

**FACTORS INFLUENCING STUDENT'S ENROLMENT IN VOCATIONAL
TECHNICAL EDUCATION POST-GRADUATE PROGRAMS IN RIVERS AND
BAYELSA STATE TERTIARY INSTITUTIONS**

Dr. Obiyai, K. K. (Phd)

Department of Vocational Education
Niger Delta University

Dr. Emeli Eniekenemi (Phd)

Department of Welding & Fabrication Engineering Technology
Federal Polytechnic, Ekowe, Bayelsa State

ABSTRACT: *The study looked at Factors Influencing Students Enrolment in Vocational Technical Education Post-Graduate Programme in Rivers and Bayelsa State Tertiary Institutions. Two research questions and one hypothesis was used in the study. The researchers used simple survey research design. The population consists of a total of 149 students in post-graduate program in technical education in Rivers and Bayelsa State tertiary institutions. The researchers developed an instrument titled students response on financial constraints and perception of vocational technical education (SRFPT). SRFPT item was subjected to face validation by two experts in the department of vocational technical education in Nnamdi Azikiwe University Awka. The instrument reliability was calculated to be 0.87 using Cronbach Alpha. Data obtained from research questions were analyzed using mean and standard deviation for research questions and Z-test for hypothesis at 0.05 level of significance. Response from table 1 showed that item 1, 2, 3, 4 and 5 were all accepted to the various questions. This shows that finance is a major factor influencing the enrolment of students in vocational technical education program. Result from table 2 reveals that item 1, 3 and 4 were rejected to the various questions. While item 2 and 5 were accepted. This shows that technical education teachers do not have low prospect, jobs are not limited to classroom only and they earn better. Also, it was observed that vocational technical education lecturers are leaving below standard as compared to their job input. In addition, the findings from the hypothesis showed that z-calculated value of 10.10 was higher than z-critical value of 1.960 at 0.05 level of significance with 149 degree of freedom. This implies that there is significant difference on how finance affects students' enrolment in post-graduate programme in Rivers and Bayelsa State tertiary institutions and how students value vocational technical training program in labour market. Among all, it was recommended that Government should create a financial scheme to subsidize tuition fee and research programs among post-graduate students in vocational technical education program.*

KEYWORDS: vocational, technical, education, post-graduate, programs

INTRODUCTION

Vocational technical education program is majorly designed to train personnel in the world of work. Vocational technical education is a multi-faced, multi-disciplinary and pragmatic field of area geared towards equipping individuals with necessary skills which enhance their relevance and participation in the world of work (Okoye, 2013). Vocational technical education is a well-organized program of courses and learning innovations that begins with exploration of career opportunities, supports basic academic and life skills, and enables achievement of high academic standards, leadership skills, preparation for industry-defined work as well as advanced and continuing education (Dike, 2007).

Akalugo (2011) stated that development of any society depends in the quality of its workforce and reaffirms that the workforce is the fundamental drive in any developing economy. Such workforce include highly skilled professionals and technicians like bricklayers, carpenters, painters and auto-mechanics, laboratory and pharmacy technicians, electrical/electronic technicians and skilled vocational nurses to mention but a few (Okoye, 2013).

Nigeria is endowed with lots of human and material resources. Advances in technology, reestablishment of industry, and drift in marketing demands have influenced and expanded the demand for labor supply (Osuala, 2004). Demands have increased for additional personnel in research, development, production and service in applied science areas. Nigerian educational system aid people to attain the required competencies needed in present day world of work. Educational programs are tailored towards individuals' interest, aptitudes, needs and occupational goals of each student. Some vocational programs available in vocational technical education as stated by Osuala, 2004 are;

1. Aeronautical Technology
2. Architectural Technology
3. Mechanical Technology
4. Building Technology
5. Electrical/Electronic Technology
6. Industrial Technology
7. Fire and Safety Technology
8. Chemical Technology
9. Automotive Technology
10. Scientific Data Technology

Observation shows that most of these vocational programs are not available in Nigerian higher institutions in Technical education. These may be due to the ground that schools lack qualified resource persons to teach these subjects. However, this study intends to identify some of the factors that may influence supply of manpower in vocational technical education program.

Statement of Problem

One of the major challenges of policy thrust of current educational system is inadequate supply of qualified vocational technical teachers to lecture at tertiary institutions (Okwelle & Nworgu, 2007). New studies conducted by Isyaku, 2003; Ezeji, 2005; Aina, 2006 and Hurbert, 2006 reveal that majority of qualified and experienced technical teachers prefer to go to industries where there are better opportunities. Also, Yakubu (2006) noted that low enrolment rate of entrants into vocational teacher training program was due to the low status of teachers and poor image of technically oriented personnel. The problem of finance may also affect students' interest in furthering educational program in technical education. Subethra, (2015) stated that a lot of students at post graduate level is confronted with financial challenges sponsoring technical education program. Therefore this research work intends to find out some of the factors that may influence students' enrolment in vocational technical education post-graduate programme in Rivers and Bayelsa State tertiary institutions.

