### The Role of Government in Building Manpower for Vocational and Technology Education in Universities in Niger-Delta, Nigeria.

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### Abstract

The study investigated the role of Government in Building Manpower for Vocational Technology Education in Universities in Niger-Delta, Nigeria. Descriptive survey research design was adopted for the study whose population was 82 (58 lecturers and 24 technologists). Purposive sampling technique was used to obtain a sample of 60 subjects. Two research questions and two hypotheses formulated and tested at 0.05 level of significance guided the study. The instrument used for data collection was the researchers' self-constructed questionnaire titled "Universities Academic Staff Development Questionnaire (UASDQ)". UASDQ was a 30-item questionnaire constructed on a 5-point Likert scale of Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree having numerical values 5, 4, 3, 2 and 1 respectively. The instrument was face-validated by two experts in vocational technology education from Nnamdi Azikiwe University, Awka, Anambra State; and an expert in measurement and evaluation from Rivers State University, Port Harcourt, Rivers State. The instrument was proved to be reliable having a reliability coefficient of 0.92 obtained via Cronbach's Alpha method. The test instrument was distributed to the respondents by the researcher and two research assistants who also helped in retrieving same after duly filled by the respondents. Out of 60 questionnaires distributed to the respondents, only 50 representing 83.3% of the total questionnaire was successfully retrieved and used for data analysis. Mean and standard deviation were used to analyze the research questions while t-test was used to test the hypotheses. The findings of the study revealed among others that inadequate funding, inadequate training facilities and equipment, poor institution-industry relations are major factors adversely affecting the manpower building of vocational and technology education lecturers in universities in Nigeria. Based on these findings, it was recommended among others that government should provide adequate funds for universities to enable them achieve quality manpower building of academic staff.

Keywords: Manpower building, vocational technology, education, universities, government.

### Introduction

The Niger Delta, as defined officially by the Nigerian government, extends over about 70,000 km<sup>2</sup> and makes up 7.5% of Nigeria's land mass. Niger Delta is the hub of oil/gas exploration and

production in Nigeria and thus becomes the mainstay of the nation's foreign earnings. The Niger Delta region is composed of nine Nigerian states of Abia, Akwa-Ibom, Bayelsa, Cross River, Delta, Edo, Imo, Ondo and Rivers, having a population of about 30 million people (Chizoba, Gwen, & Chike, 2012). Similarly, Oyejide and Adewuyi (2011), submitted that about 31 million people of more than 40 ethnic groups including the Efik, Ibibio, Annang, Oron, Ijaw, Itsekiri, Igbo, Urhobo, Yoruba, and Kalabari, Ikwerre, Obolo, Igbani, Ijaw, etc are among the inhabitants of the Niger Delta region, speaking about 250 different dialects. Niger Delta region is described as one of the most fragile ecosystem in the world serving as Africa's largest delta and the third world largest mangrove forest (Chizoba *et al.*, 2012). The Niger Delta region of Nigeria had experienced several challenges in recent times due to poverty and unemployment resulting to increased crime rates even as a region that controls the nation's fortune. These crimes range from kidnapping, cultism, drug abuse, prostitution, armed robbery, pipeline destruction, among others. These vices posed adverse effects on the socio-economic development of the region. One of the ways in which the people of Niger Delta can overcome these problems may be through entrepreneurship and self-employment obtainable via technical vocational education and training (TVET) programmes.

