

# Vocational training needed for employment as field work staff in telecommunication infrastructural servicing companies in south-east of Nigeria

**K.R.E Okoye\*, Chiemeké Michael Ayaegbunem**

Department of Technology and vocational Education, Nnamdi Azikiwe University, Anambra State

## ABSTRACT

The study was necessitated by the poor maintenance of Telecommunication infrastructures in south east by field work staff of telecommunication infrastructural servicing companies in South-East of Nigeria. It identifies the vocational training needed for employment as field work staff in Telecommunication infrastructural servicing companies in Nigeria. One research question and one null hypothesis guided the study. Descriptive survey research design was employed for the study. The population was 300 employees of the technical unit Telecommunication infrastructural servicing companies. There was no sampling because the population size was manageable. The instrument for data collection was a structured questionnaire titled vocational training needed for employment as field work staff in Telecommunication infrastructural servicing companies. The questionnaire contained 10 items structured into 5 points rating scale. The questionnaire was validated by two experts in the field technical and one experts in Measurement and Evaluation, all from Faculty of Education Nnamdi Azikiwe University, Awka. The reliability of the instrument was established by administering the instrument to both male and female with 0 to 2 years and above 2 years experienced among the field work staff in Telecommunication infrastructural servicing companies in South East which yielded reliability coefficient of 0.82. Data collected was analyzed using mean values and standard deviation to answer research question. Inferential statistics z-test was used to test the null hypotheses at 0.05 level of significance. Result shows that vocational training such as training in cell sites, repairs of power equipment, job values and norms, right attitude on the job, management training on innovation and mental strength are highly needed for employment as field work staff in telecommunication infrastructural servicing companies. It recommended that vocational training institutions should provide such training to students offering telecommunications.

## KEYWORDS

vocational training;  
telecommunication  
infrastructural;  
field work staff

## CORRESPONDING AUTHOR\*

PROF. K.R.E Okoye

## INTRODUCTION

Vocational training is generally defined as the part of vocational education that provides the specialized professional knowledge and skills. The focus of every vocational training programmes is provide professional adequacy to the trainees. Vocational training can be seen as an activity or a set of activities designed in order to transmit theoretical knowledge and also professional skills that are required for certain types of jobs (Kintana, 2106). Vocational training is a significant function of every firm towards effective performance of employees and growth of organization. This type of training is necessary to enhance the knowledge, skills and attitude of employees because it makes it easier for employees to acquire further knowledge based on the foundation gained from the earlier training and to effect changes in another co-worker's performance. Armstrong (2010) basically stated that vocational training is a formal and systematic modification of behavior through learning which occurs as a result of education, instruction, development and planned experience. Due to the practical nature of vocational training, it is important to have training that is effective.

Vocational training therefore is training for a specific career or trade. It focuses on practical application of skills, and is generally unconcerned with theory or traditional academic skills (Grubb, 2016).

A large part of the education in vocational schools is hands-on training. Vocational training thus provides a link between education and the world of work.

It is usually provided either at the high school level or in a postsecondary trade school or on the job by the company. Vocational training is often conducted to impart the skills and knowledge required on the job which is associated with the roles and responsibilities of the employees as well as company policies. Many companies currently offer continuing training opportunities for employees, focusing on skills that can improve their efficiency (Ginsberg, 2017)

Thomas (2015) argued that employee training involves teaching vocational skills that can help them become more efficient and productive workers. Employees who acquired vocational training often have higher motivation and morale because they feel that the training has enhanced their ability and development. Armstrong (2010) affirmed that trained employees often work better as teams because everyone is aware of the expectations and can achieve them together smoothly. In addition, employees who receive vocational training are more likely to accept change and come up with new ideas. Employees who learn new skills through vocational training make good candidates for promotions as a result of effective job performance.

Vocational training competently equips individuals for effective job performance as can be seen among field work staff of telecommunication serving companies in Nigeria.