LITERATURE REVIEW

Vocational Technical Education in Nigeria

The importance of vocational and technical education has been recognized by the present state and federal governments in Nigeria. Vocational technical education achieves economic gains because investments in vocational and technical programs provide persons with employable skills and provide the economy with productive citizens. The objectives of the faculty of Vocational Technical Education are mainly to train teachers who can occupy teaching and leadership positions in secondary schools, technical colleges, Colleges of education, universities and training programs in Agricultural, Home Economics, Industrial Computer and Business related establishments (Meta, 2017).

Technical education involves the training of technical personnel for the purposes of initiating, facilitating and implementing the technological development of a nation and also to create the necessary awareness of technological literacy to our youths in the society (Uwaifo, 2009). Technical education also involve the training of technically oriented personnel who are to be the initiators, facilitators and implementers of technological innovation of a nation by adequately training its country youths on the need to be technologically literate, leading to independency and sustainability in a functional system. Technical vocational education program, just like any profession has more direct impact on national development and prosperity (Uwaifo, 2009). Technical education influence are widespread and visibly ranging from different trade like metalwork technology, mechanical/ automobile technology, electrical and electronic technology, building and woodwork technology, etc. Technical education program is designed at senior secondary school grade for preparation of middle-class personnel and at university level for higher management position.

At post independent phase, technical and vocational education followed closely in the style adopted by the British government. Technical institutes offered courses of different lengths at the sub-professional levels for fulltime, part-time, and evening students (Osuala, 2004). These programs were organized into departments and encompasses both technical and commercial

subjects. Some of the challenges faced with the development of technical education in Nigeria as stated by Uwaifo, 2009 are;

1. **Funding:** Universities in Nigeria are owned by the Federal and State governments and recently Private individuals. The Federal and State governments' universities depends majorly on the governments for funding while the private universities got their incomes from the fees they obtain from the students. Other revenue sources are responsible for the reason why it has been constantly difficult to run experiments effectively for students and made the teaching and research in science and technology difficult and therefore the country was producing insufficient and ill-prepared technical education graduates necessary for driving the technological and socio-economic development of this nation. The lack of teaching, laboratory and workshop facilities has contributed to the reduction of the quality of technical education graduates in Nigeria.
2. **Brain drain:** In the context of this paper, brain drain refers to the movement of lecturers of technical education which are needed for the socio-economic and technological advancement of Nigeria from one university to other universities or to other professional (including politics) calling for better conditions of service. Akintunde (2007) identified five different components of brain drain:
 - i). Experts in academics who moved to the industry where they get better pay for their services.
 - ii). Lecturers and students who leave the country to acquire more knowledge and skill but later refused to return.
 - iii). Lecturers who move from one country for better conditions of service.
 - iv). Skill professionals who abandon the practice of technical education in favor of other more lucrative economic activities and political appointments which are not related to their training.
 - v). Skilled professionals, although in their field of training, who do not devote their full attention to their job because the necessary demands. Overseas training requires a lot of foreign exchange but the enabling environment exists to achieve success in a record time. However, over time it has always been difficult to get the trainees back to their respective countries after the completion of their study.

All these factors may have some influence on the growth and manpower development of technical education program.

Purpose of the Study

The study looked at Factors that Influence student's enrolment in Vocational Technical Education Programs in Rivers State Tertiary Institutions. Specifically, the study sought to:

1. Find out the extent to which finance can affect students' enrolment in post-graduate programme in Rivers and Bayelsa state tertiary institutions.
2. Find out the extent to which post-graduate students value vocational technical training programme in labor market.

Research Questions

The following research questions were used as a guide for the study:

1. To what extent can finance affect students' enrolment in post-graduate programme in Rivers and Bayelsa State tertiary institutions?
2. To what extent do students value vocational technical training program in labour market?

Hypothesis

The null hypothesis was tested at 0.05 level of significance

HO₁: There is no significant difference on how finance affects students' enrolment in post-graduate programme in Rivers and Bayelsa State tertiary institutions and how students value vocational technical training programme in labour market.

METHODS

The researchers used simple survey research design. The population consists of a total of 149 students in post-graduate programme in technical education in Rivers and Bayelsa State tertiary institutions. Due to the population size, they were all used as sample for the study. The population figure was obtained from Heads of Department in Technical Education in Rivers and Bayelsa State tertiary institutions. Simple structured questionnaire item was used as instrument of the study. The instrument was titled "Students Response on Financial Constrains and Perception of Vocational Technical Education (SRFPTE).