Technical Vocational Education and Training (TVET) as an educational programme is specially designed for skills acquisition for the entrepreneurship development of recipients at craft, semiskilled and skilled levels of technology. According to Afeti (2010), TVET is very crucial in the training and development of skilled entrepreneurial workforce required for the ever-changing technological work environment. TVET is the type of education which prepares individuals for the world of work; it is an instrument for sustainable development (Nande, Awua & Mlumum, 2017). Technical Vocational Education and Training (TVET) as an educational programme is anchored on competency-based learning and training for the development of the cognitive, affective and psychomotor skills of learners thereby playing a significant role in the socioeconomic growth and development of any nation. According to the national policy on education (NPE) (2013), Technical Vocational Education and Training is used as a comprehensive term referring to those aspect of the educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in all the sectors of economic and social life. TVET is a type of education that prepares manpower for sustainable national development through the provision of employable skills for employment and poverty reduction as well as the application of scientific and technological knowledge for national productivity (Obadara & Oyebolu, 2013). In the same vein, Okoye and Okwelle (2013) opined that TVET is mainly for those who will not only acquire it but also profit at it. TVET is the type of education that lay emphasis on the application of skills, knowledge and attitude needed for employment in a given occupation or cluster of related occupations in any field of social and economic activity (Oluwale, Jegede & Olamade, 2013). From the many definitions of TVET as given by different scholars in the field of technology education, it could be clearly seen that this form of education is needed for the skill development of all categories of industrial workforce in the country and as such should be treated as a priority in our national educational policies. Technical vocational education and training is offered at the secondary and tertiary levels of education in Nigeria. Technical Vocational Education and Training (TVET) programmes offered in Polytechnics, Colleges of Education

(Technical) and Universities are directed towards the training of students in skills acquisition in any given technical and technological fields thereby preparing them for the world of work. At the tertiary level, TVET is known as vocational and technology education (VTE). VTE programmes of universities are majorly offered for the skill training of learners in the areas of industrial technology education, agricultural education, business education, home economics, applied sciences among others. In Niger Delta region, VTE is aimed at training the people of the region in skills acquisition and development for self-reliance, economic productivity and technological advancement. These VTE programmes therefore, build quality manpower for the industrial and commercial sectors of the economy.

Manpower building (development) is a process that enables organizations to ensure that there are adequate human resources who will take up responsibilities thereby promoting continuous growth of the organizations as well as their readiness to actualize their cardinal objectives (Sobanjo, 2014). According to Obadara and Oyebolu, (2013), manpower development has to do with organized learning activities administered in a conducive environment for the purpose of improving performance and/or personal growth so as to foster improvement in the job, individual, and/or organization. Manpower development entails a broader range of activities to develop personnel in organizations in diverse areas of training and development, career development, and organization development. Manpower development is used simultaneously as Human Resource Development (HRD) in some quarters. HRD is a dynamic, ongoing, continuing, empowering process whose goals in every organization include to improve the performance of its workforce by maximizing their potentials, efficiency and performance. Human Resource Development therefore enhances employees' knowledge and skills, actions and standards, motivation, incentives, attitudes and work environment. In fact, human resources development takes care of the manpower developmental needs of any organizations or institutions. To further buttress the meaning of manpower development, Olanrewaju and Folarin (2013) described it as the training and development of employees in skills acquisition and knowledge leading to their potency and proficiency in the establishment. Ekpo (in Omodia, 2009) viewed manpower development as the existence of unskilled and/or skilled humans in need of training or retraining to perform more efficiently, a given job role in the society; by implication, the efficiency and effectiveness of workers are ascertained via manpower building and development. Hamlin (2004) described manpower development as any activity deliberately undertaken to improve a person's skill in a work role. Hamlin further submitted that manpower development does not only improve an individual's skills on the job but also brings about personal development in the area of knowledge and new skills acquisition. Thus, manpower development leads to human transformation which also leads to human satisfaction. Manpower development is achievable via the education and training of employees.

Furthermore, Madubueze, Ananti, Onyekwelu and Okpalibekwe (2015), viewed manpower development as a two-way responsibility between the organization and the individual. On his part, Onasanya (2005) described manpower development as a form of specialized education aimed at giving the trainee a specialized knowledge, skill and attitude needed to perform optimally in a given job role. Building manpower for technical vocational education and training thus, characterized the processes adopted to enhance the teaching effectiveness of TVET trainers and

