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Original Research Report

Apprentices' Perception of Training Modalities in Electronic Maintenance in Plateau State, Nigeria

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Abstract: This study determined the apprentices' perception of training modalities in electronic maintenance in Plateau state, Nigeria. Five research questions guided the study. A descriptive survey design was adopted for the study. 203 electronic apprentices at registered electronics industries in Plateau state between 2018 and 2020 made up the study's population. Data were gathered using a questionnaire (Cronbach's α=0.86). The study questions were answered using means and standard deviation. The study identified admittance modalities, various functional facilities for training, instructional modalities, motivation indices and evaluation methods for apprentices. The study recommends that the NDE administrators and government should hire competent master craftsmen to train apprentices, and finance skilled trainees to buy the tools they need for training and entrepreneurship, so as to increase their capacity for output.

Keywords: Apprentice, Electronic maintenance, National Directorate of Employment (NDE), Training modalities

1. Introduction

Apprenticeship is any system by which a master craftsman undertakes to employ a young person to train him or her in a trade for a while to acquire skills necessary to become proficient in a trade, craft or profession (Amasa, 2016). Fuller and Unwin (2014) defined apprenticeship is an informal relationship between a master trainer and an apprentice in which their joint responsibilities and duties are agreed upon oral or in writing. In other words, an apprenticeship involves the training of a less skilled person, also known as an apprentice, in a chosen occupation by an experienced and talented person, also known as a master craftsman.. In this sense, there are two types of apprentices in the apprenticeship system: early apprentices and late apprentices. Beginning apprentices have between one month and a year to learn the basics of electronic maintenance. Depending on the length of instruction, late apprentices have reached the graduation stage and have learned the fundamentals.

Electronic maintenance and repair, also known as electronic works, is one of the trades available for apprentices to learn and develop appropriate work skills. Orji (2015); Orji and Ogbuanya (2018) described electronics maintenance as those services required to carry out diagnostic checks and repair electronic systems. Electronic maintenance in the context of this study is a trade or craft where apprentices are taught to acquire skills in the use of tools, measuring/testing instruments and materials in order to be able to restore broken down, damaged or failed electronic components, devices, equipment, part or gadget to good condition. However, it is still being determined if electronic apprentices receive the skills they need to be proficient because most artisans trained under the system perform maintenance tasks on trial and error. According to Ogbuanya et al. (2020), training apprentices on trial and error is now becoming old-fashioned. Thus, apprentices are not exposed to changes in the trend of maintenance of modern electronics in apprenticeship. Such practices will not develop the craft practice and may instead lead to the formation of unfavourable perceptions, youth restiveness and perhaps, an increase in the attrition rate of youth to non-skill and unsustainable ventures such as; motorcycle riding, kidnapping, armed robbery, and rape. For apprentices in electronic trade to perform maintenance work effectively with precession, they need some improvement in their training modalities.

Training modalities are the package or most specific categories of teaching behaviours necessary for structuring appropriate learning experiences for apprentices in electronics maintenance (Oristian, 2007). Omofonmwan (2011) argued that the system of operation of people in the apprenticeship

system of electronics maintenance needs to be more precise, and their maintenance and repair work is done through trial and error. Therefore, there is a more organized training modality for preparing artisans to eradicate trial and error when performing repairs by admitted apprentices. The admittance of apprentices has yet to be an apparent pattern or requirement (Ogbuanya et al., 2020). Typically, a contract between the master craftsman and the apprentices spells out the training's conditions. These terms of training often include the duration of the training, the cost of the training, lodging during the training time, the terms of disengagement following completion of the training, a guarantee of the apprentices' good behavior throughout the training, working rules, and other regulations. Clement (2015) pointed out that the desire and willingness to learn a trade is an important factor governing the selection of apprentices. Usually, age, education and physical fitness are not considered of great importance by private agencies or individuals. But in industries, the case is different; the criteria for selection differ since they are profit-making entities, and their ultimate aim in selecting apprentices is to maximize their output or production. For this reason, age, education, attitude, physical fitness, good moral character, future possibilities, ability to get along well with others, reliability and interest are considered before accepting an applicant. In this context, the admittance of apprentices is not standardized; it is usually done based on the availability of vacancies, the number of secured training centres and instructional facilities for training.

