METAL WORK TECHNOLOGY: AN EFFECTIVE TOOL FOR RESOLVING SECURITY CHALLENGES IN NIGERIA

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Abstract

The Nigerian society is currently battling with security problems which manifest in form of corruption, injustice, unnecessary killing, prostitution, armed robbery and kidnapping. To resolve the current security challenges, our nation’s education should aim at enhancing creativity and innovative skills of individuals to be practically oriented. A career in Metalwork Technology can make the citizen of a nation self reliant and minimize security challenges in Nigeria. Technical Education which Metal education is part of, can serve as a change agent not only for technological change but also for many other societal changes. It is recommended that Small and Medium Scale Entrepreneurship skills acquisition centers be established in both urban and rural areas to engage youths in skills acquisition. Capital should also be given to trainees immediately they graduate from the skills acquisition center to enable them establish their own workshop.

Introduction

The Nigerian society is currently battling with security and environmental problems which manifest in form of corruption, injustice, unnecessary killings, prostitution, armed robbery, kidnapping. The government of Nigeria, teachers, parents and all stakeholders in the education industry have a major role to play in ensuring that a conducive environment is put in place in our schools and the society at large. This will help to reduce the occurrence of social vices that are engulfing the Nigerian society.

It is a well-established fact that no nation can resolve its security challenges without a well established educational system, as expressed in the National Policy on Education which recognizes education as an instrument “par excellence” for effective national development (NPE, 2004). According to Molagun 2005), education is a process through which an individual is adequately prepared through exposure to knowledge and all forms of experience that he or she needs to live successfully and contribute meaningfully to the
development of his immediate family, extended family and the entire society where he
lives.
It is sad to note that since the adoption of the National Policy on Education in 1977, not
much has been realized especially in terms of the development of a sanitized and peaceful
society in Nigeria. Social vices in form of corruption, murder, cultism, tribal and ethnic
clashes, political hooliganism, ritual killings etc are the news heralded in our newspaper
and other media houses (Fadare, 2003). The desire of many Nigerians are not what they
hear, the present barbaric killings, embezzlements and other social evils enveloping our
society are truly connected with Nigerians laissez-faire attitude, especially regarding lack
of commitment to the promotion of a godly environment, (Molagun, 2005)

Unfortunately, we keep clamoring for sound education that will serve as a vehicle of
transformation but neglecting the area of skill acquisition (Vocational Technical
Education) that can empower individuals to be self reliant. Uwaifo (2010) defines
Technical Education as the training of technically oriented personnel who are to be the
imitators, facilitators and implementers of the technological development of the nation by
adequately training its citizenry on the need to be technologically literate, leading to self
reliance and sustainability. Consequently, Technical Education which Metalwork
Technology is part of, can serve as a change agent not only for Technical systems but
also for many other societal changes. The practical nature of Technical Education makes
it unique in content and approach thereby requiring special care and attention. If
government can sincerely encourage Nigerian youths to engage in skill acquisition and
entrepreneurship by giving them the necessary support and financial backing they need,
the rate of crime and security challenges of the country will reduce.

**Impact of Metalwork Technology in the Society**
The prosperity of a nation is measured by its natural endowment and its quality, the
availability of human resources and their ability to make use of materials for improving
living standards of its citizens. As stated in the National Policy on Education (2004),
Technology Education is intended to provide among other things opportunities for
immediate development for the youth in the area of skill acquisition. One of the
objectives of NPE is to use the educational system as a tool toward building a self reliant
nation.
Hornby (2011) describes Metalwork Technology as the activity of making object out of
metal in an artistic and skillful way. Metals play an important role in almost everything
we do today. We use metal pots to cook food, eat from a metal plate, stir the food with
metal spoons, forks, knives and in almost every home today are products of metal. In our
transportation system, vehicles, trains, bicycles, motorcycles and various engine parts and
components are made from metals, in order to ease the movement of man and his
products from one place to another without much stress.
Communication is now close to everybody. Communication is basically the product of getting a message or information across using different media. The telecommunication masks seen around are from metal, handset components (mobile phones), computer, radio and television and other transmitters have metal in their components. In the agricultural sector, most farm implements such as hoe, cutlass and plough are products of metal. Aluwong and Duwa (2009) observed that life will not be complete without the use of metals. They further stated that, there is no profession on earth that will be complete without the use of metal. Metal greatly contributes to the comfort and convenience of man.