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teachers for increased productivity. The development of TVET teachers is achievable through several means such as Government sponsorship to conferences, symposia, workshops, sabbaticals, seminars, grants, among others. For teachers at all levels to be effective in the discharge of their duties, there is need for sustainable manpower development. According to Balogun (2002), training and retraining of teachers and adequate supply of training equipment and facilities in institutions are tools to effective instructional delivery capable of improving students' academic achievements. The core of any teaching exercise is the teacher, therefore, teachers' skills need to be developed periodically via training and retraining programmes to update their knowledge in modern teaching philosophies in tandem with global best practices that are result-oriented (Dolores & Ernest 2018). The process of training and retraining of teachers is aimed at building their professional knowledge base thereby making them relevant in their jobs as trainers. The role of Government in building manpower for TVET in universities and other tertiary institutions cannot be overemphasized as it is sine qua non to economic development in all of its aspects and ramifications. This is a fact because, nobody gives what he/she does not have. Just like the popular slogan by the national union of teachers (NUT): If you can write your name, thank your teacher, if you can't, look for one. This implies that teachers are capacity builders. When you build the people, by implication you are building the nation, as no nation can develop beyond the level of its workforce. Therefore, the teachers' knowledge base also needs upgrading to cope with the modern trends in global technological advancement, innovations and development. Government at all levels have a duty to play to realize this noble cause of teachers' capacity building for greater, efficient and vibrant TVET systems in Niger-Delta in particular and Nigeria generally.

### **Statement of the Problem**

Teachers are the most influential component for the achievement of effective teaching and learning exercise in any educational system. According to the national policy on education (NPE) (2013), no education system can rise above the quality of its teachers. It therefore follows that teachers need continuous upgrading in knowledge accumulation. In contrast, most universities and allied TVET institutions in Nigeria suffer setback in the aspect of manpower development. The reason why most teachers (especially those in vocational technology education) deliver outdated knowledge to the students is because they are unable to access manpower developmental programmes capable of upgrading their expertise in modern trends in TVET due to inadequate funding by Government (Akaninwor, 2010). According to TVET Country Profile Report on Nigeria (2019) by the International Centre for Technical and Vocational Education and Training (UNEVOC) in collaboration with the National Board for Technical Education (NBTE), TVET institutions in Nigeria fail to equip teachers with corresponding qualifications and knowledge, these teachers and trainers in turn also fail to teach students effectively so as to pass on skills and knowledge fit for the present and future labour markets. Nigerian universities in recent times are experiencing difficulties in accessing research grants from the Government for professional career development of lecturers. Furthermore, most Nigerian universities are faced with the problem of under-staffing as most TVET departments and faculties lacked the requisite number of academic and technical staff needed to effectively train students in one skill area or the other. In the words of Niyozov (2008), no nation can build strong and effective educational system without continuous appraisal and improvement of its teachers training programmes. Therefore, it becomes imperative

for government at all levels to prioritize the issue of manpower development of vocational and technology education lecturers and technologists in universities and other tertiary institutions across Nigeria for maximum productivity.

### **Purpose of the Study**

The main purpose of the study is to emphasize the role of Government in building manpower for vocational technology education in universities in Niger Delta, Nigeria. Specifically, the study sought to:

- 1. Determine the constraints to manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria.
- 2. Identify possible remedies to inadequate manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria.

### **Research Questions**

The following two research questions guided the study:

- 1. What are the constraints to manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria?
- 2. What are the possible remedies to inadequate manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria?

### Hypotheses

The following two null hypotheses tested at 0.05 level of significance guided the study:

- 1. There is no significant difference between the mean responses of lecturers and technologists on the constraints to manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria.
- 2. There is no significant difference between the mean responses of lecturers and technologists on the possible remedies to inadequate manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria.

