN NIGERIA

Ayonmike C.S.¹ & Okeke, B.C.²

¹Delta State University, Nigeria. ²Nnamdi Azikiwe University, Nigeria.

Correspondence author email:chinyereshirley@gmail.com

Received May 7th, 2016; Accepted October 30th, 2016

ABSTRACT

The level of skills possessed by vocational education graduates for employment has been a worrisome issue in Nigeria. In fact the representatives of labour markets tagged graduates from Nigerian universities as half-baked perceiving these graduates as lacking in employable skills, making them unemployable. The purpose of this study is to ascertain how partnerships between industries and vocational institutions can be a tool to bridge the skills gap and unemployment of vocational education graduates in Nigeria. Two research questions guided the study, and the research design used was the descriptive survey research design. The population of the study was 212 vocational education lecturers from seven selected universities owned by the government in Southern Nigeria. Random sampling technique using balloting was used to select 106 vocational educators. The instrument for data collection was a questionnaire developed by the researcher and was content and face validated by three vocational education lecturers. The questionnaire was administered to 10 vocational education lecturers and its reliability was estimated to be 0.73 using the Cronbach Alpha technique. Data collected were analysed using simple frequency count and percentage, and any response that has the highest frequency and percentage was recorded as the overall remark. The study revealed that industries and institutions partnerships will help to bridge the skills gap and reduce unemployment of vocational education graduates in Nigeria through workplace partnership like resource sharing, staff exchange and the establishment of vocational skills exhibition centres amongst others. Based on the findings of the study, it was recommended that industries, government and institutions should establish partnership that will help to enhance the skills and chances of employment of vocational education graduates in Nigeria.

Keywords: skills gap, unemployment, vocational education, partnerships, graduates

1. INTRODUCTION

Vocational education has always been a notable force of development in human existence. Vocational education is significance in every facet of life ranging from agriculture, transportation, construction, production, and modernization among others (Mkpughe & Igberadja, 2016). The integrated system of imparting knowledge with manual work (skills) gave way to two distinct systems of General and Vocational education. The general education, even today, aims to enhance the general proficiency, is mostly knowledge based and does not prepare the learner for any specific job or occupation. Vocational education on the other hand, happened to be designed to develop competencies especially suited to identify occupation(s) (Agrawal, 2012). Vocational education is a study on programs that skilfully prepare people for effective performance on practical tasks. It involves the acquisition of skills and competencies that can help individuals to function productively in industrial and commercial occupations (Wapmuk, 2011). Vocational education prepares students for the world of work, because it is a skill oriented discipline which is aimed at inculcating vocational skills to its recipients. No wonder, Aftab and Mohd (2012) pointed that vocational education plays a significant role in providing the skilled work force required for the development of any country. Skills are needed for sustainable economic development of individuals and the nation at large. Thus, vocational education has emerged as one of the most effective human resource development strategies that Nigeria and other African countries need to embrace so as to train and modernize the technical workforce for industrialization and national development (Federal Government of Nigeria, 2012). Similarly, Abdullahi (2011) opined that vocational education is an essential part of development for any nation to grow economically. However, despite government efforts to revitalize vocational education at all levels, vocational education graduates still lack skills such as occupational and employability skills to survive in the world of work. The international Labour Congress (ILC) at its 88th session in 2000, defined employability skills as the combination of all the skills, competencies as well as knowledge that enable individuals to acquire, maintain and contain the challenges of a job. Individuals are said to be employable when they acquire the components of employability skills through quality education and training in a broader way. These include Problem solving, planning and organizing, learning and technology, self-management, team work, initiative and enterprise and communication skills (David, 2008). Employability skills are the general skills which play an important part in contributing to employees' successful performance at their workplaces. Some studies suggest that a person's success is not solely determined by knowledge and technical skills (hard skills), but also by the ability to manage oneself and others (employability skills). Lack of employability skills is one of the weaknesses of university graduates.

