

**INFUSING PHONE REPAIRS INTO BUSINESS EDUCATION MINIMUM STANDARD  
AS A SUSTAINABLE DEVELOPMENT GOAL**

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## **Abstract**

This paper titled Infusing Phone Repairs into Business Education Minimum Standard as a Sustainable Development Goals. The researchers adapted one objective and one research question each respectively as follows: determine the problems associated with infusing phone repairs into business education minimum standard as a sustainable development goals, while the question were what is the problems associated with infusing phone repairs into business education minimum standard as a sustainable development goals. Business Education teaches skills that goes with generation segmentation in technology. More so, thinking outside the box by infusing phone repairs into business education minimum standard as sustainable development goals will help students for school feeding themselves in the school environment and beyond. The population of this study is one thousand four hundred and fifty (1450) students from Business Education department federal College of education, Zaria consisting of B.Ed, NCE, Pre-NCE and PPNCE students of the Business Education department respectively. The sample size of the study was 290, despondence this is in line with Odukunle (2005) who recommended that if the population is less than 2500 for descriptive study 20% is enough to establish the existence or non existence of a relationship. In order to get the required sample size, two hundred and ninety students were randomly selected the respondents shall be the sample of this study. The researchers concluded and recommend that federal ministry of education should expose the students of business education on sustainable ways though phone repairs to meet up with 2020 development goals.

**Key words:** INFUSING PHONE REPAIRS, BUSINESS EDUCATION MINIMUM STANDARD, SUSTAINABLE DEVELOPMENT GOALS

## **Introduction**

Business education programme in Nigeria is a course that is designed to think outside the BOX, more so infusing phone repairs into business education minimum standard is an emerging call for sustainable development Goals in Nigeria. Therefore educating students of business education on the present needs in our society is possible ways of eradicating poverty and unemployment with the emerging skills in phone repairs will serve 2020 goals.

Thus, business education teaches skills that goes with generation segmentation in technology, thereby phone repairs is a segment in vocational and technical education that curriculum and minimum standards planners have omitted in Nigeria. This is an age of communication and the older methods of communication are becoming obsolete and newer & modern ones are continuously replacing them. One of such a modern communiqué is mobile communication. It has now become a necessity & has been enthusiastically adopted by the people throughout the world. The modern mass cannot think of life without this facility to connect with their family and friends at any time from any venue. As a sequel of it being a necessity, it is absorbing more people into it than any other field of life these days. Now keeping in mind this fact, it is felt imperative to introduce some courses about mobiles. Repairing of mobiles is one of such course, to produce skilled manpower, who will be able to carry out repair of the mobiles to enhance their life & to make them more useful. This curriculum of three months duration covers the usage of common hand tools, measuring instruments, usage of communication systems, faultfinding of mobile phones & their rectification, troubleshooting of software problems and upgrading of software version of handset independently to meet the need of job market.

Maintenance is the total attention and care given to an appliance or a system in order to continue functioning well, both at its up-time and down time. It is simply the action taken to restore or keep an item in good functional order. According to Ogbuaya, (2009) it involves all the activities taken in order to prolong the service life of the item. There are basically three types of maintenance usually carried out in any system. These are predictive, preventive and corrective maintenance. The practices engage in identifying faults and remedying the faults in an appliance to prolong the service life of the appliance is contextually termed maintenance practices. One of the important maintenance practices in mobile phone necessary for self-employment is the corrective maintenance, which can also be termed equipment repair maintenance or breakdown maintenance or simply repairs.

Generally, repairs are carried out when there exist faults in an appliance. Mobile phones are prone to developing faults when used like other appliances. Faults in mobile phones are generally grouped into two. According to Gsmindia (2013), Blogger (2011) and Archninja (2010) mobile phone faults are classified into hardware and software faults, but because some of the software faults are common with the phone settings, a third classification of mobile phone faults known as setting fault is considered. The hardware faults are associated to printed circuit board (PCB), batteries and any other electronics or hardware parts. These faults include no signal, battery empty, mic, vibration, keypads and earpiece faults, just to mention but a few. Software faults are associated to faults emanating from the operating system (OS) of the mobile phone. Some of the faults are dead set, auto restart, camera failure and booting problems. Setting faults are faults related to the setting of the mobile phone, and these include call diverts, SIM lock, no network and phone slow. These categories of faults can definitely be remedied by employing the right repair principles.

Repairs in the document of Bridgestone Michellin Pirelli (2013) are services that are required or necessary when something on a system is not working properly or may have worn to the point where a replacement is required to maintain the performance of the system. According to Australian Taxation Office (2012) repairs mean work to make good or remedy defects in, damage to or deterioration of the property. It involves fixing faults in an appliance or a system. Repairs in the context of this study involves the activities taken for the restoration of a broken, damaged or failed component, device, equipment, part, or appliance to an acceptable operating or stable state. The skills involved in maintenance of digital electronic appliances are commonly acquired in Nigeria through the non-formal and/or the formal educational system. The non-formal education involves the apprenticeship system or practice of learning, which according to Omofonmwan (2011) is a contractual agreement undertaken by a master craftsman and an apprentice whereby the apprentice is trained in a prescribed work process through practical experiences under the supervision of the master-craftsman. Perhaps, the more acceptable and preferable educational system is the formal education approach, which is characterized as a system with fixed curriculum and a cadre of certified teachers with standard pedagogical methods for skill acquisition. One of the levels through which maintenance skills in mobile phone can be acquired is the secondary education, of which technical colleges in Nigeria are grouped under this level.