### **Materials and Methods**

The study adopted descriptive survey design. A total of 82 (58 lecturers and 24 technologists) from three universities offering vocational technology education programmes in Niger Delta constituted the study population. The universities are Delta State University, Abraka, Delta State; Ignatius Ajuru University of Education, Port Harcourt, Rivers State; University of Uyo, Akwa-Ibom State. Purposive sampling technique was used to obtain from the population, a study sample of 60 (38 lecturers and 22 technologists). Two research questions and two hypotheses guided the study. The instrument used for data collection from the respondents was the researcher's self-constructed questionnaire titled "Universities Academic Staff Development Questionnaire (UASDQ)". UASDQ was a 30-item questionnaire constructed on a 5-point Likert scale of Strongly Agree,

Agree, Undecided, Disagree and Strongly Disagree having numerical values 5, 4, 3, 2 and 1 respectively. The instrument was face validated by two experts in vocational technology education from Nnamdi Azikiwe University, Awka, Anambra State and one expert in measurement and evaluation form Rivers State University, Port Harcourt, Rivers State. The instrument was proved to be reliable having a reliability coefficient of 0.92 via Cronbach Alpha's method. UASDQ was distributed to the respondents by the researchers and two other research assistants who also helped in retrieving same after duly filled by the respondents. Out of 60 questionnaires distributed to the respondents, only 50 representing 83.3% was successfully retrieved and used for data analysis. Mean and standard deviation were the descriptive statistical tools used to analyze the research questions while t-test was used to test the hypotheses at 0.05 level of significance. The decision was that any items having a mean value of 3.00 and above is accepted while items whose mean values fall below 3.00 are rejected. For hypotheses, if  $t_{cal}$  is greater than  $t_{crit}$ , the hypothesis is rejected otherwise accepted.

### Results

The results were presented based on the research questions and hypotheses as follows.

**Research Question 1:** What are the constraints to adequate manpower building of vocational technology education lecturers in universities in Niger Delta, Nigeria?

S/ N	Item Statement	Lecturers	5		Techno	ologists	
		$\overline{X_1}$	$SD_1$	Decision	$\overline{X_2}$	$SD_2$	Decision
1	Inadequate motivation of TVET staff.	4.00	1.1	Agreed	4.23	1.13	Agreed
2	Inadequate in-service training of TVET staff.	4.54	0.87	Agreed	4.09	0.79	Agreed
3	Inadequate funding of TVET programmes.	4.43	0.86	Agreed	4.05	1.3	Agreed
4	Poor research grants for TVET staff.	4.04	1.09	Agreed	3.77	1.15	Agreed
5	Inadequate supply of instructional materials.	4.29	0.96	Agreed	3.82	1.22	Agreed

## Table 1:Constraints to adequate manpower building of Vocational and Technology<br/>Education Lecturers in Universities in Niger-Delta, Nigeria.

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6	Poor public image of TVET.	4.43	0.9	Agreed	4.32	0.76	Agreed
7	Increased workloads due to inadequate academic staff	2.89	1.57	Agreed	3.95	1.05	Agreed
8	No adequate research outputs.	3.46	1.40	Agreed	2.91	1.62	Agreed
9	Human capital flight	3.32	1.26	Agreed	3.5	1.34	Agreed
10	Inadequate industry-institution relations.	3.71	1.36	Agreed	3.95	1.11	Agreed
11	Poor staff welfare	4.36	0.9	Agreed	3.77	1.24	Agreed
12	Poor workshop facilities	3.82	1.31	Agreed	4.05	1.02	Agreed
13	Poor laboratory facilities	4.21	1.26	Agreed	3.68	1.22	Agreed
14	Poor library facilities	4.12	0.94	Agreed	4.41	0.6	Agreed
15	Inadequate TVET programme implementation in universities.	4.07	1.28	Agreed	4.14	1.06	Agreed
	Grand Mean and SD	3.98	1.14		3.91	1.11	

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Table 1 indicated that both categories of respondents saw these items as constraints to adequate manpower building of TVET teachers in universities in Niger-Delta, Nigeria. This was seen from the mean scores of all the items which fall above the criterion mean of 3.00. Standard deviation values ranging from 0.6 to 1.62 shows homogeneity in their responses.

**Research Question 2:** What are the possible remedies to inadequate manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria?