According to the World Bank Team Task Leader for Youth Employment and Social Support Operation (YESSO) Mr. Foluso Ogunmadewa, the Word Bank has attributed Nigeria's stunt economic growth to high rate of unemployment that has bedevilled the country. Abdullahi (2011) defines unemployment as the inability of a matured citizen or individual to acquire employment to satisfy his basic needs. Unemployment is a hydra headed monster which exists among the youth in all developing countries. The unemployment rate in Nigeria was reported at 23.9 percent in 2011 (NBS, 2011). The National Bureau of Statistics (NBS) has put the figure of unemployed Nigerians in the first half of the year at 23.9 per cent, up from 21.1 per cent in 2010

and 19.7 per cent in 2009. According to Maaji and Hassan (2012) research carried out by the Ministry of Youth Development (2012) pointed out that there are 68 million unemployed youths in Nigeria. Every year about 300,000 graduates enrol in the NYSC scheme. This is definitely not the total number of graduates but it is a pointer. According to the Population reference Bureau, the population of youth in Nigeria is 43%. The high rate of unemployment in Nigeria affects both those that who went to school and those who do not have the opportunity to go to school. These unemployment situation is as a result of the lack of occupational and employability skills by unemployed Nigerians (vocational education graduates inclusive).

A skill denotes expertise or ability developed in the course of training and experience. It includes not only trade and craft skills acquired by apprenticeship. Occupational skills are tied to the field of study and its subject matter, while employability skills are beyond occupational skills because these have to do with personal skills that are highly desirable for employment in the labour market. One of the reasons why many students continue their studies at university is to enhance their employment prospects. However, while good academic qualifications are highly valued, they no longer seem to be sufficient to secure employment (Yorke, 2006). Due to technological developments and the expanding international orientation of many companies, labour market demands have changed.

Because of the fast changing requirements and demand for manpower on newer trades and higher levels of skills, a large number of industries are unable to recruit appropriately trained skilled workforce required in the industries. This results in many of the training school graduates remaining unemployed (Aftab & Mohd, 2012). The major reason of this employability gap is the inability of the vocational education institutions to adapt or update their curricula and training programs according to the need and demand of the job markets. Various studies have revealed that this gap is primarily due to lack of linkages with the industries and understanding of their requirements. To improve upon the situation, the vocational education institutes need to establish strong linkages and partnerships with the industry sectors to know their requirements and design the training curricula accordingly. Such linkages are also very important to seek support from the industry sector for sustainable development of the vocational education programs (Aftab & Mohd, 2012).

To address the problem of lack of occupational and employability skills, there is need to establish partnership between industries and vocational education institutions which will be aimed to bridging the skills gap and unemployment of vocational education graduates in Nigeria. A skill gap is the shortage in performance. It is the difference between what is required or expected and what we actually get. Put in another way a skill gap is the required performance minus the present performance. Hence it is also called by the performance gap. In other to determine the skill gap researchers have designed a scientific quotient for measuring this negative performance. This is called by the skill gap analysis. What they do by this is to compare the performer's skills with the skills required for the job in order to determine the deficiency and to identify future performance improvement opportunities. The present behaviour (B) is subtracted from the desired standard (S) to measure the performance gap (G). This measurement, S - B = G, becomes the span that must be bridged in order to reach the objective.

In order to plan for future requirements (visioning), you determine where you are now (the present behaviour (B)) and where you want to go (the future standard (S)). Again, the difference between B and S is the performance gap (G). Although the second measurement is on a larger and more vague scale, both cases require that you determine where you are, where you want to go (analysis and planning), creating the framework (design or blueprint), and then building the structure (development) to bridge the gap.

According to Adetokunbo (2009) a skill gap is a significant gap between the needed skills and the current capabilities of the workforce in an organization. Skill gap exist at the point when the organization can no longer grow or remain competitive in its industry because its employees do not have the right skills to help drive business results or support its strategies and goals. The gaps are noticeable in five major areas. These are:

- O Basic skills: These include proficiency in reading, writing, simple calculations, communications and human relations.
- Technical skills: These are capabilities in manipulating engines, machines, equipment, constructions, computers, etc.
- o Professional skills: These are required skills in fields like law, medicine, marketing, teaching, nursing, surveying, architecture, etc.
- Management/leaderships skills. These cover areas like supervision, team-building, goalsetting, planning, motivation, decision making, delegation, ethical judgment, etc.
- o Emotional intelligence skills. These are innate capabilities. They manifest as self-awareness, self-discipline, persistence, sympathy, perseverance, intuition, etc.