Instructional facilities are physical objects that facilitate a given work or activity. They include any material that apprentices use and manipulate to acquire the necessary skill in a training programme. According to Baylor and Ritchie (2012), training facilities always positively impact learners' skill acquisition and add to class performance. Facilities in the context of this study include skills, tools, equipment, measuring/testing instruments, and other materials electronics master craftsman and apprentice manipulates to acquire skills, knowledge and attitude for job performance. Uwameiye (2010) stated that the electronics maintenance training workshop setup involves the master craftsman and the apprentices. This is to say that the workshops of electronic maintenance are organized along the line of the master/apprentice's situation, where the master craftsman owns all the standard electronic tools/equipment and the skills from which the apprentices benefit. The most effective training or learning depends on the adequacy of training facilities and appropriate instructional methods.

Instructional methods can play an essential role in teaching electronic maintenance skills.

According to Umunadi (2010), instruction is a series of actions intended to start, stimulate, and promote learning in a learner who is a human. The most specialized types of teaching behavior required for procedural objectives and for building suitable learning experiences for apprentices in electronics maintenance, according to Umunadi, are instructional approaches. Bernstein (2016) pointed out that instructional methods are strategies and techniques teachers adopt to effectively deliver or impart knowledge and skills to learners. Bernstein stated further that instructional methods describe learning objectives, oriented activities and the flow of information between master craftsmen and apprentices in electronic maintenance training. Contextually, the instructional method is the activities, techniques and practices electronics maintenance trainers carry out during training to impact skills and knowledge to apprentices in apprenticeship programmes. It is also a method of learning through observation which has to do with having an adequate look at what the master trainer is doing or performing at a particular time and keeping track of what is being observed. Applying appropriate methods and proper Motivation of apprentices improves apprentices' understanding.

Motivation refers to an inducement, incentive or encouragement given to a person to initiate and inspire the person's interest towards achieving a stated objective. Chintalloo and Mahadeo (2013) described Motivation is defined as a condition that determines the arousal, direction, and maintenance of work-related behavior. Motivation is important, according to Orji (2021) and Orji and Ogbuanya (2022), because even those with the necessary information, skills, and abilities will only perform successfully if they are appropriately motivated to devote their time, energy, and effort to work. Motivated behavior is distinguished by action and is geared toward the fulfillment of a goal or a need. Motivation of apprentices is a control tool that can be utilized in the context of this study to attain the apprentice's dedication, productivity, and efficient performance. When apprentices are admitted into a master craftsman's program, they expect a certain amount of compensation, as they contribute their time, energy, and effort towards the master craftsman's goal. When apprentices are motivated properly, they are punctual and dedicated to their work, and when they are evaluated, their behavior can be adjusted and modified.

Training activity evaluations help the trainer identify areas of strength and weaknesses of a training programme. Baudrillard (2015) stated that by measuring or assessing changes in learner behavior, evaluation can be used to determine if a business is successful or unsuccessful. Different methods are used to evaluate learning results. Evaluation techniques are tools always employed by

teachers, trainers, or evaluators to evaluate a training programme's learning outcome. In this research context, evaluation is seen as an activity, an appraisal of skills in electronic maintenance. There is no generally accepted pattern for the evaluation of apprentices in under the apprenticeship system; in most cases, it is done at the discretion of individual trainers as apprentices progress in learning the skills of the trade (Okeme et al. 2014). An evaluation's primary purpose is feedback, research control, intervention and power game (Orji, 2012). In this study, the evaluation of electronics maintenance apprentices does not take the shape or pattern of a formal education setting; it is done as apprentices progress in learning the skills of the trade. In some cases, apprentices are often allowed to demonstrate their skills in the absence of their master. The repeated process of skills demonstration prepares them for freedom (certification) to establish his/her workplace.

Electronic maintenance trade supplements manpower production for the economy. In recent times, an increasing number of electronics maintenance workers are participating in intensive training in apprenticeship programmes available in the informal sector. It has, over time, provided training opportunities for apprentices and is helping to alleviate the problem of unemployment and curbing social vices. Some of these programs train apprentices in repairs of faulty or damaged cell phones, radio and television, computers, and electronic maintenance, among others. On successful graduation, these apprentices have several broad areas of advancement opportunities; some advance to foremen, some with extensive shop experience, can open their own maintenance shops and could also employ others. However, their training methods appear to be lacking in perception; their system of operation is somewhat chaotic, and maintenance and repair work are carried out by trial and error. Such practice will not develop the practice of the craft; instead, it may further lead to damage to gadgets and equipment. It, therefore, becomes imperative to understand the feelings, thinking, and attitudes apprentices have towards training modalities in electronic maintenance. Sadly, no study known to the researcher has been carried out to discover apprentices' perception of training modalities in electronic maintenance in Plateau state, hence the need for the study.