SRFPTE item is made up of a four point rating scale consisting of two sections. The first section was used to answer research question 1 and it consist of 5 items. The second section was used to answer research question 2 which also consist of 5 items as well. The SRFPTE has response mode as Strongly Agree (SA), Agree (A), Disagree (D) and Undecided (UN). The response option are weighed as 4, 3, 2, and respectively. SRFPTE item was subjected to face validation by two experts in the department of vocational technical education in Nnamdi Azikiwe University Awka. The experts checked the language content of the instruments and made necessary corrections before final copy was produced and used for the study.

The instrument was administered to five post-graduate students in technical education program from Nnamdi Azikiwe University Awka for pilot study. The pilot group filled the questionnaire from SRFPTE item and the result was analyzed using Cronbach Alpha reliability coefficient. From the result obtained, reliability coefficient value was calculated to be 0.87. The researchers administered SRFPTE items directly to post-graduate students in technical education in Rivers and Bayelsa State of Nigerian tertiary institutions. All the questionnaire items were retrieved. Data obtained from research questions were analyzed using mean and standard deviation for research questions and Z-test for hypothesis. The hypothesis was tested at 0.05 level of significance. Mean value exceed 2.50 were accepted, while mean value below 2.50 were rejected. Also, reject null hypothesis if calculated Z-value exceed tabulated Z-value or accept.

Data Analysis**Research Question 1**

To what extent can finance affect students' enrolment in post-graduate program in Rivers and Bayelsa State tertiary institutions?

Table 1: *Financial effect on students' enrolment in post-graduate program in Rivers and Bayelsa State tertiary institutions*

S/No	ITEMS	SA (4)	A (3)	D (2)	Un (1)	Mean	Standard Deviation	Decision
1	Financing post-graduate program in technical education is expensive	119	18	12	-	3.75	0.62	Accept
2	Financing post-graduate project in technical education can be frustrating	89	30	30	-	3.40	0.82	Accept
3	Financing post-graduate program can lead to poor enrolment of students	60	71	18	-	3.28	0.68	Accept
4	Lack of finance can delay completion of post-graduate program in technical education	78	58	6	7	3.28	0.77	Accept
5	Financing post-graduate program in technical education may lead to withdrawal of students	89	48	6	6	3.48	0.77	Accept
Grand Mean						3.44	0.73	

Response from table 1 showed that item 1, 2, 3, 4 and 5 were all accepted to the various questions. This shows that finance is a major factor influencing the enrolment of student in technical education program.

Research Question 2

To what extent do students value vocational technical training program in labour market.

Table 2: Students value on vocational technical training program in labor market

S/NO	ITEMS	SA (4)	A (3)	D (2)	UN (1)	Mean	Standard Deviation	Decision
1	Technical teachers have low prospect in labour market	12	30	95	12	2.28	0.74	REJECT
2	Lecturers in technical education have low standard of living	30	24	89	6	2.52	0.87	ACCEPT
3	Technological teachers do not earn well in labour market	24	18	95	12	2.36	0.86	REJECT
4	Job opportunities in technical education are limited to classroom teaching only	6	12	125	6	2.12	0.53	REJECT
5	I would love to secure a job as a technical education instructor.	107	18	12	12	3.48	0.96	ACCEPT
Grand Mean						2.55	0.79	

Result from table 2 reveals that item 1, 3 and 4 were rejected to the various questions. While item 2 and 5 were accepted. This shows that technical education teachers do not have low prospect, jobs are not limited to classroom only and they earn better. Also, it was observed that technical education lecturers are leaving below standard as compared to their job input.

Hypothesis

There is no significant difference on how finance affects students' enrolment in post-graduate programme in Rivers and Bayelsa State tertiary institutions and how students value vocational technical training program in labour market.

Table 3: Z-test analysis of financial effects of students' enrolment in post-graduate (PG) programme in Rivers and Bayelsa State tertiary institutions and how students value vocational technical training program in labour market

ITEMS	Mean	Standard Deviation	N	Df	z-cal	z-tab	Decision
Financial effects of PG students' enrolment in TVET	3.44	0.73	149	296	10.10	1.960	Reject
Students value TVET program in labour market	2.55	0.79	149				

The data obtained from the null hypothesis showed that z-calculated value of 10.10 was higher than z-critical value of 1.960 at 0.05 level of significance with 149 degree of freedom. This resulted

to the rejection of the null hypothesis based on the decision rule. Therefore, it would be stated that there is significant difference on how finance affects students' enrolment in post-graduate programme in Rivers and Bayelsa State tertiary institutions and how students value vocational technical training programme in labour market.