Adetokunbo (2009) posited that bridging the skill gaps is not merely improving workers' competence in core fields like technology, engineering, science and mathematics, but there are gaps too in non-technical areas such as leadership, management and communication. Education with relevant syllabuses and training in specific areas play crucial roles in achieving rapid changes in updating technical and engineering skills. Equally important to the ability to innovate, collaborate and compete, are the non-technical skills. These manifest incompetence in people-management, human relations, language proficiency, etc. Good character traits such as honesty, integrity, hard work, love, empathy, justice and fairness are intrinsic invaluable skills that contribute immensely to success. These skills oftentimes sustain the operation of the organization where other technical skills are inadequate.

Consequently, partnerships remain the best option to address the skills gap. Olaitan, (2000) posited that partnerships is an arrangement between two resource group that is, educational institutions and an industry to assist learners developed functional skills for the world of work and give them the opportunity of matching theoretical learning with practice. In order to remain competitive in the world market, corporations should have highly skilled employees who can keep the enterprise economically viable in a global economy. Partnerships between VET provider and industry corporations can be a useful strategy in providing workforce training and maintaining knowledgeable employees (Abdullah, 2012). According to Nuri (2013) providers of vocational education should use a wide range of methods including joint venture with industry and summer courses to linking between the learning and industry.

Successful partnerships between vocational education providers and industry are essential to the national economy (Pagtakhan & Rock, 2002). According to Callan and Ashworth (2004), the purpose of working with industry is to develop the vocational education curriculum. El-Raghy (1999) stated that a good relationship between the university and industry facilitates the placement of students for training and provide case studies for enriching the delivery of the curriculum. Some type of industry supervision should be offered by the training place, while university staff may pay visits to follow the progress of students during their time in the industry. Comyn (2007) argue that the development of the graduate engineer cannot be a classroom based experience; rather it requires the specific involvement and commitment of industry to be involved with engineering programs. One of the strategies in order to achieve this is through the development of partnerships between industry and education. Vocational education linkages with industry can clearly involve a wide range of mechanisms and activities, from providing national policy direction and identifying skill needs, to setting skill standards and providing technical input into teaching and learning resources (Comyn, 2007). However, vocational education policy design and delivery should be achieved through a new partnership between government, employers, professional associations, industry, and employees (UNESCO & ILO, 2002). Lynch (2000) and Pagtakhan and Rock (2002), pointed out, in order to make the best use of resources and provide high quality vocational education for students, it is essential that the vocational education system and the market place work together clearly. This collaboration should include the directing of resources towards occupational and career preparation where there is the greatest need and opportunity. Callan and Ashworth (2004) stated that industry partners believed that the strength of their relationships with training institutions is central to creating skills and knowledge for solution of the problems.

Since technology advances in today's workplace, there is an increasing demand for well trained entry level workers. Consequently, increasing numbers of companies are establishing partnership training agreements in order to ensure their continued success in the business world, to be competitive, and to improve productivity. The reasons many educational and training institutions such as vocation education institutions are moving towards these types of training agreements include overcoming financial barriers in upgrading equipment, enhancing instructors skills and offsetting enrolment declines in programs that are viewed as obsolete or in need of improvement (Abdullah, 2012). Since then, the paring of companies and higher education institutions around the world to gratify new mutual needs is growing. Companies are viewing collaborations with universities and vocational education institutions as a means for employee training in addition to enabling recruitment and retention. Improving partnerships between industries and vocational institutions in Nigeria could be a help to address the problem of shortage of skilled man power (workers); skill mismatch and the skills gaps that exist between the labour market demand and supply. Buttressing the relevance of partnerships between industries and vocational institutions, Adetokunbo (2009) recommended that the need to institutionalize Entrepreneurship Development Programme (EDP) and vocational training in the educational curricula is also imperative. Happily enough, some institutions have already started this. These subjects should be included among the contents of the compulsory general studies programme of all tertiary institutions. The Federal Ministry of Labour and Productivity (FMLP) is ready to collaborate with the institutions in this area through the NDE which has a comprehensive entrepreneurial and vocational skills training and development program for all

