
Identifying Employment Opportunities for Graduates of Technology Education Programme in Nigeria

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Abstract

Unemployment in Nigeria is fast becoming a national treat. Population growth in the country has overtaken economic expansion. Questions were posed as to whether technology education was contributing substantially in employment generation and income earning opportunities in Nigeria. It becomes pertinent therefore to investigate and identify the areas where graduates of technology education programme can create jobs. Five research questions and two hypothesis tested at 0.05 level of significance guided the study. The target population of the study comprises all administrators, teachers and students of technology education. The data collected were analyzed using Mean, Standard Deviation and Analysis of Variance (ANOVA). The overall results revealed the employment opportunities available for graduates of technology education. Recommendations were made.

Unemployment is a situation where graduates of training institutions are actively seeking work but cannot find one. Elobuiké (2006) contributing, stated that unemployment is a condition where an individual who is able to work and is dependent on work to survive is unable to obtain employment. Unemployment is often times a result of a low demand of labour and inadequate access to employment opportunities. Unemployment is known with its social consequences which range from waste of productive capacity, to devaluation of human dignity.

Unemployment in Nigeria is fast becoming a national treat. Population growth in the country has overtaken economic expansion, resulting in high level of unemployment rate. Nigeria situation seems most pathetic and worrisome. To tackle the plague of spiral unemployment, most developing nations like Ghana, Gambia, Indonesia, Malaysia and Singapore among others have recently turned attention to implementing those strategies that should enhance technical skill acquisition. The

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Federal Government taking a clue from such nations came up with a new National Policy on education which laid great emphasis on technology education. Technology education is a conglomerate of course in engineering technology, science, automobile, electrical/electronics, building, metalwork, woodwork etc.

National Policy on Education (NPE, 2004) defined technology education as that aspect of education that gives its recipient an opportunity to acquire technical practical skills. United Nations Education scientific and cultural organization (UNESCO, 2004) perceived technology education as that aspect of education process involving in addition to general education the study of technologies and related science and the acquisition of practical skills. Some of the aims of technology education according to NPEI 2004 include:

1. to promote technical knowledge and vocational skill necessary for individual and economic development.
2. to give training and impart the necessary skills leading to the production of craftsmen, technicians and other skilled personnel who will be enterprising and self-reliant.

Technology education provides individuals with appropriate skills with which to live and function in today's and tomorrow's industrial world. In the advent of perennial unemployment and poverty technology education has the potential to stimulate indigenous entrepreneurship among the citizenry. Technology education if successfully implemented in this country will serve as a key to lift Nigeria citizenry above subsistence level, provide a solid base for self-reliance, reduce if not eliminate unemployment. Moreover, technology education helps the unemployed at different levels to acquire skills that will help them get wage employment, establish on their own so that they can earn a living. Technology education plays a vital role in the generation of wide spread employment and income earning opportunities.

The importance of technology education and its potentials of reducing unemployment among Nigerians cannot be underestimated. This importance is underscored by the establishment of technical colleges; colleges of education (technical) among others in most states of the country. Colleges of education (technical) are regarded as the principal technology education institution in Nigeria. They give full technology education training intended to prepare students for entry into various occupations. At the end of the approved period of study, the students are offered with Nigeria certificate in education (technical). In order to achieve the aims of technology education, the focus of these institutions has been to train and impart the necessary skills leading to the production of individuals who are self-reliant and self-sufficient.

The current unemployment predicament in Nigeria made many people seriously question the utilization of technology education in the nation. Some people were very critical regarding the increasing problem of low levels of employment.

national policy would provide solutions to the problem. Further questions were posed as to whether technology education was contributions substantially in providing wide spread employment and income earning opportunities in Nigeria. Upon this background, it becomes pertinent therefore, to investigate and identify the areas where graduates of technology education programme could be employed.

Statement of the Problem

As earlier stated, unemployment is known with its social consequence which range from waste of productive capacity to devaluation of human dignity. Nigeria today is largely plagued by spiral unemployment. Oladebo (1990) reported that unemployment creates identity crisis and that technology education plays a vital role in the generation of new employment. Technology education helps the unemployment at different levels to acquire skills that will help them get wage employment or earn a living by establishing their own business.

