# SKILL ACQUISITION IN CARPENTRY MAINTENANCE AND JOINERY

# Adamu Gambo Saulawa HASSAN USMAN KATSINA POLYTECHNIC gambosaulawaadamu@gmail.com

#### **ABSTRACT**

Skill acquisition varies in nature and complexity according to the trade involved. Individuals who choose carpentry and joinery as a carrier should, among other things, posses quality such as interest, ability, aptitude, patience, personality characteristics and other physical qualities that would enable them succeed in it. Therefore, the acquisition of appropriate skill in carpentry is necessary to (every youth) for sustainable empowerment. This paper highlights the basic construction, and maintenance techniques of tools and machines in the field of carpentry and joinery.

**Keywords:** Carpentry construction, Skills acquisition, Maintenance

### INTRODUCTION

Carpentry is a skilled trade in which the primary work performed is the cutting, shaping and installation of building materials during the construction of buildings, ships, timber bridges, concrete formwork. According to Omeje (2013) Carpentry and joinery is the act, art, or trade involving working with wood. It is the process of building or making an oriented disciplines, require skills. It emphasizes learning by the doing through cognitive and psychomotor skill. Skills Is the ability to do something well, usual gained through training or experience. He further refers skill as expertness, practiced ability. To possess skills is to demonstrate the habit of acting, thinking and behaving in a specific activity in such a way that the process becomes natural to the individual through repetitive practice.

Taiwo (2014) observed that in any given economy, entrepreneurship development always give birth to job creation which will force people to do something that will better their lives and the country at large. He evaluated the relationship between job creation and entrepreneurship development in Nigeria. It was clear from his observation, job creation or employment opportunity in an economy can be traceable to entrepreneurship training and development. The major area of carpentry and joinery are entrepreneurial skill development in building construction, furniture making upholstery, machine woodworking and ornamental operation.

# BASIC CONSTRUCTION AND CARPENTRY TECHNIQUES

Basic carpentry techniques are necessary to be able to complete site or home renovation, building and other construction projects. A carpenter need to be able to layout a building site, determine the elevation of a site excavation, concrete footing, and other component of buildings structure he should be able to build wall forms, frame, stair, wood properties and finishing.



Ogalanya in Anyaeneh (2010) classified skills into three broad areas namely: sound professionals intellectual skills, specific/technical skills, and psychosocial skills each of which require training and can be broken down as follows:

Sound professional/ intellectual skills - The skills development in this instance will focus on managerial/administrative skill—articulating idea in a logical fashion: human relation skills-interpersonal relationship, management-labour relations; supervisory coordination skills-persuasiveness and communication (language) skills-power of accurate information dissemination. Job specific/technical skills - Skills development in this case will focus on competitive and enterprising skills; creativity/ innovative/ imaginative skills; investigative/ problem solving skills; skill in the operation of gadgets and personal use competence. Psychosocial skills - To develop high motivation/strong willpower /determination to succeed, honesty/ hard work dedication to duty, self discipline/self-confidence/acceptance of challenges and respect for the dignity of labour.

### MAINTENANCE OF FACILITY

The basic maintenance strategies include preventive, corrective and condition-based maintenance the three basic maintenance strategies are into five types of maintenance strategy, which includes time-based, performance-based, breakdown-based, renovation-based and integration-based Chan et al (2001) Furthermore, Tse (2002) is of the opinion that most of the maintenance practices are failure-driven, time-based, condition-based, reliability-centered and predictive.

Carpenters should imbibe maintenance culture in order to prolong the life span of the equipment. When tools are maintained it enhances high degree of efficiency on the part of the machines. It helps to maintain safe working condition and it keeps the cost of operation and increase the life span of the tools and machines it is important to imbibe maintenance culture since carpentry and joinery equipment is expensive cutting blades or knives should be properly sharpen before use chains, sprockets, spindles and other nipples should be checked every week.

# FREQUENCY OF MAINTENANCE

Carpentry and joinery equipment may need to be frequently checked to ensure that safety related features are functioning correctly. The frequency of such checks will vary and depends on the machinery itself and the risky involved. It should also take into account: The intensity of use, The operating environment and The variety of operations. The manufacture's instruction should help you determined the item that require maintenance, as well as the type of maintenance work. Adjustment of parts and the frequency of the maintenance work.

## Maintenance management

The extent and complexity of maintenance can vary substantially from simple checks on basic woodworking machinery to integrated programmes for complex machinery. In all circumstances, for maintenance to be effective, it needs to be targeted at the parts of work equipment where failure



or deterioration could lead to increased risks to health and safety. Maintenance strategy is adopted in order to extend the life cycle of woodworking items and its fittings services. Maintenance personnel choose different maintenance strategies depending on allocation maintenance resources. The maintenance policy is the integration of different strategic approaches, which include corrective, preventive and condition-based maintenance (Horner et al, 1997). Ollila and Malmipuro (1999) identify that the main types of categories of maintenance consisted of reactive, preventive, predictive and proactive maintenance. However, Coetzee (1999) argues that the maintenance strategies should be based on the detailed design of the maintenance cycle for different types of jobs.

# DIFFERENT TECHNIQUES FOR THE MANAGEMENT OF MAINTENANCE HAVE **DIFFERENT BENEFITS:**

The maintenance policy consists of five major components, and different maintenance strategies are developed from these components. Without defining this policy, maintenance operation processes will be in a haphazard order. The five major components (CEM, 1994; RICS, 1990; Chanter and Swallow, 1996; Lee and Wordsworth, 2001) are as follows:

- ✓ The length of time for maintaining for their present use.
- ✓ The life requirements of the carpentry equipments and their fittings and services.
- ✓ The standard to which the carpentry equipments and its services are to be maintained.
- ✓ The reaction time required between a defect occurring and a repair being carried out.
- ✓ The legal and statutory requirements shall also be considered.

# MAINTENACE TECHNIQUES

- Planned preventive maintenance involves replacing part or making necessary adjustment at preset interval so that hazards do not occur because of the deterioration or failure of the equipment;
- Condition-based maintenance involves monitoring the condition of safety critical part and carrying out maintenance whenever necessary for the same purposes. When safety critical parts could fail and cause the equipment, guard or other protection devices to fail in a dangerous way, a formal system of planned preventive or condition-based maintenance is necessary
- Breakdown maintenance, however, only needs to be carried out after failure has occurred. This is appropriate only if the failure does not present on immediate risk and can be corrected before risks occur, for example through effective fault reporting and maintenance.

### **CONCLUSION**

The carpentry skills acquisition is an asset to industries and useful to the society. This becomes more evident when the recipients are exposed early enough to entrepreneurial skills development. Development of basic entrepreneurial skill in carpentry and joinery is a sure way of guaranteeing



self-reliance in the society. Omeje (2012) stressed that acquisition of appropriate skills in carpentry is necessary to (every youth) and essentially for sustainable empowerment.

## RECOMMENDATION

The paper has the following recommendations based on Okwori (2012) who recommends the effective management of woodwork shops should include the followings:

- Carpenters should participate fully in the maintenance of equipment; this maintenance will help to prolong the life span of the equipment.
- Head of carpentry section should take proper inventory of equipment and materials weekly to make sure things in other in the workshop and it will assist in the maintenance of equipment.
- Carpenters should develop the habit of improvising using local resources. This will help in the effective conduct of work.
- Carpentry and joinery is a structured practical course, which demand practical skill, carpenters should acquire skill, discipline and respect for both financial and standard regulations.

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