categories of potential suppliers of skills in Nigeria. In addition, Adetokunbo (2009) suggested an outline for a framework for fostering the partnership for interaction between university and employer. While some areas of positive interaction between university and employers exist in the forms of training programs, and joint services geared at bridging the skill gaps, what is needed, however is a framework that addresses the chronic skilled shortages in the labour market. This no doubt will entail an integrated strategy (Adetokunbo, 2009). Educational reform is the most important area in which university can aid in bridging skill gaps. The rapidly changing needs of employers and the labour market affect curriculum. Adjusting the curriculum to rapidly changing needs of employers and the labour market is therefore very imperative. In framing an innovative curricular relevant to employers' need, universities must factor in the dynamics of modern trends, including ICT, globalization and technological changes (Adetokunbo, 2009).

According to Elechi (2013) there is the need for partnership in the successful implementation of entrepreneurial education. Partnership with the National Directorate of Employment is one of such important links. Neighbouring universities also need to partner to share resources. Linkage with some advanced countries endeavour to broaden the range of their technology to search for, organize and analyse information in order to effectively communicate and collaborate with other graduates of diverse abilities, skills and socioeconomic background is important. The demand on each university in the conglomerate lightens with such arrangement as human and material resources are shared. For example during Students Industrial Work Experience Scheme (SIWES) is a programme that is organize for students' offering science and industrial related courses such as vocational education of tertiary institutions in Nigeria. The programme is usually done in industries for students to be exposed to the real job situation in the labour market, so that they can acquire the right vocational and occupational skills to make them to be more productive and efficient in the world of work. The duration of SIWES is between 6 months to 1 year mandatory industrial attachment as a requirement for graduation. During the industrial attachment students were assigned to two supervisors (one institution based and industry based) that will assess the students' occupational skills during the period of the industrial attachment.

1.2 Research Questions

The following research questions guided the study:

- i. How can partnerships between industries and TVET institutions help to bridge the skills gap of vocational education graduates in Nigeria?
- ii. How can partnerships between industries and TVET institutions help to tackle the unemployment of vocational education graduates in Nigeria?

1.4 Statement of Problem

Level of skills possessed by vocational education graduates for employment has been a worrisome issue in Nigeria. This explains why representatives of labour markets tagged graduates from Nigerian universities as half-baked. Also, they believed that these graduates do not possess employable skills, thereby making these graduates to be unemployed. Supporting this view, scholars such as Ekpenyong (1988), Adetokunbo (2009) and Sodipo (2014) posited that

most employers of labour in this nation and abroad consider the products of vocational education as half-baked and unusable without further training. Therefore, to address these problems of lack of employable skills and unemployment of vocational education graduates, there is need to find ways that will be used to address these skills gap and unemployment of vocational education graduates in Nigeria, which is the focus of this study.

1.5 Significance of the Study

This study is significant in this era of mass unemployment of graduates in Nigeria. Thus, the study will be significant to industries, government, and TVET institutions, since the findings of the study will establish ways of bridging the skills gap and the persistent unemployment of graduates, especially vocational education graduates. Furthermore, the study will be useful to future researchers when conducting related study.

2. METHODS AND PROCEDURE

Survey research design was used in this study, as well, the population of the study was all the 212 vocational education lecturers in 7 selected government own universities (Nnamdi Azikiwe University, Ambrose Ali University, Niger-Delta University, University of Nigeria, River State University of Science and Technology, University of Benin, and Delta State University) in Southern Nigeria. Simple random sampling technique using balloting method was used to select 106 vocational education lecturers which represent 50% of the entire population. The instrument for data collection was an 11-item questionnaire titled 'Bridging Skills Gap and Unemployment of Vocational Education Graduates Questionnaire' (BSGUVEGQ). The questionnaire had two parts A and B, part A is on the respondent's personal data, while part B had two sections 1 and 2. Section 1 is on how to bridge the skills gap while section 2 is on how to tackle unemployment of vocational education graduates. Section 1 and 2 had 6 and 5 items statement respectively. The questionnaire is on a 4-point scale of Strongly Agree (SA), Agree (A), Disagree (D) and Strongly Disagree (SD). The questionnaire was faced validated by 3 vocational education lecturers from Delta State University, Abraka and possible corrections and suggestions were effected in the final questionnaire. Using test retest method the questionnaire was administered twice in two weeks interval to 10 vocational education lecturers from University of Port Harcourt to ascertain the reliability of the instrument, Cronbach Alpha technique was used to analyse the data collected which yielded a reliability coefficient of 0.73. Data were collected by the researcher, on the spot, through the assistance of six research assistants from vocational education lecturers, recording a 100 per-cent return rate. Data collected were analysed using simple frequency count and percentage, therefore, the response that had the highest frequency and percentage was recorded as the overall remark.