Field work staff are the employees of a Companies and Subsidiaries whose job responsibilities involve product or service research, engineering, conceptualization, design, testing or similar activities. They are also known as telecom technicians and Engineers who usually handle telecom equipment maintenance and repairs. Their core responsibilities according to Henderson (2007) include; Operations, Project Integrations and Field telecom methods

#### **OPERATIONAL ACTIVITIES ARE TO;**

- (1) Ensure Telecom means for field are always operational even in emergency situations and especially for the Emergency Management Team
- (2) With minimal supervision, ensure Field Telecoms maintenance and Telecoms materials transfer using SAP PM module
- (3) Coordinate third-party service contractors working at field locations to ensure compliance with HSE rules, telecoms standards and good housekeeping
- (4) Coordinate preventive & curative maintenance in conjunction with Original Equipment Manufacturers and Service Contractors at all field locations
- (5) Update network diagrams, layouts, equipment numbering and system configuration records, resulting from changes
- (6) Manage the functional interface between Telecoms entity and other disciplines

#### **PROJECT INTEGRATION TO;**

- (1) Liaise with Project teams regarding design, upgrade of existing infrastructure and integration of new projects into the existing network with minimum disruption to IST services

#### **FIELD TELECOM METHODS TO;**

- (1) Analyze the Telecommunications market, monitor and propose improvements to installed systems, with particular attention to obsolescence of installed field systems
- (2) Prepare and standardize internal technical procedures, report templates, document management, equipment naming etc.
- (3) Participate in developing best practice and monitoring indicators for contractors' management
- (4) Participate in preparing scope of work, technical evaluation & recommendation to award for Contract Call for Tender

Ultimately, field work staff consistently maintain the active, passive and janitorial infrastructures in telecommunication base stations. Telecommunication infrastructure is the technological and human components, networks, systems, and processes that contributes to the functioning of the information system" (Bartel, 2014).

Hanseth (2020) stated that telecommunication infrastructure is a shared heterogeneous installed base information technology capability that develops on open and standardized interfaces property.

Basically, Telecommunication infrastructures is a base station which consists of electronic (active) and non-electronic infrastructures (passive). The examples of infrastructures are shown in figures 1-6 below.

- (1) Electronic infrastructure includes base tower station, microwave radio equipment, switches, antennas, transceivers for signal processing and transmission.
- (2) Non-electronic infrastructure includes tower, shelter, air-conditioning equipment, diesel electric generator, battery, electrical supply, technical premises and easements & pylons that account for nearly 60 percent of network rollout costs. See Base Station subsystem and Base Transceiver Station.



(A)



(B)

**FIGURE 1:** (A-B) Telecommunication infrastructure Passive equipment shared by service providers



(A)



(B)

**FIGURES 2:** (A-B) Telecommunication Micro wave radio antennas in South East



(A)



(B)

**FIGURES 3:** (A-B) Telecom towers in the South East

It is expected that organizations like Telecommunication infrastructural servicing companies in Nigeria have a basic entry requirement for an employment as a field work staff. Therefore, this study is embarked on to determine the vocational training needed by field work staff in telecommunication infrastructural servicing for effective performance since such training is required by the field staff to sufficiently execute a task or job and to improve performance in the job environment (Salas & Cannon-Bowers, 2010).

#### **STATEMENT OF THE PROBLEM**

It has been observed that from the last decade, the telecommunication sector has become the fastest growing economic sector in Nigeria. In very short span, a lots of changes occurred in this sector with respect to network coverage, infrastructural servicing, marketing strategies, technological requirements and intensified competition among servicing companies, which result in increasing demand for well trained workforce. It is also observed that the network availability is becoming poor and there is no free flow of communication between telecommunication subscribers. This network availability challenges becomes a major concern to the telecommunication companies because of loss of revenue experiencing and subscribers' inability to communicate easily. Many attributed this fault to poor performance of the field work staff of telecommunication infrastructural servicing companies in South East Nigeria.

The poor performance of the field work staff is assumed to be as a result that the field work staff were not given the basic vocational training needed on the job. It could be that the field work staffs have no basic training before being employed by the telecommunication infrastructural servicing companies. One may also assume that the poor performance of the field work staff in telecommunication infrastructural servicing could be traced to the kind of vocational training acquired by the field work staff employed by the infrastructural services companies to maintain the telecom base stations. The assumption is that the field work staff may not have the basic vocational training needed on the job. Hence this study is designed to examine the vocational training needed by field work staff in telecommunication infrastructural servicing companies in south-east of Nigeria for effective performance.