Many people have questioned the role of technology education in reducing unemployment among Nigerians. Critics are wondering whether technology education is contributing substantially in the generation of new employment. The problem of this study is therefore, to identify employment opportunities for graduates of technology education programme.

Purpose of the Study

The main purpose of the study is to investigate and identify employment opportunities for graduates of technology education programme. Specifically the study will:

1. identify the employment opportunities in automobile occupations that are available for graduates of technology education
2. determine the employment opportunities in electrical/ electronics occupations that are available for graduates of technology education
3. Identify the job opportunities in building occupations that are available for graduates of technology education.
4. determine the job opportunities in metal work occupations that are available for graduates of technology education.
5. Identify the employment opportunities in woodwork occupations that are available for graduates of technology education.

Significance of the Study

The findings of the study would help motivate private entrepreneurs in job creation. Optimal workforce for transforming socio- economic situation in the country would be produced in short and long terms. The findings of the study would make substantial contributions towards generating wide spread employment and income earning opportunities thereby reducing if not eliminate unemployment in Nigeria. Technology education would begin to experience enhanced recognition because

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government would be pleased to fund at a full capacity technology education programmes because of its potentials of reducing unemployment among Nigerians.

Research Questions

The following research questions guided the study

1. What employment opportunities in automobile occupations are available for graduates of technology education?
2. What employment opportunities in electrical/electronics occupations are available for graduates of technology education?
3. What job opportunities in building occupations are available for graduates of technology education?
4. What job opportunities in metalwork occupations are available for graduates of technology education?
5. What employment opportunities in wood work occupations are available for graduates of technology education?

Hypotheses

The following hypotheses were tested at 0.05 level of significance.

HO₁: There is no significant difference in the Mean response of administrators, teachers and students regarding the job opportunities in automobile occupations that are available for graduates of technology education.

HO₂: A significant difference does not exist between the Mean responses of administrators, teachers and students on the job opportunities in electrical/electronics occupations that are available for graduates of technology education.

Scope of the Study

The study is concerned with identifying employment opportunities for graduates of technology education in colleges of education (technical). Thus, the study is delimited to technology graduates at college of education (technical) level.

Design of the Study

This study is basically a survey type aimed at identifying employment opportunities for graduates of technology education. Surveys are used to gather data with the intention of describing the nature of existing conditions (Cohen and Marian, (1999).

Methodology

The geographic area of the study was Nigeria. The target population of the study comprises all administrators, teachers and students of technology education in colleges of education (technical). The instrument for the study was a structured questionnaire. The data collected with the instrument were analyzed using Mean rating, standard deviation, Cronbach Alpha and analysis of variance (ANOVA).

Results

Table 1: Means and Standard Deviations of Responses Regarding the Employment Opportunities Available in Automobile Technology Occupations

S/N	Items	X	SD	Remarks
1	Wheel Balancing and Alignment Job	4.13	0.103	Accept
2	Vulcanizing Job	4.23	0.120	Accept
3	Automobile Mechanic Job	4.09	0.111	Accept
4	Automobile Electrical work	4.02	0.114	Accept
5	Automobile battery charging and repair job	4.07	0.112	Accept
6	Automobile lubrication job	4.28	0.114	Accept
7	Automobile spare parts marketing job	4.39	0.120	Accept
8	Automobile spare fabrication job	4.13	0.110	Accept
9	Automobile exterior finishing job	4.11	0.113	Accept
10	Automobile spare parts fabrication job	4.16	0.14	Accept
11	Automobile body repair job	4.27	0.113	Accept
12	Automobile air-conditioning job	4.18	0.112	Accept

Table 1 shows the respondents responses as to the employment opportunities in Automobile Technology occupations. All the items have a mean rating ranging from 4.02-4.39. All the items were accepted by the respondents' as the employment opportunities available in Automobile Technology occupation.

