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## Management of Woodwork Workshops in Nigerian Tertiary Institutions: An Analytical Study

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### ABSTRACT

Woodwork Technology Education contributes immensely toward economic growth and development of any nation that deems it fit to invest in the aspect of education because it has the capacity to equip learners with skills in self-reliance. Woodwork Technology Education also gives the graduates the opportunity to create jobs, employ and train others in the same field of study, become creative and productive citizens who will be able to participate in the economic growth and development process. But, lack of proper management of the woodwork workshops in most tertiary institutions have left many graduates in the state of hopelessness; they have little or no practical ideas in the woodwork field of study. Some of the Woodwork Technology graduates who ought to be self-reliant due to the skills expected to have acquired from their institutions roam the streets in search for government jobs which are not readily available. This study was designed to look at management of Woodwork Workshops in tertiary institutions in Nigeria. The study was a descriptive study guided by research questions. Questionnaire items were used for collection of data as the instruments were validated by experts. Four tertiary institutions in Nigeria participated in the study and it was discovered among others that most institutions offering woodwork as a course of study still operate with obsolete equipment. Also, that most often, teachers are not undergoing training/retraining exercise to update their knowledge on current woodwork issues. The study recommended among others that Government should once in a while evaluate or revisit the woodwork technology programs/curriculum in tertiary institutions as this will help to improve the standard of teaching and learning.

**Keyword:** Technical Education, Woodwork Workshop, Workshop Management

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## INTRODUCTION

Most developing countries especially Nigeria expect their educational system to meet their aspirations, shape the future and provide solutions to social, political and economic problems. This is impossible without proper and effective management of education programs, including Woodwork Practice in Technical/Industrial and Vocational Education Departments of Universities, Polytechnics and Colleges of Education (Technical). Fafunwa (2008) stated that the education system requires well-trained technical and commercial teachers who can operate equipment for carpentry, brick-laying, home economics, local craft, farming, secretarial equipment, technical drawing, electronics, electrical, automobile and computers. He further explained that adequate technical education teachers should be provided for a more effective education system. It is important to note that technical education teachers need to update their knowledge, skills and competencies on new equipment and tools different from the obsolete machines in the workshops (Umunadi, 2010).

Woodwork Technology is a technical education course and subject of study offered in Universities, Polytechnics and Colleges of Education leading to acquisition of skills at professional and sub-professional levels. Woodwork technology according to Agbo (2000) is that type of training intended to prepare students to earn a living in an occupation in which success is dependent largely on understanding of technology as applied to modern technology and design. And this type of education according to Okoro (1993) provides skills, knowledge and attitudes necessary for effective employment in a specific occupation. It is an aspect of Technical Education program that is suitable for contributing to national socio-economic development and meeting the Millennium Development Goals (MDGs) through human resources development. In the current post-2015 discussion, Woodwork Technology Education would still contribute immensely toward economic growth and development of any nation that deems it fit to invest in this aspect of education. It is also important to understand that both the developed and developing countries have come to realize that Technical Education, including Woodwork Technology, has an indispensable role to play in equipping individuals with relevant skills and knowledge, hence enabling the citizens to effectively participate, contribute to and benefit from the economic growth and development process by being productive and creative citizens.

Advances in technology and increased competition due to trade liberalization are major forces driving change in the world of work; they have important implications for the demand of skills, human resource development and training. The use of new technologies especially Information Technology (IT) and new manufacturing process now necessitate demand for higher order knowledge skills and productivity. Backwardness and slow rate of development in technology as seen in most developing nations today reflects the ineffective management accorded technology education most especially at workshop practice/ management level, which has been seen as the foundation for building a versatile technology kingdom.

Woodwork technology involves engaging both teachers and students in theory and practical work (Agbo, 2000). Technology development has contributed immensely to the high economic and social standards in most of the developed countries. Therefore, the development of woodwork technology in the Higher Institutions cannot be achieved without proper management of the Workshops. Ilojeme (2000) expressed that Nigeria, like most of the developing nations, requires a well-articulated woodwork technology to enable her to achieve economic and technological development. This goal cannot be achieved unless the prevailing problems of woodwork technology - especially lack of equipment and lack of adequate qualified personnel -- are overcome.

Olaoye (2000) pointed out that teaching is a process to facilitate learning; for effective teaching of woodwork technology it is considered quite appropriate that prospective teachers should interact with the teaching environment; workshop rules and regulations must be made available for them before using the workshops and



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the workshops must be properly managed. At present, we have woodwork technology teachers who emphasize more on theoretical aspects in the workshop with no emphasis on practical due to lack of facilities; this is in line with findings of Sara (2001) that more than 60% of the staff teaching woodwork technology could not perform the skills or provide technical services they are expected to teach others despite their high level paper qualification. She further stated that this is due to non-skill acquisition from their respective institutions of higher learning.

