

**ENTREPRENEURIAL SKILLS NEEDS OF ELECTRICAL/ELECTRONICS
TECHNICAL COLLEGE GRADUATES FOR SELF-EMPLOYMENT IN
ABUA-ODUAL LOCAL GOVERNMENT AREA,
RIVERS STATE**

BY

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AND

MOSES FORTUNE

Abstract

The study was carried out to determine entrepreneurial skills needs of electrical/electronics technical college graduates for self-employment in Abua-Odual Local Government Area, Rivers State. In carrying out the research, two research questions and two null hypotheses were formulated. The population for the study was 40 electrical/electronics technical college graduates. This consists of 25 males and 15 females. All the 40 electrical/electronics technical Colleges graduates were used for the study without sampling as a result of the relatively small population size. A 20-items structured questionnaire developed from the reviewed literature was used as instrument for data collection. Forty Copies of the questionnaire were administered and retrieved by the researcher. This amounted to 100% return rate. Research questions were answered using mean and standard deviation while t-test was used to test the three null hypotheses at .05 level of significance. The findings of the study are that technical college graduates need entrepreneurial skills such as technical skills, managerial skills, accounting skills and interpersonal skills among others for self-employment. It was therefore recommended that electrical/electronics technical college graduates should acquire entrepreneurial skills such as planning skills, technical skills, accounting skills and interpersonal skills, which will help them to be self-employed. Also, sensitization campaign should be carried out by the government in collaboration with technical education institutions in quest to sensitizing both technical college students and graduates on the need to acquire entrepreneurial skills for self-employment.

Introduction

With the growing rate of unemployment in Nigeria, acquisition of skills in various occupations is a means of salvaging the situation. Acquisition of skills suitable for various occupations is achieved through technical education, in technical colleges. Okoro (2006) stated that technical colleges are regarded as the principal vocational institutions in Nigeria that give full vocational training intended to prepare students for entry into various occupations as artisans and craftsmen. The author further described technical colleges as institutions where students are trained to acquire relevant knowledge and skills in different occupations for employment in the world of work. Technical education is not gender biased.

According to Johnson (2013), the establishment of the Polytechnic, and in a climate of affirmative actions to increase enrollment of the female sex in the technical areas of studies, it is expected that the two sexes especially the female sex will be able to access technical education and help reduce gender and geographical imbalance to technical education.

However, in Colleges of Education in Nigeria, Home Economics is one of the Vocational and Technical subjects offered. Others include Agricultural Education, Business Education, and Secretarial Education. Electrical Electronics Education, metalwork, Technical Education and Woodwork. The first three subject areas including Home Economics are referred to as the "soft" areas of Vocational Education while the other four subject areas are best described as the "hard" Vocational subject areas, (Arubayi, 2004). The author further noted that in terms of gender access, there appear to be more female representation than males in the "soft" Vocational subject areas while

the reverse is the case in the "hard" Vocational subject areas. In whatever area, whether hard or soft vocational subjects, the students are imparted the requisite skills which can help them respond successfully to the needs of the society in terms of gainful or self-employment.

Technical education gives full vocational training intended to prepare individuals for entry into various occupations. Technical colleges are the post primary schools where students are trained to acquire relevant knowledge, skills and attitudes in a chosen occupation or trade at craft level (Bakare, 2012).

According to Federal Republic of Nigeria (FRN), (2014) one of the trades offered in technical colleges is electrical and electronics trade. The author further stated that the scope of electrical and electronics trade include:

- i. Electrical installation and maintenance work
- ii. Radio, television and electrical work, and
- iii. Appliances repairs

This implies that upon completion of a course of study in technical college, the electrical and electronics graduate would have acquired the requisite skills to install, maintain and repair electrical appliances for either paid, or self-employment. However, electrical and electronics graduates from technical colleges contributes to the teeming unemployed youths roaming the streets. According to Okoye and Chijeoke (2014) unemployment rate in Nigeria has been blamed mainly on lack of relevant skills needed for paid or self-employment. Loghara & Mbah (2009) in their findings, noted that there is need for the acquisition of entrepreneurial skills among school leavers (graduates) if they must function effectively either in paid or self-

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In the same vein, Uzodinma (2015; 195), stated that other attributes for self-employment of these graduates are interpersonal competencies like being empathetic, trusting, loyal and supportive. Furthermore, for graduates of electrical and electronics in technical colleges to be self-employed, it is necessary for the institutions to give special attention to this area of providing these graduates with the opportunities to acquire entrepreneurial skills and competencies for self-employment after graduation, (even in Abua-Odual Local Government Area of Rivers State).