# Table 2:Possible remedies to inadequate manpower building of vocational technology<br/>education lecturers in universities in Niger Delta, Nigeria.

S/ N	Item Statement	Lecturer	S		Techn	ologists	
		$\overline{X_1}$	$SD_1$	Decision	$\overline{X_2}$	SD <sub>2</sub>	Decision

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1	Provision of adequate motivation for TVET Staff.	3.64	1.34	Agreed	3.82	1.40	Agreed
2	Adequate in-service training of TVET staff.	3.89	1.36	Agreed	3.77	1.31	Agreed
3	Adequate funding of TVET programmes.	4.32	1.17	Agreed	4.36	0.88	Agreed
4	Provision of quality research grants for TVET staff.	4.32	1.59	Agreed	3.91	1.28	Agreed
5	Adequate supply of instructional materials.	4.50	0.65	Agreed	4.18	1.07	Agreed
6	Improved public image of TVET staff via awareness creation.	4.04	1.09	Agreed	3.91	1.31	Agreed
7	Engagement of adequate academic staff.	3.50	1.52	Agreed	3.73	1.39	Agreed
8	Increased research outputs by provision of adequate funds.	3.75	1.38	Agreed	3.64	1.37	Agreed
9	Improved condition of service of TVET staff to discourage brain drain.	4.07	1.16	Agreed	4.09	1.16	Agreed
10	Quality industry-institution tie.	4.32	1.04	Agreed	4.45	0.66	Agreed
11	Improving the general welfare of staff.	4.46	0.94	Agreed	4.27	1.17	Agreed
12	Provision of adequate workshop facilities.	4.28	1.08	Agreed	4.18	0.72	Agreed
13	Provision of adequate laboratory facilities.	4.50	0.87	Agreed	3.95	1.19	Agreed
14	Improved library facilities in TVET fields.	3.71	1.28	Agreed	4.00	1.17	Agreed
15	Effective TVET programme implementation in Universities.	4.32	1.00	Agreed	4.68	0.76	Agreed

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	4.40	1.17	
Grand Mean and SD	4.10	1.16	4.06 1.12

Table 2 revealed that both lecturers and technologists believed that all the items are possible remedies to the constraints of inadequate manpower building of vocational and technology education lecturers in universities in Niger Delta, Nigeria as seen in the mean values of all the items which are above the criterion mean of 3.00. Standard deviation values ranging from 0.65 to 1.59 revealed closeness in the responses of the respondents.

**Hypothesis 1:** There is no significant difference between the mean responses of lecturers and technologists on the constraints to manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria.

### Table 3:Constraints to manpower building of vocational and technology education<br/>lecturers in universities in Niger-Delta, Nigeria.

GROUP	Ν	$\overline{X}$	SD	df	t-cal	t-crit	Decision
Lecturers	28	3.98	1.14				
				48	0.22	2.00	Accepted
Technologists	22	3.91	1.11				

Source: Researchers' Field Work; 2019

Table 3 indicated that the calculated value of t (0.22) was less than the critical value of t (2.00) at 0.05 level of significance and degree of freedom of 48. Thus, the null hypothesis which stated that there is no significant difference between the mean responses of lecturers and technologists on the constraints to manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria was accepted.

**Hypothesis 2:** There is no significant difference between the mean responses of lecturers and technologists on the possible remedies to inadequate manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria.

Table 4:	Possible remedies to inadequate manpower building of Vocational/Technology
	Education lecturers in universities in Niger-Delta, Nigeria.

GROUP	Ν	$\overline{X}$	SD	Df	t-cal	t-crit	Decision
Lecturers	28	4.10	1.16				
				48	0.12	2.00	Accepted
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Technologists	22	4.06	1.12

### Source: Researchers' Field Work; 2019

Table 4 showed that the calculated value of t (0.12) was less than the critical value of t (2.00) at 0.05 level of significance and degree of freedom of 48. Hence, the null hypothesis which stated that there is no significant difference between the mean responses of lecturers and technologists on the possible remedies to inadequate manpower building of Vocational Technology Education lecturers in universities in Niger Delta, Nigeria was accepted.