If the woodwork technology course is well taught in Higher Institutions in Nigeria, many students graduating from these schools will engage in businesses or open their own workshops instead of waiting for government work. Jackden (1997) advised the Federal and State Governments to invest in woodwork technology to hasten the nation's technological advancement. The key to national development is technology and this can be acquired and attained if we have proper investment in woodwork technology and manage the workshops effectively. Jackden warned that there would be no technological breakthrough without developing the necessary infrastructure for qualitative education. If there is no proper investment in woodwork technology, it will be difficult to compete in the structural work in terms of skills and expertise; so we have to act in order to move away from the era that focuses mainly on liberal arts. Ntoiden (2003) pointed out that if we have the necessary equipment and workforce to manufacture our own vehicles, household furniture and so on, it will help us to be more self-reliant and conserve foreign exchange for other uses. This is because most of the technology products are imported into the country, making them very expensive for the average Nigerian. If we can produce such things in Nigeria using locally sourced raw materials, the cost will be reduced and many people will be able to afford them. To produce self-reliant citizens, each Local Government Area or province in cooperation with appropriate agencies, shall organize relevant apprenticeship schemes and Technical and Vocational Training of which Woodwork is a part.

Technology Education according to Aina (1994) meant skill training in crafts and in certain trades such as building, auto mechanics and woodwork. Technical or technology education, according to Uwaifo (2008), is the training of technically oriented personnel who are to be the initiators, facilitators and implementers of technological development of a nation by adequately training its citizenry on the need to be technologically literate, leading to self-reliance and sustainability. Technical education, more than any other profession, has more direct impact on national welfare. Its contributions are widespread and visible ranging from metalwork technology, mechanical/automobile technology, electrical and electronic technology, building and woodwork technology and so forth. Consequently, Technical education can serve as a change agent not only for technical systems but also for many other societal changes. Okolie and Nwuzo (2013) opined that manpower development and wealth creation are important components of any nation's technological advancement and by implication economic development. At the heart of development of a skilled workforce of any economy is technical education; therefore its training must be given the attention it deserves. This is why workshops used for training must be well managed to enable the students to acquire skills for productive living.

The practical nature of technical education makes it unique in content and approach, thereby requiring special care and attention. The inputs of technical education are so visible to the extent that even an illiterate could see when "failures" occur. Technologists are supposed to solve societal problems in sustainable ways; to do so, they need to be sufficiently informed in technical education concepts and application of theoretical principles to practical problems. The desire of stakeholders to achieve this has faced many challenges which must be tackled in achieving the program aims. According to Flolu (2013), any country that aspires to meet the basic needs of its citizenry and stay in the forefront of technological advancement by being competitive in its production process has to marshal Technical and Vocational Skills as an indispensable tool for socio-economic development, employment generation, higher living standards and better quality of life. But, surprising as it may be, most nations' ministries of education neglect Technical Education Training programs in their schools which has resulted in poor workshop management.



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## WOODWORK TECHNOLOGY EDUCATION

As a course of study in Nigerian Colleges of Education (Technical), Polytechnics and Universities, Woodwork Technology Education is sub-divided into Joinery, Upholstery and Carpentry. Woodwork Technology is that type of training intended to prepare students to earn a living in an occupation in which success depends largely on understanding of technology as applied to modern technology and design. This type of education provides skills, knowledge and attitudes necessary for effective employment in a specific occupation (Okoro, 1993). Woodwork Technology, therefore, involves engaging both teachers and students in theory and practical work, creating new ways of improving the economy through design, which will in turn serve as a service to the citizens; when new products or services are created individuals will appreciate or patronize the services and generate income for business. Fajimi (2005) noted that developed technology has contributed immensely to the high economic and social standards of developed countries of the world.

The development of woodwork technology in our Higher Institutions and Technical Colleges cannot be achieved unless Workshops are managed properly. At present, woodwork technology education as an essential educational program with structured practical courses has not been fully realized due to inadequate facilities and lack of effective management in wood workshops (Makama & Pondu, 2006). It may be necessary for administrators of Technical Colleges, Universities and Polytechnics to be creative especially in using various mechanisms for improving the management/supervision and in providing facilities for wood workshops instead of relying on government alone. Availability of facilities in wood workshops will eventually lead to improving the teaching and learning of woodwork especially in the practical skills acquisition aspect.

Most developing nations of the world especially Nigeria require well-articulated woodwork technology programs to enable them to achieve economic and technological development but with the prevailing problems of woodwork technology (especially lack of equipment), its potential as a base for the nation's progress cannot materialize unless quick steps are taken to resolve the problems. For effective teaching of woodwork technology, prospective teachers should interact with the teaching environment, workshop rules and regulations must be made available for them before using the workshops. The students start to learn when they are involved in the learning situation; at present, we have woodwork technology teachers who emphasize more on theoretical aspects in the workshop with no emphasis on practical due to lack of facilities.