According to Wikipedia (2016) Abua-Odual (also spelled as Abua/Odual) is a Local Government Area in Rivers State. Its headquarter is in the town of Abua. The author further stated that the Local Government Area has an area of 704km² and a population of 282,988 at the 2006 census. The Local Government Area has electrical/electronics graduates from technical colleges who are supposed to be self-employed and also makeup the pool of entrepreneurs for industrial development of the nation. However, lack of entrepreneurial skills has resulted to a situation whereby many of these graduates hope solely on paid employment which is not forthcoming. Unemployment situation of the youths in the study area has resulted to burglary, rubbery and other social vices. Based on this background the researcher seeks therefore, to find out the entrepreneurial skills needs of electrical/electronics technical college graduates for self-employment in Abua-Odual Local Government Area, Rivers State.

Statement of the Problem

The major expectation from students of

electrical/electronics in technical colleges is to acquire adequate skills for either paid or self-employment after graduation. Majority of these students, graduate without employment by relevant industries and are also unable to set up their own businesses. This may be as a result of little or no skills acquired while in training. Lack of skills requisite for paid or self-employment by these graduates has contributed significantly to the alarming rate of unemployment in the nation. Many of these graduates who are supposed to establish their own businesses and employ others are hoping on paid employment which is nowhere to be found. The curriculum of technical colleges seem to be deficient of entrepreneurship education which would have help to salvage the situation. A finding revealed that training of the students to acquire entrepreneurial skills is a surest way of coping with a distressed and depressed society. Entrepreneurial skill deficiency has been implicated for the failure of some technical college graduates who venture into self-employment.

It is therefore worrisome to the researcher that unemployment among electrical/electronics graduates of technical colleges in Abua-Odual Local Government Area continue to maintain it's colossal status. Some of the technical college graduates have left their trades for Okada riding while some engage in taxi driving and some conductors as a means of livelihood. Does it mean that these graduates of technical colleges lack entrepreneurial skills requisite for paid or self-employment? Hence the need arose to determine the entrepreneurial skills needs of electrical/electronics technical college graduates for self-employment in Abua-Odual Local Government Area, Rivers State.

employment.

Entrepreneurial skills are necessary skills needed to succeed in any engineering trade especially in electrical and electronics trade. Entrepreneurial skills according to Adeyemo (2009) are developed competencies required to initiate and sustain a business venture. They are basic skills necessary to enable an individual start, develop, finance and succeed in business (Adeoti, 2014). Salgado-banda (2005) viewed entrepreneurial skills as abilities to have self-belief, boldness for internal management and external advancement of the firm in all aspects. Olagunju (2004) described entrepreneurial skills as the ability of an individual to exploit an idea and create an enterprise (small or big) not only for personal gain but also for social and development gains.

According to Onoh (2013), entrepreneurial skills demanded of an entrepreneur include:

- i. Technical competence, which deals with intimate knowledge of physical products, job skills, manufacturing process and so on.
- ii. System competence which refers to having the ability to be planners and organizers, to exhibit skills in fixing all the pieces of the desired components of the business together in order to move the enterprise forward to the desired future.
- iii. Interpersonal competence which includes such role traits as accounting skills, marketing skills, communication skills and public relation skills.

Gana (2007) in his view stated that entrepreneurial skills include technical, managerial, financial, marketing and

communication skills.

Technical skills are the skills required to accomplish a specific task. George (2001) described technical skills as the knowledge and skills specific to a particular occupation or group of occupations. Technical skills implies an understanding of and the proficiency in a specific kind of activity, particularly one involving methods, processes, procedures, or techniques. It involves specialized knowledge, analytical ability within that specialty and ability in the use of tools and techniques of the specific discipline (Arul, 2012). Technical skills in electrical and electronics trade includes electronics fault diagnoses and repair skills, electrical installations and maintenance skills among others. Those with technical skills are often referred to as technicians in their chosen field (Adeoti, 2014). It is the major skill required to perform a particular task. Without technical skills, the objective of an enterprise may be difficult to manage or sustain by an entrepreneur for self-employment.