1.1. Statement of Problem

The dynamic character of society has continued to be benefited by technological development, particularly in the field of electronics technology, where advancements have made nearly every human endeavour dependent on one or more electronic devices. When employed, these electronic devices are frequently prone to breakdown and malfunction. In event of any fault, damages or new

installation, competent artisans are expected to handle the maintenance or repair, as the case may be. These artisans are supposed to be trained informally under apprenticeship system.

In recent times, a good number of electronics artisans are participating in intensive work in electronics maintenance workshops thereby becoming self-employed and reliant. Thus, this aids in alleviate the problem of unemployment and curbing social menace in the society. However, there seems to be perception of deficiency in the skill level of the electronics artisans trained under the apprenticeship system. Majority of them perform task pertaining to repairs on trial and error, hence their proficiencies are usually doubted, blamed on undefined streamlined training modalities and change in technology. They may not have patiently acquired the skill necessary for job performance. Aware of such deficiencies, requires an improvement in the training modalities of electronics apprentices especially in key elements: including admittance pattern, instructional facilities, instructional method, motivation indices and evaluation method to enable electronics apprentices become aware of the skills and activities so as to be committed and be successful in learning the trade. Improvement in training modalities of apprentices is hoped, will not only lead to a change in the usual way of performing repair task on trial and error but will also improves apprentices' perceptions thereby stimulates more youth's participation in electronics craft, and perhaps, help to reduce attrition rate of youths to non-skilled and unsustainable ventures such as; armed robbery, kidnapping, rapes, child trafficking, political tugs, banditry, and the likes. Therefore, there is a need for an empirical study. This need in turn necessitates this study which is to find out apprentices' perception of training modalities in electronics maintenance in Plateau state, so that it can better serve the technological need of Nigeria, hence the need for this study.

1.2. Purpose of the Study

The general purpose of this research is to find out apprentices' perception of training modalities in electronic maintenance in Plateau state. Specific purpose is to determine the perception of apprentice on:

a) Entry/admission modalities of apprentices.
b) Instructional facilities for training apprentices.
c) Instructional modalities for training of apprentices.
d) Motivation indices of apprentices.
e) Evaluation method of apprentices.

1.3. Research Questions

The following research questions guided the study:

a) What are the perceptions of apprentices on entry/admission modalities in electronic maintenance training?

b) What are the perceptions of apprentices on the instructional facilities for training apprentices in electronic maintenance?

c) What are the perceptions of apprentices on instructional modalities in electronic maintenance training?

d) What are the perceptions of apprentices on motivation indices for training in electronic maintenance?

e) What are the perceptions of apprentices on evaluation method for training in electronic maintenance practice?

2. Materials and Methods

2.1. Design for the Study

Descriptive survey design was used for the study. Descriptive survey design is considered suitable for this study because it was used to solicit for information from apprentices of electronic maintenance trade in informal apprenticeship system in Plateau state.

2.1.1. Ethics Statement

This research was approved by the Faculty of Vocational and Technical Education Research Ethics Committee. All the participants signed an informed consent form to participate in the study.

2.2. Area of the Study

The study was carried out in Plateau State. Plateau is located in North Central Nigeria, sharing boundaries with five states namely; Nasarawa, Benue, Kogi, Niger, Kwara and FCT. As such, and because of the proximity of Plateau with the FCT and Tin Mines, many people from all these states and beyond either reside or work in Plateau, making it commercial and metropolitan. There are many artisans and craftsmen in the field of electronic maintenance work for businesses, factories, or private citizens. Some of them are independent contractors who might take on and train apprentices, boosting the economy's ability to provide labour.

2.3. Population and Sample

A total of 203 electronic apprentices (between 2018 and 2020) from registered electronics industries in Plateau state served as the study's population. There were 20 recognized electronic industries in the state, and each one is training apprentices as of the time of this research. The Plateau State Ministry of Commerce and Industries and the Corporate Affairs Commission (CAC) served as the primary sources of information. There was no sampling since the population is small enough to be efficiently managed.