Table 2: Mean and Standard Deviation of Responses Regarding the Employment Opportunities Available in Building technology Occupations

S/N	Items	X	SD	Remarks
1	Block moulding job	4.35	0.113	Accept
2	Block laying job	4.41	0.114	Accept
3	Brick laying job	4.22	0.110	Accept
4	Building painting job	4.7	0.116	Accept
5	Plumbing job	4.07	0.115	Accept
6	Pipe fitting job	4.8	0.111	Accept
7	Titles fitting job	4.21	0.113	Accept
8	Flooring job	4.11	0.114	Accept
9	Marketing of building material	4.22	0.112	Accept
10	Installation of sanitary appliance	4.15	0.116	Accept

Table 2 reveals the respondents' responses as to the employment opportunities in Building technology occupation. The mean rating of all the items ranges from 4.07 –

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4.41. All the items were accepted by the respondents as the employment opportunities in Building Technology occupation.

Table 3: Mean and Standard Deviation of Responses Regarding the Employment Opportunities Available in Electrical/Electronics Occupations

S/N	Items	X	SD	Remarks
1	Electrical Installation Job	4.31	0.113	Accept
2	Electrical Installation Maintenance Job	4.03	0.111	Accept
3	Electrical Appliance/gadgets repair job	4.10	0.114	Accept
4	Electrical Appliance/ gadgets Marketing job	4.17	0.112	Accept
5	Electrical appliance/gadgets production job	4.16	0.113	Accept
6	Electrical Wiring Job	4.30	0.114	Accept
7	Electrical materials production job	4.11	0.113	Accept
8	Electrical Spare manufacturing job	4.12	0.114	Accept

Table 3 reveals the respondents' responses as to the employment opportunities in electrical/electronics technology occupation. The mean rating of all the items ranges from 4.03-4.31.

All the items were accepted by the respondents as the employment opportunities in electrical/electronics occupation.

Table 4: Mean and Standard Deviation of Responses Regarding the Employment Opportunities Available in Metalwork Occupations.

S/N	Items	X	SD	Remarks
1	Welding craft job	4.23	0.101	Accept
2	Fabrication job	4.71	0.121	Accept
3	Foundry job	4.12	0.111	Accept
4	Forging job	4.11	0.112	Accept
5	Agricultural Implement fabrication job	4.21	0.110	Accept
6	Marine engineering craft job	4.17	0.102	Accept
7	Machining job	4.18	0.111	Accept
8	Milling job	4.63	0.112	Accept
9	Mechanical spare part fabrication	4.27	0.111	Accept
10	Industrial machines manufacturing job	4.13	0.112	Accept
11	Mechanical equipment manufacturing job	4.10	0.113	Accept

Table 4 shows the respondents' responses as to the employment opportunities in metalwork occupation. All the items have a mean rating ranging from 4.11 – 4.23. All

the items were accepted by the respondents' as the employment opportunities available in metalwork technology occupation.

Table 5: Mean and Standard Deviation of Responses Regarding the Employment Opportunities Available in Woodwork Occupations.

S/N	Items	X	SD	Remarks
1	Upholstery job	4.20	0.112	Accept
2	Furniture making job	4.18	0.113	Accept
3	Carpentry work	4.13	0.114	Accept
4	Joinery work	4.22	0.113	Accept
5	Wood machining job	4.18	0.112	Accept
6	Building roofing and ceiling job	4.26	0.113	Accept
7	Cabinet making job	4.16	0.114	Accept
8	Wood Doors making job	4.18	0.113	Accept
9	Processing of woods	4.21	0.112	Accept

Table 5 reveals the respondents' responses as to the employment opportunities in woodwork occupation. The mean rating of all the items ranges from 4.13 – 4.26. All the items were accepted by the respondents as the employment opportunities in woodwork technology occupation.

Table 6: t-test comparison of the mean responses of Automobile Technology Education Teachers and Employers on Employment Opportunities in Automobile technology occupation.

Respondents	X	SD	N	df	Standard Error	T-Cal	T-Critical	Decision
Teachers	3.78	0.111	310					
Employers	3.51	0.121	168	477	0.23	0.576	1.96	ACCEPT H ₀

Table 6 shows the t-calculated to be 0.516 while the t-critical is 1.96 at 0.05 level of significance. As the t-calculated value is less than the t-critical, the null hypothesis is therefore accepted.