Managerial skills are needed for effective management of an enterprise. Managerial skills are the tactics for effective management of human and material inputs in order to enhance or achieve maximum output in an organization. According to Aliyu (2008), managerial skills are the type of skills required by individual entrepreneurs to formulate and execute policies of an enterprise which constitute management. Gana (2007) described management as the coordination of all resources of an organization through the process of planning, organizing, directing and controlling in order to attain organization objectives. Management skills enable entrepreneurs to run successful enterprises for self-employment.

The research questions were answered using mean with standard deviations. Any mean score of 2.50 and above were regarded as agree while items with mean below 2.50 were regarded as disagree. The four null hypotheses were tested at .05 level of significance using t-test. Any

hypothesis with the t-critical greater than the t-calculated was regarded as not significant.

Research Question 1:

What are the technical Skills Needed by Electrical Electronics Technical College Graduates for Self-employment in Abua-Odual Local Government Area, Rivers State.

S/N	Technical Skills	MALE(25)			FEMALE(15)			AGGREGATE(40)		
		\bar{x}	SD	Dec	\bar{x}	SD	Dec	\bar{x}	SD	Dec
1	Posses depth of knowledge and skills in maintaining electrical machines	2.98	1.03	Agree	3.02	1.11	Agree	3.0	1.07	Agree
2	Repairing of electrical machines	3.1	0.96	Agree	2.85	1.0	Agree	2.93	0.98	Agree
3	Install and wiring of domestic installation.	2.99	1.11	Agree	2.55	1.03	Agree	2.77	1.07	Agree
4	Licensed to install overhead installation.	3.02	0.98	Agree	2.98	0.92	Agree	3.0	0.95	Agree
5	Connect and test electrical transformers	3.1	1.08	Agree	2.68	1.2	Agree	2.87	1.14	Agree
6	Assembles switchboards, circuit breaker etc.	3.3	0.74	Agree	3.04	1.0	Agree	3.17	0.87	Agree
7	Installation of electrical generators and motors	3.1	0.96	Agree	2.96	0.82	Agree	3.03	0.89	Agree
8	Diagnose and repair faults in electrical machines and domestic installations.	3.2	0.92	Agree	3.0	1.0	Agree	3.1	0.96	Agree
9	Rewind alternate current (AC) electric motors and generators.	3.3	0.73	Agree	2.9	1.03	Agree	3.1	0.88	Agree
10	Diagnose and repair of DC electric motors.	2.74	1.21	Agree	3.0	0.87	Agree	2.87	1.04	Agree
Grand Mean/Pull Standard Deviation		3.07	0.97	Agree	2.9	0.99	Agree	3.03	0.97	Agree

Results in table 1 revealed that all the 10 items statements had their mean ratings ranging from 2.77 to 3.17 indicating that the respondents agree with all the items statements as technical Skills Needed by Technical College Electrical/Electronics Graduates for Self-employment in Abua-Odual Local Government Area, Rivers State. The standard deviation also ranged from 0.87 to 1.14 indicating homogeneity of opinions.

Research Question Two:**What are the managerial Skills needed by Electrical Electronics Technical College Graduate for Self-employment in Abua Odual Local Government Area, Rivers State .**

S/N	Managerial Skills	MALE(25)			FEMALE(15)			AGGREGATE(40)		
		\bar{x}	SD	Dec	\bar{x}	SD	Dec	\bar{x}	SD	Dec
11	Ability to manage human and material resources in the business	3.0	1.0	Agree	2.56	1.2	Agree	2.8	1.1	Agree
12	Ability to organize ideas and concepts related to the trade	3.1	1.02	Agree	2.7	1.1	Agree	2.9	1.06	Agree
13	Ability to plan daily activities in the shop	3.2	0.98	Agree	3.0	0.86	Agree	3.1	0.92	Agree
14	Ability to accommodate and plan for changes in technology	3.3	0.92	Agree	2.9	1.0	Agree	3.1	0.96	Agree
15	Skills in time management	2.9	1.01	Agree	2.9	0.97	Agree	2.9	0.99	Agree
16	Ability to use feedback from customers and clients for improved performance	3.2	0.93	Agree	3.0	1.0	Agree	3.1	1.03	Agree
17	Ability to plan for improvement of products and services	3.21	0.93	Agree	3.05	0.87	Agree	3.13	0.90	Agree
18	Ability to plan for a feasibility study for the business	3.3	0.74	Agree	3.04	1.0	Agree	3.17	0.87	Agree
19	Ability to make plans for payment of workers	3.04	0.97	Agree	3.1	0.85	Agree	3.07	0.91	Agree
20	Ability to make plans for recruitment	3.1	0.95	Agree	3.13	0.92	Agree	3.12	0.94	Agree
Grand Mean/Pull Standard Deviations		3.14	0.96	Agree	2.92	0.98	Agree	3.03	0.97	Agree