### Discussion

Table 1 revealed that vocational technology education lecturers in universities in Niger-Delta, Nigeria faced numerous constraints which adversely affects their manpower building. This finding corroborates Akaninwor (2010) who posited that one major reason why most teachers (especially those in vocational technology education) deliver outdated knowledge to the students is due to the fact that they are unable to access manpower developmental programmes capable of upgrading their expertise in modern trends in TVET due to inadequate funding by Government. Similarly, Adegbenjo (2007) opines that Nigerian institutions of higher learning lacked adequate funding to embark on some numerous capital-intensive technological developmental programmes such as teacher training and retraining, upgrading of teaching and learning facilities, electricity supply, among others which adversely affect teaching and learning activities. Furthermore, this finding supports the views of Emmanuel, Adike and Opigo (2018), who stated that incessant poor funding of tertiary education in Nigeria calls for urgent attention to remedy the situation as every constraint in the university system is traceable to poor funding of educational programmes by government. Again, this finding agrees with Okoroma (2003) who posited that inadequate funding, poor supply of training facilities, inadequate laboratories and libraries are some of the factors impeding on the educational development in Nigeria.

Table 2 revealed that possible remedies to the constraints of adequate manpower building of vocational technology education lecturers in universities include improved staff welfare packages, training and retraining of lecturers and instructors, adequate research grants for staff development, adequate funding of TVET programmes, increased institution-industry relations, adequate supply of training facilities and materials among others. This finding is in line with the views of Dolores and Ernest (2018) who opined that training and retraining of teachers in the educational institutions is key to effective instructional delivery capable of improving students' academic achievements. In the same vein, this finding agrees with Balogun (2002) who posited that the core of any teaching-learning exercise is the teacher since he/she facilitates learning to bring about improvement in students' achievement, therefore teachers' professional knowledge and skills demand regular update through adequate in-service training and retraining activities and the provision of quality training equipment for effective teaching and learning capable of enhancing student's achievement.

From table 3, the t-test analysis on constraints to adequate manpower building of TVET lecturers in universities in Niger-delta, Nigeria revealed that both categories of respondents are of similar

views that so many problems adversely affected manpower building of TVET teachers in universities and other tertiary institutions.

From table 4, the t-test analysis on possible remedies to the constraints to manpower building of TVET lecturers in universities in Niger-delta, Nigeria revealed that both categories of respondents share similar opinion on possible ways of building manpower for TVET programmes in universities.

Therefore, from these findings, it becomes imperative for Government at all levels to embrace effective approaches to ensuring adequate teachers' professional growth and development as this serves as an alternative to curtail the menace of poor academic achievements of vocational and technology education students in universities in Nigeria.

### Conclusion

The best gift a nation can give to its citizens is effective education. Quality education increased knowledge, awareness and power. Therefore, investing heavily in technical vocational education and training programmes in tertiary institutions in Niger Delta, Nigeria is sacrosanct to the socioeconomic and political advancement of the people of the region as it will help to fight the hurdles of poverty, increased crime rates and unemployment prevalent in this part of Nigeria. However, to achieve great results in this regard, vocational technology education lecturers' expertise requires upgrading at every point in time as new technologies always come with different instructional approaches for maximum productivity and effectiveness.

### Recommendations

From the findings of the study, the following recommendations are suggested:

- 1. Government should ensure adequate provision of funds to universities and other tertiary institutions in Nigeria for smooth operation of educational activities and programmes.
- 2. Government should make move to strengthen institution-industry relations so that technical and vocational education students can learn effectively in theories and practice in both domains.
- 3. Government should take serious measures concerning the issue bordering on the welfare academic staff in Nigerian universities in order to bring out the best in them.
- 4. Government should provide adequate training facilities and materials in technical workshops/laboratories in universities across Nigeria to enhance the practical skill training and development of students.
- 5. Government should provide adequate research grants to universities embarking on innovative research and development projects.

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