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Table 7: *t*-test comparison of the mean responses of Electrical/Electronics Technology Education Teachers and Employers on Employment Opportunities in Electrical/Electronics technology occupation.

Respondents	X	SD	N	Df	Standard Error	T-Cal	T-Critical	Decision
Teachers	3.81	0.132	398					
Employers	3.53	0.121	210	607	0.28	0.341	1.96	ACCEPT H ₀

The data in Table 7 reveals that the calculated value of *t* (0.341) was greater than the critical value of *t* at 0.05 level of significance (1.96). The null hypothesis is therefore accepted as postulated.

Discussion

Regarding research question 1, result showed that the respondents agreed with all the items on the employment opportunities available in automobile technology occupations. This is in agreement with the findings of Alaka (2005) and Adeyemi (2006) who in their individual studies discovered that there were employment opportunities for automobile technology education graduates in the areas of automobile servicing, maintenance and repair. Results regarding research question 2 showed that the respondents agreed that there were employment opportunities for building technology education graduates in the areas of block moulding and laying, plumbing, sanitary appliance installation e.t.c. These findings are supported by similar studies by Idika (2002) and Anaele (2000) who found that building technology education graduates possess building construction skills. Findings relating to research question 3 showed that the respondents agreed with all the items on the employment opportunities available in electrical/electronics occupation. This is in agreement with postulations of Olu (2005), Amiayo (2006) who in their separate studies found that there were employment opportunities for graduates of electrical/electronics technology education in the areas of electrical installation, electrical/electronic gadgets maintenance and repair. Result of research question 4 indicates that the respondents agreed that there were employment opportunities in such areas as identified in table 4 for graduates of metalwork technology education. These findings agree with those of Onehalu (2003), Adebayo (2005) and Wimmer (2001) who found in their separate studies that welding, metal fabrication, machining, milling jobs were available for graduates of metalwork technology education. Results regarding research question 5 showed that the respondents agreed with all the items in table 5. These findings is consistent with the finds of Chukwurah (2005) and Boise (2008) who found that there were job opportunities for wordwork technology education graduate in the areas of cabinet and furniture making, joinery and upholstery work.

Test of hypothesis 1 showed that the null hypothesis was not rejected. That indicated that there were employment opportunities in automobile technology occupations. The result agree with findings of Igwe(2008) and Baker (2007) who found that automobile technology education graduates were highly productive and efficient in performing automobile maintenance are repair work. Hypothesis 2 revealed that the null hypothesis was accepted as postulated. The result resembled that of Igwe (2008) who found that building technology graduates were highly skilled in building construction.

Conclusion

Contrary to wide spread view that there were dearth of employment opportunities for graduates of technology education, this study apparently revealed that employment opportunities were abound for there graduates. The study have identified the area, these graduates can get jobs, technology education teachers should strive to ensure that these graduates acquire skills essential to perform the identified jobs.

Recommendation

1. Policy makers and curriculum planners should use the finding of the study in planning viable and quality technology education programme that would prepare students for entry into the identified occupations.
2. Government should provide adequate machines, technical tools, equipment, consumables to technology education institutors for practical.

References

- Elobuike, H.U.(2006). *Unpublished lecture notes. Department of technology and vocational education.* ESUT, Enugu.
- Federal Government of Nigeria (2004). *National Policy of Education.* Lagos: 'Federal Government Press.
- Olawepo, A.A. (2006). The role of vocational technical education in technological and national development. *Journal of Technical Teachers education* 1(10), 49.
- Okeke, B. C. (2006). Mechanism for using community resources in vocational guidance. *Journal of Nigeria Vocational* 6_(1), 80.
- Oladejo, J. (1990). Vocational education in Nigeria. *Journal of Nigeria policy* 8(8) 18.

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- Uzoagulu, A. E. (2008). Community participation in vocational education programmes at secondary school level for self-reliance. *Journal of Nigeria Vocational Association* 2 (6), 14.
- Wolaye, O. (2005). Development of technical education in Nigeria. *Journal of Nigeria Association of Technology Teachers* 1 (1).
- Wang, V. (2007). Youths and vocational/technical education in Nigeria. *Studies in Technical Teacher Education* 1 (1). 56.