2.4. Instrument for Data Collection

The instrument for data collection was a structured questionnaire developed by the researcher titled; apprentices' perception of training modalities in electronic maintenance questionnaire (APTMEMQ). The questionnaire is carefully designed following an intensive literature review. The necessary documents, texts, and manuals relevant to this study were also consulted. The items in the questionnaire were organized into sections to answer the research questions. Section one featured 20 items designed to elicit information about apprentice entry/admission methods. Section two featured 13 items designed to gather information about apprenticeship training establishments. Section three comprised 15 items designed to obtain information about apprentices' training methods. Section four featured 11 items designed to elicit information on apprentice motivation indices in electronic repair training in Plateau state. Section five contained 10 items designed to elicit information on apprentice assessment methods. Each item in the questionnaire's sections was assigned a five-point response scale, with the following response options: Strongly agree (5)-Strongly disagree (1). The questionnaire underwent face validation by three professionals to confirm the validity of the instrument. The internal consistency of the instrument's items was assessed using the Cronbach alpha coefficient. The alpha values were, successively, 0.812, 0.79, 0.81, 0.86, and 0.82 for sections one to five respectively. The instrument's total reliability coefficient, which was 0.86, demonstrated its dependability.

2.5. Data Collection Technique

The researcher, assisted by three research assistants, distributed copies of the APTMEMQ to the respondents at various training facilities within the study area. The best way to distribute the questionnaire to the respondents was explained to the research assistants. All 203 questionnaire items were properly retrieved after being distributed. The questionnaire was distributed and collected over

a two-week period to give apprentices enough time to complete it at their own pace given their level of education.

2.6. Data Analysis Technique

A statistical tool for the social sciences (IBM SPSS) was used to examine the data gathered for this study. For the purpose of addressing the study questions, means and standard deviation (SD) were used. Based on the actual numerical limit, each item was interpreted.

3. Results and Discussion

3.1. Research Question 1: What are the perceptions of apprentices on entry/admission modalities in electronic maintenance training?

Table 1: Mean and standard deviation of the respondents on the perceptions of apprentices on the Entry/ Admission in electronic maintenance training

S/no	Items	Mean	SD	Remark
1	Application forms must be filled out by apprentices.	4.46	0.59	Agree
2	Admission is contingent on knowing the master trainer.	4.45	0.65	Agree
3	Written agreement between the master trainer and the parent or guardian of the trainee.	4.30	0.67	Agree
4	Reliable guarantors must be shown before apprentices are admitted.	4.40	0.75	Agree
5	Apprentice and master trainer enter into an oral agreement between apprentice parents and guardians.	4.66	0.67	Agree
6	Apprentices must successfully complete an oral interview before being allowed for training.	3.41	1.69	Disagree
7	Apprentices must provide documentation of prior qualifications.	4.37	0.64	Agree
8	Admission is dependent on the district head of the apprentice's recommendation.	4.34	0.64	Agree
9	The availability of openings in the apprentice's field of study determines his or her admission.	4.51	0.74	Agree

10	Training costs must be paid before admission.	4.56	0.71	Agree
11	Apprentice admission is based on connections or lobbying.	3.99	1.33	Agree
12	The quantity of available training centers determines the admission of apprentices.	3.86	1.36	Agree
13	Before admittance, an apprentice is nominated by their local government.	4.04	1.06	Agree
14	A candidate for apprenticeship is accepted based on cultural affinity.	4.00	1.16	Agree
15	Apprentice is admitted based on religious affiliation.	3.72	1.21	Agree
16	Apprentice must possess at least a minimum of secondary school certificate before admitting for the training.	4.00	1.22	Agree
17	Apprentice must be fluent in spoken English to be able to respond clearly to customer demands.	4.20	0.97	Agree
18	Apprentice must present evidence of medical fitness.	3.99	1.26	Agree
19	Admission is opened to all categories of persons who are interesting in the practice.	3.82	1.44	Agree
20	Apprentice is admitted based on family/relational affiliation.	3.99	1.26	Agree

According to the study's findings, which are summarized in Table 1, entry/admittance modalities for apprentices include the following: completion of an application form, familiarity with the master trainer, a written agreement between the apprentices' parents and the master trainer, the presentation of trustworthy guarantors, and the availability of openings in the trade in which the apprentice is interested. The study's findings are consistent with those of Clement (2015) who claimed that, depending on the number of open positions, the number of centers that have been secured, and the amount of funding available, candidates are asked to fill out application forms with information about themselves, their professional interests, and their educational backgrounds. Paying fees, lobbying and connections, cultural and religious affiliation, and affiliation with groups are further results.