### **PURPOSE OF THE STUDY**

The major purpose of this study was to determine the vocational training needed by the field work staff in telecommunications infrastructural servicing for effective performance. Specifically, the study examined the opinion of Technical staffs of Telecommunications infrastructural servicing companies to determine;

- (1) The Vocational trainings needed by a candidate to be qualified for possible employment as a field work staff by the telecommunications infrastructural servicing in South- East of Nigeria.

### **RESEARCH QUESTION**

The following research question guided the study.

- (1) What type of vocational training is needed to qualify a candidate for an employment as a field work staff in telecommunication infrastructural servicing company?

### **HYPOTHESIS**

The following null hypothesis was formulated to guide the study and was tested at 0.05 level of significance.

- (1) There is no significant difference between the mean ratings of male and female field work staff on type of vocational training needed for someone to be employed as field work staff in telecommunication infrastructural servicing companies.

### **METHOD**

The study adopted descriptive survey research design. The population of this study consists of 300 employees of three telecommunication infrastructural service companies in South - East of Nigeria. The entire population was used for the study because the size was manageable. Therefore, there was no sampling. The instrument for data collection is a structured questionnaire. The instrument consists of parts 1 and 2. Part 1 deals with background information of the respondents covering employee educational qualification. Part 2 contains 10 items organized in one section. The section contains 15 items that addressed the Vocational trainings needed by a candidate to be qualified for possible employment as a field work staff by the telecommunications infrastructural servicing in Nigeria. The instrument was designed in a five-point scale of Strongly Agreed, Agreed, Undecided, Disagreed and Strongly Disagreed. The instrument validated by the two experts; one in Vocational Education Department, and the other in Measurement and Evaluation Unit of Nnamdi Azikiwe University, Awka. The reliability of the instrument was established using test re-test method. Copies of the questionnaire for the study were administered to Forty (40) personnel of the service providers in south East zone of the country. The same instrument was administered to the same respondents after two weeks. The coefficient of reliability for their response was established using Pearson product moment correlation coefficient formula. The reliability coefficient of 0.82 was obtained. To ensure high percentage return of the instrument and to create researcher-respondents friendly with better understanding of the questionnaire items by the respondents, three Regional managers (one from each company) were trained on what to do as research aides and were engaged to help in administration of the instrument. A period of one month was used for the exercise to ensure a high response rate and high percentage return. Data collected were analyzed using mean and Standard deviation to answer the research question while inferential statistics z-test was used to test the hypotheses at 0.05 level of significance.

## RESULTS

### Research Question 1

What type of vocational training is needed to qualify as a candidate for an employment as a field work staff in telecommunication infrastructural servicing company?

Answer to research question 1 involved data collected in respect of item 1-10. It is represented in Table 1

**TABLE 1:** Respondents 'Mean Rating on Vocational Training Required

S/N	Vocational Training	Mean	SD	Remark
1	Training on cell sites regulatory and access policies	4.1	0.3	Agreed
2	Training on alarm monitory and Escalations	38	0.29	Agreed
3	Training on repairs of the telecom active and power equipment	3.85	0.3	Agreed
4	Training on job Values and norms	3.48	0.25	Agreed
5	Training on reporting and analysis	3.96	0.3	Agreed
6	Training on the right attitude to job	4.3	0.34	Agreed
7	Customers service management training	3.64	0.27	Agreed
8	Management training on innovation and mental strength	3.72	0.28	Agreed
9	Training on installations of telecom Active and power equipment	3.6	27	Agreed
10	Training on the telecom cell site safety precautions measures	3.74	0.28	Agreed
<b>Cluster mean</b>		<b>3.82</b>	<b>0.29</b>	<b>Agreed</b>