Before making a career choice in Metalwork Technology Education, it is imperative to know everything possible about the occupation. If the Nigerian government focuses towards Technical Vocational Education Training (TVET) which includes metal work as a career (as a means of empowering the youths by establishing functional and well equipped Technical Vocational Education Training center across Nigeria) it could enjoy a lot of benefits as observed and summarized by Abdulrahman (2003) such as:

- Equipping the beneficiary with skill and knowledge
- Increasing the chance of getting a job
- Providing knowledge and skill toward self employment and
- Providing a source of financial empowerment.

Metalwork Technology make citizens of a nation self reliant and reduce security challenges because youths are at the frontline of crime. If they are engaged in skills practice, crime will be reduced in our country.

**Career or Occupation in Metalwork Technology Education in Nigeria**

Career is a series of job that a person has in a particular (Omogbare, 2003). It is also the period of time spent in your life working or doing a particular thing. Career is a way of making one’s living and profession. Occupation simply refers to what one does to earn a living in a given society. Aluwong and Duwa (2009) observed that Metal Technology is a totality of all processes involved in the production of metal articles.

The careers and occupation in Metalwork Technology as stated by Aluwong and Duwa (2009) are as follows:

- **Fabrication (sheet metalwork technology):** this is an aspect of Metalwork Technology which is concerned with production of metal components and articles such as boxes, doors, water cans, containers for food canning etc. They are mostly called sheet metal fabricators.
- **Machining/machinist** deals with mechanical production while producing flat surface shapes, conical surface, cylinder surface, drilled holes, winding groove
(thread) etc. They are mainly concerned with machine operations such as lathe machine, drilling machine among others.

c. Welding/welder: These are concerned with joining two or more pieces of metal together with the aid of heating which involves the use of welding machine and welding rod. Door frames, doors, window frames, windows etc. are products of welders.

d. Foundry work deals with melting of metal and pouring the molten metal in preparing mold to produce desired shapes e.g. aluminum pots and spoons are products of foundry work.

e. Forging (forger) deals with heating of metal and shaping them by hammering so as to produce local hoes, knives, arrows, cutlasses, rakes and other agricultural implements.

The careers in Metalwork Technology can make Nigeria to be a self reliant nation. Akanbi and Ugbe (1997) stated that being without a job can cause loss of respect, depression, domestic violence, strained family relations, alcohol abuse and even suicide and can lead to a lot of other criminal activities.

Although the Nigerian government accorded small medium entrepreneurship scheme financial backing, the impact was not felt in the rural areas. Olaitan (1990) observed that Technical Education is the field of Education that emphasizes on skill acquisition and utilization. It trains individuals to be job providers instead of job seekers and the ultimate goal is to enable individuals to become very productive and functional in their careers.

**Causes of Insecurity in Nigeria**

The current security situation in Nigeria has become a serious challenge to the general public and even the government. Most governors and other political office holders have been purchasing bullet proof cars (jeeps) for fear of assassination. Okolo (2009) observed that the kidnapping syndromes, ethnic clashes, political hooliganism and religious violence has led some highly placed individuals and top government officials to relocate their families out of some geographical zones or outside the country, living the poor masses at the mercy of the gangsters.