3. RESULTS AND DATA ANALYSIS

The results were presented according to the research questions:

Research Question 1: How can partnership between industries and TVET institutions help to bridge the skills gap of vocational education graduates in Nigeria?

Table 1: Vocational education lecturers' response on bridging the skills gap of vocational education graduates through partnerships

S/	Item Statement:	Response					
n	The following are ways of bridging the skills	SA	A	D	SD	Overall	
	gap of vocational education graduates in	F(%)	F(%)	F(%)	F(%)	Remark	
	Nigeria through Partnerships between						
	industries and TVET institutions:						
1	Workplace partnerships such as SIWES	60(56.6)	30(28.3)	10(9.43)	6(5.7)	Strongly	
						Agree	
2	Resource sharing such as laboratory,	70(66.0)	20(18.9)	8(7.5)	8(7.5)	Strongly	
	workshops, and personnels					Agree	
3	Staff exchange/training and development	30(28.3)	68(64.2)	1(0.9)	7(6.6)	Agree	
	programme						
4	Joint review/ formulation of curriculum	10(9.4)	81(76.4)	5(4.7)	10(9.4)	Agree	
5	Joint assessment of students skills by industries	20(18.9)	73(68.9)	7(6.6)	6(5.7)	Agree	
	and TVET institutions					-	
6	Joint certification of students by industries and	10(9.4)	65(61.3)	15(14.2)	16(15)	Agree	
	TVET institutions					-	

^{*}Note: F= Frequency & %= Percentage

Research Question 2: How can partnerships between industries and TVET institutions help to tackle unemployment of vocational education graduates in Nigeria?

Table 2: Vocational education lecturers' response on tackling unemployment of vocational education graduates through partnerships

S/n	Item Statement:	Response					
	The following are ways of tackling the	SA	A	D	SD	Overall	
	unemployment of vocational education	F(%)	F(%)	F(%)	F(%)	Remark	
	graduates in Nigeria through Partnerships						
	between industries and TVET institutions:						
7	Compulsory internship in industries for 2 years	50(47.2)	40(37.7)	6(5.7)	10(9.4)	Strongly	
	before graduation					Agree	
8	Entrepreneurship training and development by	80(75.5)	5(4.71)	16(15.1)	5(4.7)	Strongly	
	industries					Agree	
9	Soft loans for vocational education graduates by	90(84.9)	6(5.7)	5(4.7)	5(4.7)	Strongly	
	industries					Agree	
10	Immediate employment after graduation by	70(66.0)	30(28.3)	8(7.5)	8(7.5)	Strongly	
	industries.					Agree	
11	Establishment of vocational skills exhibition	97(91.5)	3(2.8)	6(5.7)	0(0.0)	Strongly	
	centres by industries and TVET institutions					Agree	