In addressing research question 1, result in Table 1 shows that all items are rated Agreed, This indicates that training on cell sites, training on repairs of power equipment, training on the job values and norms, training on right attitude on the job, management training on innovation and mental strength, training on installation of Telecom active and passive equipment and training on telecom cell site safety precaution are all agreed to be the vocational training needed to qualified a candidate for an employment as a field work staff in telecommunication infrastructural servicing company

### Hypotheses 1

There is no significant difference between the mean rating of male and female field work staff on type of vocational training needed for someone to be employed as field work staff in telecommunication infrastructural servicing companies

The test analysis for hypotheses 1 is presented in Table 2

**TABLE 2:** Summary of z-test Analysis of Hypothesis 1

Variable	N	X	S	z-cal	z-crit	df	Remark
Male	200	1.3	0.9	1.2	0.15	248	Reject
Female	50	2.3	0.5				

Table 2 indicates that male and female respondents in the infrastructural servicing company rated the items as types of vocational training needed for someone to be employed as field work staff in telecommunication infrastructural servicing companies with a mean score of 1.3 and 2.3 respectively. The z-calculated value of 1.2 is greater than the z-tabulated value of 0.15 at degree of freedom of 248 and alpha value of 0.05. This implies that there is significant difference in the mean ratings of male and female respondents from the infrastructural servicing companies used.

This is to say that the null hypothesis is rejected. This further suggests that the reason or factors that may appeal to field workers in respect of gender differ. It is possible that the female field workers could be more comfortable with office electronic works (duties) compared to their male counterparts.

### **FINDINGS**

Result of the finding shows that telecommunication servicing company require all the training itemized in Table 3-7 for one to be employed in the firm. This includes training cell sites, repairs of power equipment, job values and norms, right attitude on the job, management training on innovation and mental strength, training on installation of Telecom active and passive equipment and training on telecom cell site safety precaution. Mean ratings of the items indicate that those items are agreed and needed in telecommunication servicing company. This implies that any Candidate seeking employment in these companies should possess training in this area for him or her to be employable in the company. This is line with findings of Henderson (2007) which indicate that training on innovation and mental strength, training on installation of Telecom active and passive equipment and training on telecom cell site safety precaution are core mandate of telecommunication studies.

### **CONCLUSION**

Vocational training is necessary for the existence of organizations and may be called its soul. It is an evident that those vocational training are required in a telecommunication infrastructural company for one to be employed as field work staff.

### **RECOMMENDATIONS**

Based on the findings of this study, it is recommended that vocational training institutions should training on cell sites, repairs of power equipment, job values and norms, right attitude on the job, management training on innovation and mental strength, training on installation of Telecom active and passive equipment and training on telecom cell site safety precaution for students telecommunication in order for them to be employable.

### **REFERENCES**

- [1] Armstrong, M. (2010). A Handbook of Performance Management 4th edition, New Delhi: Kogan. 67-70
- [2] Bartel, A. P. (2014). Productivity gains from the implementation of employee training programs. *Industrial Relations Review*, 40-45
- [3] Ginsberg, S. (2017) Mass vocational education and training in Europe: classical models of the 19th century and training in England, France and Germany during the first half of the 20th. Luxembourg: Publications Office of the European Union (Cedefop Panorama series, 118).50-51
- [4] Grubb, W.N. (2016), Vocational education and training: issues for a thematic-review", OECD. 98-90
- [5] Hanseth, O. (2020). Systems and tools to networks and infrastructures, design to cultivation. Towards a theory of ICT solutions and its design methodology implication 78-80
- [6] Henderson, M. (2007). Sustaining online teacher professional development through community design. *Campus-Wide Information Systems*, 24(3), 162–173. doi: 10.1108/10650740710762202
- [7] Kintana, M. L., (2016). High performance work systems and firms' operational performance. *International Journal of Human Resource Management* 5(3), 30-35
- [8] Salas, A. & Cannon-Bowers, H.L. (2010). Transformative learning theory. *New Directions for Adult and Continuing Education*. Jossey-Bass. pp. 5–15.
- [9] Thomson (2015). "The brain that changes itself: Stories of personal triumph from the frontiers of brain science". *Journal of Academic Language and Learning*.