3.2. Research Question 2: What are the perceptions of apprentices on the instructional facilities for training apprentices in electronic maintenance?

Table 2: Mean and standard deviation of the respondents on the perceptions of apprentices on the Facilities for training in electronics maintenance

S/no	Items	Mean	SD	Remark
1	Regular power supply.	3.63	0.69	Agree
2	Lighting system undisrupted.	3.60	0.66	Agree
3	Enough space for keeping finished and unfinished works.	3.94	0.49	Agree
4	Functional working tools and equipment.	3.88	0.56	Agree
5	Fire extinguishers/sand bucket for safety.	3.19	1.32	Disagree
6	Mini classrooms for teaching theory work.	3.34	0.67	Disagree
7	Stand by generating set in case of power outage.	3.88	0.96	Agree
8	Workshop space that can accommodate at least at a time.	3.91	0.81	Agree
9	Enough scraps of different gadgets for teaching aid.	3.92	0.89	Agree
10	Electronic gadgets and materials for training.	3.99	0.88	Agree
11	Facilities for training are adequate and of good quality.	3.77	0.81	Agree
12	Accessible first aid box in the workshop.	3.85	0.94	Agree
13	Adequate machine winding shops with winding materials.	3.63	0.89	Agree

Findings in Table 2 revealed some functional facilities for training apprentices. These including regular power supply, lighting system, availability of space for keeping finished and unfinished works, functional working tools and equipment, mini classroom for teaching theory work, standby generator set in case of power outage, workshop that can accommodate at least twenty trainees at a time, scraps of different electronic gadgets for teaching aid and accessible first aid boxes in the workshop. Other facilities include; functional electronic gadgets and electrical installation material for training, adequate machine winding shop with winding material. The findings of this study are in line with Williamson (2016) who noted that functional facilities such as relevant tools, devices, equipment and machines facilitate and determine the quality of trainees produced, therefore, should be made available.

3.3. Research Question 3: What are the perceptions of apprentices on instructional modalities in electronic maintenance training?

Table 3: Mean and standard deviation of the respondents on the perceptions of apprentices on instructional modalities for training in electronic Maintenance

S/no	Items	Mean	SD	Remark
1	The instructional delivery content is organized sequentially.	3.87	0.78	Agree
2	The learning method is strictly observation.	3.93	0.85	Agree
3	The apprentice has the opportunity to ask questions about the learning topic.	4.08	0.68	Agree
4	Making the wrong choice of learning materials is a problem.	4.24	0.78	Agree
5	Some theoretical assignments are delivered via a projector.	4.29	0.79	Agree
6	The demonstration approach is used for training.	3.99	0.87	Agree
7	Prior to offering new tasks, previous tasks are repeated.	4.23	0.80	Agree
8	E-learning is used to teach the many types, symbols, measures, and properties of electronic devices.	4.25	0.75	Agree
9	The learning supplied is built in stages.	4.01	0.91	Agree
10	Imitation and exploration are the primary methods for learning.	3.91	0.88	Agree
11	All learning activities are completed by the apprentice through personal effort.	4.07	0.87	Agree
12	The majority of learning activities are carried out through contact among coworkers.	4.13	0.89	Agree
13	The instructional delivery content is organized sequentially.	4.00	0.98	Agree
14	Apprentices are permitted to attend electronic works seminars and workshops.	3.96	0.95	Agree
15	Apprentices are assigned to electronic industries for training.	3.76	1.14	Agree

The results in Table 3 showed that the best instructional methods for apprentices were as follows: learning is strictly through observation, the apprentice has the opportunity to ask questions about the

learning topic, teaching is based on the type of work received, making the wrong choice of learning materials is a problem, some theoretical assignments are delivered via a projector, the demonstration approach is used for training. These findings agree with Coe et al. (2020) who pointed out that instructional modalities are strategies and technique adopted by teachers to effectively deliver or impact knowledge and skills to learners in the most appropriate way possible in the form of lecture, demonstration and teamwork, given room for explanation, opportunities for practice and feedback.

3.4. Research Question 4: What are the perceptions of apprentices on motivation indices for training in electronic maintenance?