Results in table 2 revealed that all the 10 items had their mean ratings ranging from 2.8 to 3.17 indicating that the respondents agree with all the items statements as managerial Skills Needed by Technical College Electrical/Electronics Graduates for Self-employment in Abua-Odual Local Government Area, Rivers State. The standard deviation also ranged from 0.92 to 1.10 indicating homogeneity of opinions.

Hypotheses

Ho₁ Significant difference does not exist between the mean ratings of male and female technical college electrical/electronics graduates on technical skills needed by them for self-employment in Abua-Odual Local Government Area, Rivers State.

Table 3: t-test summary for significant difference between male and female technical college electrical/electronics graduates on technical Skills Needed by them for Self-employment in Abua-Odual Local Government Area, Rivers State.

Responses	N	\bar{x}	SD	D.F	t-cal	t-crit	Remark
Male	25	3.1	0.95	38	1.58	2.042	Not Significant
Female	15	3.13	0.92				

The data presented in **Table 3** show a computed t-value of 0.10 which is less than t-critical value of 1. at 38 degree of freedom, hence the null hypothesis is not rejected. Male and female technical college electrical/electronics graduates have uniform opinion on technical skills needed by them for self-employment in Abua-Odual Local Government Area, Rivers State.

Ho₂ Significant difference does not exist between the mean ratings of male and female technical college electrical/electronics graduates on managerial Skills Needed by them for Self-employment in Abua-Odual Local Government Area, Rivers State.

Responses	N	\bar{X}	SD	D.F	t-cal	t-crit	Remark
Male	25	3.14	0.96	38	0.45	2.042	Not Significant
Female	15	2.92	0.98				

The data presented in **Table 4** show a computed t-value of 0.45 less than t-critical value of 2.042 and at 38 degree of freedom; hence the null hypothesis is not rejected. Male and female technical college electrical/electronic graduates have the same opinion on managerial Skills needed by them for Self-employment in Abua-Odual Local Government Area, Rivers State.

respondents agree with all the items as managerial skills needed by technical college electrical/electronic graduates Self-employment in Abua-Odual Local Government Area, Rivers State. This finding also agree with the findings of Aliyu (2008), who stated that managerial skills are the type of skills required by individual entrepreneurs to formulate and execute policies of an enterprise which constitute management.

Discussion of Findings:

The findings in table 1 imply that the respondents agree with all the items as technical skills needed by technical college electrical/electronic graduates Self-employment in Abua-Odual Local Government Area, Rivers State. This also agree with the findings of Onoh (2013) who noted that technical competence, deals with intimate knowledge of physical products, job skills, manufacturing process and so on. Another author, Oluka (2016), also noted that technical competence is the ability of the graduates to innovate, or initiate new products or ideas, act positively and decisively with available facts to carry out specific tasks and functions to a standard.

The results in table 2 also revealed that the

Conclusion

Entrepreneurial skills are the core to the success of any business endeavour. This study and its findings on the entrepreneurial skills needs of electrical/electronic technical college graduates for self-employment in Abua-Odual Local Government Area, Rivers State revealed that electrical/electronic technical college graduates must acquire entrepreneurial skills such as planning skills, technical skills, managerial skills, accounting skills and interpersonal skills, for them to be self-employed. However, no significant difference was found in the mean ratings of male and female electrical/electronic technical college graduates with respect to the entrepreneurial skills needed. Their opinions were the same.

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Recommendations

Based on the findings, the following recommendations are made;

1. Electrical/electronic technical college graduates have to acquire entrepreneurial skills such as planning skills, technical skills, accounting skills and interpersonal skills, which will help them to be self-employed.
2. Sensitization campaign should be carried out by the government in collaboration with technical education institutions to sensitize both technical college students and graduates on the need to acquiring entrepreneurial skills for self-employment.
3. Entrepreneurship education should be made a core course in technical colleges so as to impart to the students requisite entrepreneurial skills for self-employment.

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