^{*}Note: F= Frequency & %= Percentage

4. **DISCUSSION OF FINDINGS**

Table 1 above revealed that high percentage of the respondents agreed that workplace partnerships such as SIWES, Resource sharing such as laboratory, workshops, and personnel, Staff exchange/training and development programme, Joint review/ formulation of curriculum, Joint assessment of students skills by industries and TVET institutions, and Joint certification of students by industries and TVET institutions are ways of bridging the skills gap of vocational education graduates in Nigeria. These findings were in agreement with the views of scholars such as Adetokunbo (2009) who suggested an outline for a framework for fostering the partnership for interaction between university and employer. While some areas of positive interaction between university and employers exist in the forms of training programs, and joint services geared at bridging the skill gaps, what is needed, however is a framework that addresses the chronic skilled shortages in the labour market. As well, educational reform is the most important area in which university can aid in bridging skill gaps. The rapidly changing needs of employers and the labour market affect curriculum. Adjusting the curriculum to rapidly changing needs of employers and the labour market is therefore very imperative. However, vocational education policy design and delivery should be achieved through a new partnership between government, employers, professional associations, industry, and employees (UNESCO & ILO, 2002). Lynch (2000) and Pagtakhan and Rock (2002), pointed out, in order to make the best use of resources and provide high quality vocational education for students, it is essential that the vocational education system and the market place work together clearly. This collaboration should include the directing of resources towards occupational and career preparation where there is the greatest need and opportunity.

Table 2 above revealed that high percentage of the respondents agreed that Compulsory internship in industries for 2 years before graduation; Entrepreneurship training and development by industries; Soft loans for vocational education graduates by industries; Immediate employment after graduation by industries; and Establishment of vocational skills exhibition centres by industries and TVET institutions are ways of tackling the unemployment of vocational education graduates in Nigeria. Buttressing the relevance of partnerships between industries and vocational institutions, Adetokunbo (2009) recommended that the need to institutionalize Entrepreneurship Development Programme (EDP) and vocational training in the educational curricula is also imperative. In same vein Elechi (2013) posited that there is the need for partnership in the successful implementation of entrepreneurial education. Partnership with the National Directorate of Employment is one of such important links. Neighbouring universities also need to partner to share resources. Linkage with some advanced countries endeavour to broaden the range of their technology to search for, organize and analyse information in order to effectively communicate and collaborate with other graduates of diverse abilities, skills and socioeconomic background is important. The demand on each university in the conglomerate lightens with such arrangement as human and material resources are shared. Callan and Ashworth (2004) stated that industry partners believed that the strength of their relationships with training institutions is central to creating skills and knowledge for solution of the problems. Successful partnerships between vocational education providers and industry are essential to the national economy (Pagtakhan & Rock, 2002). According to Callan and Ashworth (2004), the purpose of working with industry is to develop the vocational education curriculum. El-Raghy (1999) stated that a good relationship between the university and industry facilitates the placement of students for training and provide case studies for enriching the delivery of the curriculum.

5. CONCLUSION

Based on the findings from the study, it was concluded that both industries and TVET institutions have vital roles to play in bridging the skills gap and in lacking unemployment of vocational education graduates in Nigeria. Therefore, adequate synergies such as workplace partnerships like SIWES, resource sharing, staff exchange programme and the establishment of vocational skills exhibition centres should be put in place to enhance the employment chances of vocational education graduates. The implication of the findings of this study if properly implemented by government, industries, and TVET institutions will help to produce viable vocational education graduates that will contribute meaningfully to the growth and development of the Nigerian economy which will be as a result of the impact of the skills and attitude benefited by the recipients through the supposed partnership between industries and TVET institutions.

6. **RECOMMENDATIONS**

Based on the findings of this study the following recommendations were made:

- i. Industries, government, and TVET institutions should established partnership that will be used to enhance the competency of vocational education graduates through programme such as workplace partnership, resource sharing, and staff exchange, joint review of curriculum and joint certification of vocational education graduates in Nigeria.
- ii. Industries, Government, and TVET institution should establish partnership that will increase employment chances of vocational Education graduates through initiative programmes like: compulsory internship for 2 years, entrepreneurship training/development, soft loans, employment after graduation, and establishment of vocational skills exhibition centres.

References

- Abdullah, H. (2012). The role of VET provider in training partnerships with industry in East Java, Indonesia. Proceedings of the 2nd UPI International Conference on Technical and Vocational Education and Training Bandung, Indonesia, 4-5 December 2012.
- Agrawal, P. (2012). *Indian experience of internal and international collaboration in tvet and prospects of regional cooperation*. Proceedings of the 2nd UPI International Conference on Technical and Vocational Education and Training Bandung, Indonesia, 4-5 December 2012.
- Abdullahi, S.M. (2011). Entrepreneurship skills needed by TVET Students for effective learning in technical colleges of Northern Nigeria. *Journal of Science, Technology, Mathematics and Education (JOSTMED)*, 7(2), 140-148.
- Adetokunbo, P. K. (2009). Bridging the skills gap in Nigeria: Framework for dialogue between universities and employers of labour. A Keynote Address Presented by Hon Minister of Labour and Productivity of the