Ogheneakoke in Kolo (2009) observed that the following factors are responsible for insecurity in Nigeria: electoral malpractice, tribalism, corruption, unemployment, poverty among others. Chinyere (2004) posited that unemployment breeds poverty and poverty is one of the greatest problems in Nigeria and at times it leads to crime. Other factors responsible include the societal value for wealth, as observed by Ajibuwa (2012). The hasty crave for acquisition of material wealth has led some youths into robbery, advanced fraud and other dubious acts.
The government needs to create an enabling environment where youths can enjoy self development through different skills available in Metalwork Technology. If the youths are properly guided, they can learn to fend for themselves and not necessarily indulge in illicit acts. John (2009) observed that the best way of resolving the security challenges of our nation is to encourage individuals to acquire skills and alleviate poverty, provide security, maintain accountability and efficiency in public sector management. This can be achieved through proper management of our resources.

Resolving Security Challenges through Metalwork Technology Education

The National Policy on Education (2004) observed that Technical Vocational Education “is used as a comprehensive term referring to the aspect of the educational process involving, in addition to general education, the study of technology and related sciences and acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of economic and social life” (pp 23-24). The various occupation in Metalwork Technology Education as noted by Aluwong and Duwa (2009) which are fabrication, machinist, welding, forging and foundry work can be learnt through a formal system of education (study of metal work technology) or through a non-formal system of education (apprenticeship). Apprenticeship is a system through which young ones are given to craft experts in the locality to be trained on their chosen career.

Metalwork Technology such as welding, forging, foundry and fabrication workshop can be established with little money after undergoing training. For example sheet metal workshop (fabrication) which deals with production of articles such as boxes, funnels, water cans etc; welding workshop (welder) which is concerned with joining two or more pieces of metals together to form useful objects with the aid of welding machine rod (electrode). People who engage in this type of occupation do not need to travel out of their communities, because metal windows and doors are seen everywhere. Also the forger deals with heating metals and shaping them by hammering to produce local farming tools e.g. hoes, cutlasses among others.

If government encourage youths and adults to acquire practical skills in Metalwork Technology (through the study of Technical Education or Apprenticeship by giving adequate financial support to the beneficiary) it will reduce over dependence on white collar jobs. The current mass movement of youths from rural to urban settlements can be minimized because there will be means of livelihood in their various domains. In Nigeria, it is a popular saying that an idle hand is the devil’s workshop. Skilled hands therefore stand the advantage of being productive and gainfully employed, hence such people rarely have criminal tendencies.
Chinyere (2004) asserted that unemployment breeds poverty and poverty leads to crime while crime leads to insecurity. Government needs to be a part of small and medium scale entrepreneurship schemes, encourage locally made goods and enforce its usage in both government offices and other public sectors. If this is done many young school leavers and graduates of Technical Education (Metalwork Technology in this case) would be interested in establishing their own shops without having to seek for white collar jobs (office jobs).

To resolve the current security challenges of our nation, education should aim at enhancing creativity and innovative skills and should be practically oriented. This implies the training of individuals to be able to stand without seeking for government employment but to develop individuals to be able to manipulate skills and be more creative in order to contribute meaningfully to the economic growth of the nation.

**Conclusion**
Metalwork Technology Education has a great potential towards resolving the security challenges in our nation. If government enforces the patronage and usage of locally made articles in different government sectors, this will encourage many Nigerians to acquire skills in Metalwork. Education should be seen as a vehicle of transformation so that skillful hands would not turn to crime.

**Recommendations**
- All institutions offering Vocational and Technical courses should be adequately equipped with all the necessary materials and facilities to enhance the practical skills of the learners.
- Government should patronize locally made metal goods and enforce the usage in government and public sectors across the country.
- Qualified personnel with high level of practical skills should be employed in the area of Technical Vocational Education Training Centers.
- Small and Medium Scale Entrepreneurship Scheme and the National Directorate of Employment (NDE) should establish a center in rural areas to encourage youths to engage in skills acquisition.
- Capital should be given to trainees immediately they graduates from a skills acquisition center, to enable them establish their own workshop.
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