According to Nwachukwu, Bakare and Jika (2011) technical college provides students through training with the relevant and adequate knowledge, skills and attitude for employment under the guidelines of a teacher in related occupations. In order to achieve these objectives, various trades or occupations are learnt at the technical colleges. Ede, Miller and Bakare (2010) identified that students in technical colleges are trained in auto mechanics, woodwork, plumbing,

electrical installation and maintenance work, radio and television (RTV) and electronics, computer craft and mechanical trades.

### **Statement of the Problem**

In recent times, the use of digital electronic products such as mobile phones has increased, but there seems to be relatively inadequate qualified and competent technicians to repair these products when they are in bad conditions. The relative inadequacy of technicians in maintenance repairs of mobile phones may be traced to inadequate inclusion of such skills in the curriculum of the school system as early as necessary. This may be the reason why majority of the available technicians perform maintenance repair tasks on trial and error basis as they were never or rarely exposed to such skills while in school and hence may not possess the adequate knowledge and skills needed to carry out such repairs. The foregoing implies that there is need to identify the maintenance skills required by electronics technology students of technical college to carry out basic repairs of mobile phones in order to enhance their preparation as competent craftsmen, advance craftsmen and technicians who will perform the required repairs, otherwise there will be continuous waste of electronic products when there is breakdown. In addition, the problem of employment has continued to mount. If better skills are acquired by graduates of technical colleges in the repairs of devices such as mobile phones, it will contribute to increasing a shift from youth unemployment to self-reliance. The common breakdown of these appliances, the relative continual production of incompetent manpower to perform effective maintenance repair tasks in mobile phones and the problem of youth unemployment can raise many questions in mind. One question the researchers ask is: is it not time to introduce practical skills in repairs of mobile phone in the curriculum for teaching and learning in practical classes in vocational and

technical colleges in Nigeria? The study therefore identified Infusing Phone Repairs into Business Education Minimum Standard as a Sustainable Development Goals which will help them earn a living after graduation.

### **Objective of the Study**

1. Determine the problems associated with infusing phone repairs into business education minimum standard as a sustainable development goals.

### **Research Question**

1. What are the problems associated with infusing phone repairs into business education minimum standard as a sustainable development goals?

### **Review of Related Literature**

#### **Interact with customer and perform front end repair**

appropriate details

PC17. use the system to prepare invoice, stock management, order placement, accessories availability, etc.

#### **Performing front end repair**

To be competent, the user/ individual must be able to: PC18. Identify problem and decide the action to be taken

PC19. upload only licensed and brand approved

applications as per customer requirement using system

PC20. understand the application and software compatibility with the smartphone and suggest to customers accordingly

PC21. check the accessories and perform a demo with the customer to ensure their functionality (chargers, SD card, etc)

PC22. open the panel of the smartphone without damaging them

PC23. replace the parts such as battery and clean the inner parts of the phone

PC24. ensure the functionality of the replaced part

PC25. provide necessary details on the warranty, terms and conditions of the replaced parts

PC26. educate customers on effective usage of smartphone to save battery and to avoid any repeat problem

**Technical  
Knowledge**

The individual on the job needs to know and understand:

KB1. basic electronics involved in the hardware

KB2. operate various models of smartphone

KB3. features of smartphone and their purpose

KB4. different types of smartphone and their model specifications

KB5. how to document the spares movement note and capture all the action performed

KB6. different accessories available for smartphones and their purpose

KB7. awareness about implementation of engineering change order process

KB8. software and applications related to smartphone

KB9. procedures of replacing accessories such as battery, SD card

Implications and gabs of the Study this study has far reaching implication for the cell phone repairers, the society and the government. The cell phone repair facilities that could not be used by cell phone repairers and those not available will be identified and if improve upon will enhance the quality of their job and ultimately increase their financial strength. The society who happens to be the user of cell phones will be sure of getting their set repaired when faulty instead

of procuring new one. This will help in saving their meager resources and channel it to other profitable ventures. The study will enable the Government to be aware of the needs of cell phone repairers and make necessary planning and policies that will enhance their skills in minimum standard of business education. The rate of unemployment will be reduced because many unemployed graduates will opt to be self reliance.

### **Methodology**

Descriptive survey design was used in conducting the study. The design involved collecting and analyzing data gathered. The choice of the design was based on the opinion of Douglass (2006) who highlighted that descriptive survey research design is the most dominant technique for educational research. Kerlinger (2005) emphasized that this design should be employed when a research work involves the use of questionnaire to seek the opinions of respondents. The design was considered suitable because it enables the researcher to understand the social phenomenon from the participants' perspective. It constitutes the most convenient way to obtain real facts and figures needed, in which the results of the analyses were used for decision taking and generalization.

### **Population of this Study**

The population of this study is one thousand four hundred and fifty (1450) students from Business Education department federal College of education, Zaria consisting of B.Ed, NCE, Pre-NCE and PPNCE students of the Business Education department respectively

### **Sample size and Sampling Procedure**

. The sample size of the study was 290, despondence this is in line with Odukunle (2005) who recommended that if the population is less than 2500 for descriptive study 20% is enough to establish the existence or non existence of a relationship. In order to get the required sample size,

two hundred and ninety students were randomly selected the respondents shall be the sample of this study.

### **Conclusion and recommendations**

The prevalence in the use of mobile phones in Nigeria has continued to increase, yet the maintenance practices and skills of the devices at their down-time seems not professionally increasing. It was therefore found in this study that it is highly necessary and required of students of business education graduates from colleges in Nigeria to part-take in the professional technicians in the maintenance of mobile phones. Federal ministry of education should expose the students of business education on sustainable ways though phone repairs to meet up with 2020 development goals.

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