- Federal Republic of Nigeria at the 24th Conference of the Association of Vice Chancellors of Nigerian Universities, University of Ilorin, Ilorin, Nigeria 2nd June.
- Aftab, U. A. & Mohd, H. R. (2012). *Industry linkages of TVET programs in Bangladesh UCEP programs A successful model*. Proceedings of the 2nd UPI International Conference on Technical and Vocational Education and Training Bandung, Indonesia, 4-5 December 2012.
- Callan, V. & Ashworth, P. (2004). Working together: Industry and VET provider training partnerships, NCVER, Adelaide, SA.
- Comyn, P. (2007). *Industry links with vocational education and training in China*. Retrieved 20th July from http://www.avetra.org.au/publications/journals/Vol5 2....
- David, H.F. (2008). *Improving skills and productivity of disadvantaged youths*. International Labor Organization. Working paper, No.7, 1.
- Ekpenyong, L. E. (1988). Vocational content in the national curriculum for Nigerian secondary schools: How industry can help. *The Vocational Aspect of Education XL*, (106), 57 62.
- Elechi, G. E. (2013). Transformation of university education for graduate employability in Nigeria: The intervention of entrepreneurship education. *Journal of Education and Practice*, 4(15), 135-139.
- El-Raghy, S. (1999), Quality engineering education: Student skills and experiences. *Global Journal of Engineering Education*, 3(1), 25-30.
- Federal Government of Nigeria (2012). *National economic empowerment and development strategy (NEEDS)*. Abuja, National Planning Commission.
- International Labour Organisation (ILO, 2002). Decent work and the informal economy. ILO Conference, 90th Session, Geneva, ILO Publications.
- Lynch, R. (2000), High school career and technical education for the first decade of the 21st century. *Journal of Vocational Education Research*, 25, (2).
- Maaji, S. A. & Hassan, A. M. (2012). Assessing the unemployment initiative programmes in collaboration with technical vocational education and training (TVET) institutions in Nigeria. Proceedings of the 2nd UPI International Conference on Technical and Vocational Education and Training Bandung, Indonesia, 4-5 December 2012.
- Mkpughe, C. I. & Igberadja, S. (2016). Constraints and remedy to quality vocational skills development among vocational education students in Nigeria as perceived by vocational educators. *Journal of Innovative Practice in Vocational Technical Education (JIPVTE)*, 1(1), 16 23.
- National Bureau of Statistics NBS (2011). Annual statistical review of Nigerian economy. Abuja, pp. 1-28.
- Nuri, M. T. (2013). Higher technical and vocational education and training programmes and its impact on the Libyan manufacturing industry. *Literacy Information and Computer Education Journal (LICEJ), Special Issue*, 2(2), 1287-1293.
- Olaitan, S.O. (2000). Poverty and Poverty alleviation in Nigeria, Nsukka, Education Research Association.
- Pagtakhan, R. & Rock, A. (2002). University-industry partnerships driving innovation. Retrieved 20th July from http://www.nserc.gc.ca/news/2002/p021028.htm.
- Robertt, W. (2007). Technical and vocational education and training development. A Paper Presented at Singapore/ADB/PAC Forum on 15th October.
- Sodipo, O. O. (2014). Employability of tertiary education graduates in Nigeria: Closing the skills-gap. *Global Journal of Human Resource Management*, 2(3), 28-36.
- UNESCO & ILO (2002). Technical and vocational education and training for the twenty-first century. UNESCO and ILO Recommendations.
- Wapmuk, L.S. (2011). *Technical and vocational education and training for sustainable development of Nigeria*. A Keynote Address Presented at the 24thth Annual National Conference of Nigerian Association of Teachers of Technology (NATT) at Federal College of Education (Technical), Umunze, 17th 21st October.
- Yorke, M., (2006): *Employability in higher education: what it is what it is not*. York: Higher Education Academy. Reprint.