DISCUSSION OF FINDINGS

Result obtained from research question 1 showed that finance is a major factor influencing the enrolment of student in technical education programme. This is in agreement with the statement of Pauline & Bernadette (2014) that inadequate finance can limit students from furthering their education. Also, students in higher education programme, may drop out due to financial constrain (Pauline & Bernadette, 2014). Data obtained from research question 2 revealed that technical education teachers do not have low prospect, jobs are not limited to classroom only and they earn better. Osuala, 2004 listed other opportunities in technical education that is suitable for training and industrial activities. In addition, it was observed that technical education lecturers are leaving below standard as compared to their job input. This may affect the level of manpower development in the field. Okwelle, 2007 identified seven forms of wastages in technical and vocational education to include; low enrolment rate of entrants, repetition of class; drop outs, under-utilization of human learning and non-employment of school leavers.

Result obtained from hypothesis showed that there is significant difference on how finance affects students' enrolment in post-graduate programme in Rivers State tertiary institutions and how students value vocational technical training program in labour market. This implies that irrespective of financial constrains faced by post-graduate students, it may not affect their perception on how they value vocational technical education programme in the labour market.

CONCLUSION

In all, the study looked at Factors that Influence Students Enrolment in Vocational Technical Education Post-Graduate Programs in Rivers and Bayelsa State Tertiary Institutions. The study showed that finance is a major factor influencing the enrolment of student in technical education program. Also, results from the study revealed that technical education teachers do not have low prospect, jobs are not limited to classroom only and they earn better. Finally, the Result obtained from hypothesis showed that there is significant difference on how finance affects students' enrolment in post-graduate programme in Rivers and Bayelsa State tertiary institutions and how students value vocational technical training program in labor market.

Recommendations

From the research findings, it will be recommended that:

1. Government should create a financial scheme to subsidize tuition fee and research programs among post-graduate students in technical education program.

2. School authorities should elaborate and inform students of prospects and opportunities in technical education.

References

- Aina, O. (2006). Technical and Vocational Education in Nigeria: The way forward. *Paper Presented at the ETF zonal sensitization workshop on the revamping of Technical and Vocational Education in Nigeria.*
- Akalugo, M.N. (2011). Systematic Approach to Emerging Science and Technology: Technology an Integral Aspect of Society. Retrieved from <http://www.digitalreview.org>.
- Dike, I. (2007). Vocational Education: Missing in Nigeria's Development Policy. Retrieved July, 2012 from http://www.Nigeria_villages.com
- Ezeji, S.C.O.A. (2005). Empowering the Nigerian Youths through Effective Technology Education. Some Policy Imperatives in G.N. Nneyi, F.O.N. Onyeukwu, M. *Proceedings of 8th Annual Conference of Nigerian Association of Teachers of Technology (pp 55-11), Port Harcourt.*
- Harbert, J.C. (2006). Learning from the Tigers: How Nigerian my adopt the experience of Asian Countries to reposition her technical and vocational education sector; *Paper Presented at the ETF zonal sensitization workshop on the revamping of technical and vocational education in Nigeria, Port Harcourt.*
- Isyaku, K. (2003). The Implication of vocational and Technical education in the National Growth and development in the 21st century. *Journal of Technical and Science Education* 12 (182), 96-103.
- Meta, (2017). *Philosophy & Objectives of Vocational Teacher Education Philosophy.* Faculty of Education, University Of Nigeria Nsukka.
- Okoye, P.I. (2013). Entrepreneurship through Technical and Vocational Education Training (TVET) for National Transformation. *Unizik Orient Journal of Education.* 7,1, 59-64.
- Okwelle, P.C. & Nworgu, P.O, (2007). Incidence of Wastage in Technical Teacher Education. *Program at Federal College of Education (Technical) Omoku, Rivers State.*
- Osuala, E.C. (2004). *Foundations of Vocational Education.* Agbani Road, Enugu, Nigeria fifth Cheston Agency LTD, 104.
- Pauline, M. & Bernadette, J. (2014) Poor Students Face Massive Financial Stress. Retrieved From <http://www.Mail & Guardian African Best Read.com>
- Subethra, P. (2015). Financial Stress Distracts University Students from Academic Success. Retrieved from <http://www.Conversationmedia.com>.
- Uwaifo, V. O. (2009). Technical Education and its Challenges in Nigeria in the 21st Century. *International NGO Journal Vol. 5(2), pp. 040-044, February, 2010.*
- Yakubu, N. (2006). New Approaches to Technical and Vocational Education. *Paper Presented at the ETF zonal sensitization workshop on the revamping of technical and vocational Education in Nigeria, Port Harcourt.*