Table 4: Mean and standard deviation of the respondents on the perceptions of apprentices on motivation indices for training in electronics maintenance

S/no	Items	Mean	SD	Remark
1	Master trainer meeting apprentice's daily needs.	4.23	0.88	Agree
2	Rewarding apprentices on a job well done.	3.82	0.85	Agree
3	Overtime compensation provided by master trainer to apprentices.	3.65	0.82	Agree
4	Master's positive approach to work.	3.90	0.79	Agree
5	Recognition and gratification from the government.	3.34	0.82	Disagree
6	Deriving joy working with the master trainer.	3.37	0.93	Disagree
7	Parents encouraging their child's training participation.	3.39	1.07	Disagree
8	Group collaboration with peers.	3.58	0.78	Agree
9	After training placement as a wage worker.	3.75	0.80	Agree
10	Offering special allowance/scholarship during training programme.	3.83	0.89	Agree
11	Achieving his objectives while cooperating with the coworkers.	3.39	0.77	Disagree

The findings identified a number of motivational indicators for electronic maintenance apprentices in Table 4. These include: the master trainer providing for the apprentices' daily needs; the apprentices enjoying working with the trainer; financial compensation for overtime; complimenting the apprentices for a job well done; the master's positive attitude toward work;

providing a special allowance or scholarship during the training program; acknowledgment and satisfaction from the government, and parental support for their participation in trades. Other variables were teamwork among peers and hiring trainees as wage earners after training. This result agrees with Orji (2021) and Orji and Ogbuanya (2022) who suggested that those with the required knowledge and abilities will struggle if they are not appropriately motivated to work hard.

3.5. Research Question 5: What are the perceptions of apprentices on evaluation method for training in electronic maintenance practice?

Table 5: Mean and standard deviation of the respondents on the perceptions of apprentices on evaluation method for training in electronics maintenance

S/no	Items	Mean	SD	Remark
1	Apprentice is given a similar work observed from master trainer to work upon.	3.48	0.69	Disagree
2	Master trainer observes apprentice of adherence to safety regulations.	3.63	0.96	Agree
3	Master trainer gives the apprentice practical work to observe his/her performance.	3.66	0.82	Agree
4	Apprentice is given a written test after every job is satisfactorily completed.	3.55	0.86	Agree
5	Apprentice is tested on knowledge of tool manipulation.	3.49	0.65	Disagree
6	Trainer uses varieties of evaluation devices procedures such as: assessment and project.	3.56	0.66	Agree
7	Master trainer test apprentice while a task is in progress.	3.62	0.80	Agree
8	Master trainer test apprentice when task is concluded.	3.54	0.81	Agree
9	Master trainer organize micro-teaching for apprentice and test them while on the process.	3.58	0.81	Agree
10	Master trainer test apprentice theoretically using objective and answer.	3.46	0.64	Disagree

The study results indicated some apprentice evaluation methods shown in Table 5. These include that an apprentice is given a similar work observed from master trainer to work upon, master trainer

observes apprentices on adherence to safety regulations, master trainer gives the apprentices practical work to observe his/her performance, apprentice is given a written test after every installation work carry out, and apprentice is tested on knowledge of tools manipulation. The findings are in consonants with Onu and Agu (2021) who explained that, in essence, evaluation lets the trainer know of the success or failure of an enterprise measuring the change in behaviour of the learner, which is accomplished through observing the trainees on an assignment. The implication is that the indicated modalities should be used by master trainers in the apprenticeship system to enhance the training of electrical apprentices. The research is a descriptive survey so information about the actual impact of training modalities for electronic maintenance apprentices could not be ascertained by the current results. Future research should examine the positive impacts of apprenticeship training modalities on electronic maintenance skills of apprentices in Plateau state.

4. Conclusion

The purpose of the study was to find out apprentices' perception of training modalities in electronic maintenance in Plateau State. According to the study's findings, entry/admission of apprentices is dependent upon a number of factors, including familiarity with the master trainer, the apprentices' parents and guardians and the master trainer sign written agreements, present trustworthy guarantors, and also sign an oral agreement. Based on the study's findings, it was recommended that the government should provide loans to skilled artisans so they may buy the tools they need for training and entrepreneurship, increasing their capacity for output. To train apprentices, the National Directorate of Employment (NDE) administrators should hire competent teachers. The instructional techniques employed by instructor in training apprentice should be varied to path way for learning procedure that will facilitate effective learning.

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Conflict of Interest

The author declares that there is no conflict of interest.

Author Contributions

CTO was responsible for overseeing all aspects of this research project including conceptualization, materials and methods, data collection, data analysis, writing and approval of this

article for publication.

Data Availability Statement

The original contributions presented in the study are included in the article. Further inquiries can be directed to author.

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