If the woodwork technology course is well taught, many students graduating from the schools will engage in businesses and open their own workshops instead of waiting for government work which is not readily available. Federal and State Governments of any nation should invest in woodwork technology to hasten the nation's technological advancement (Okwori, 2012). The key to any nation's development is technology and this can be partly acquired and attained if we have proper investment in woodwork technology and manage the workshops effectively (Okolie & Nwuzo, 2013). There would be no technological breakthrough without developing the necessary infrastructure for qualitative education including effective workshop management. Without proper investment in woodwork technology, it will be difficult to compete in the structural work in terms of skills and expertise; so we have to act to move away from the focus mainly on liberal arts education.

Ihekwoaba (2005) pointed out that if we have the necessary equipment, and workforce to manufacture our own vehicles, household furniture and so on in the developing world, it will help us to be more self-reliant and conserve foreign exchange for other uses. According to Inyiagu (2005), most of the products of technology are imported into developing countries from the developed countries; this makes the products very expensive for the average person to afford. If we can produce such things using locally sourced raw materials, the cost will be reduced and many people will be able to afford them. This is one of the benefits of investing in technical education such as woodwork



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technology. Woodwork technology education, which is an essential educational program with structured practical courses, is capable of engaging citizens especially the youths into productivity and making them contributing members of nation building and economic growth. When they are largely involved in production, they contribute knowingly or unknowingly to the economy and benefit from the economy as well. This is Inclusive Growth.

Since management as defined by Oxford Advanced Learner Dictionary (2011), involves the control, supervision and leading of other persons, overseeing projects, resources and business enterprises; therefore, management of Tertiary Institution's Woodwork Workshops in Nigeria entails proper overseeing, controlling and effective supervision of the Woodwork Workshops to enable the students to benefit from the program and become productive citizens. It also entails proper coordinating and overseeing the full works of students by the teachers and school management, overseeing the effectiveness of workshops tools, machines and materials to enable the students to benefit through the practical aspects of the Woodwork Technology Education in their respective schools.

## STATEMENT OF THE RESEARCH PROBLEM

The quest for self-reliance in industrial and technological growth, and development boils down to the need for skilled personnel who will judiciously utilize abundant resources. Studies have shown that many graduates of Woodwork Technology in most Technical Colleges and Higher Institutions are unemployed and cannot be self-reliant due to lack of practical skills during their school days. As a woodwork tutor in a technical college in Nigeria, it was difficult most times involving students in practical work due to lack of necessary required equipment. And without students' involvements in the real practical work, they will never be able to fit in the world of work and they will be unable to start their private small scale businesses after graduation; failure of the graduates to be self-reliant after graduation means failure to achieve the aims of establishing Technical and Vocational Education, of which Woodwork Technology is a part (Okolie, 2010). Individuals who have acquired useful skills like that of woodwork technology should be able to help themselves and at the same time help others. They can make extra income for themselves and live by it; at the same time, they can assist others by teaching them the acquired skills for a fee, thereby supplementing their income. This means that skills acquisition is a means of providing oneself with opportunity for a satisfactory livelihood (Okolie, 2010).

From long teaching experiences in Woodwork, Carpentry and Joinery Units of a Technical College in Nigeria and experiences as Building/Woodwork Technology graduate of one of the state Universities in Nigeria, I have discovered that facilities for practical work in most Technical Colleges and Higher Institutions are short in supply and where available, are not well managed. This is in line with findings of Inyiagu (2005) that inadequacy in teaching and workshop facilities as well as mismanagement of workshops have contributed to the diminution of the quality of technical education graduates in Nigeria. The available facilities are inadequate quantitatively and qualitatively and besides most of them are obsolete (Daramola, 2005). Lack of proper workshops management in Nigerian Institutions is a contributing factor to these problems.

Adebayo (2005) posited that no matter how vibrant and well-meaning the program of technical colleges could be, success and goal achievement largely depend on efficient management processes. Abdullahi (2005) stressed that woodwork workshops in most technical colleges and other higher institutions are highly mis-managed and this therefore affect student performance after graduation as many of them are unable to fit into the job market, or be self-reliant. In some Universities and Polytechnics the researcher visited, some of their facilities were found obsolete; some of them do go to the industries to hire the practical equipment during departmental accreditation, which usually come up in a short interval just to pass the accreditation, after which the equipment and other practical materials are sent back to the industries where they hired them. One may wonder why it is difficult for



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some School managements and Governments to purchase relevant Workshops equipment for students' practical works and with these situations at hand, one also wonder how the Nigerian government intends to fight poverty, reduce youth unemployment and create more jobs when the students are engaged in learning theory for a course which is meant to be 70% practical. Some schools that were established about 60 years ago still use the same woodwork practical equipment that was purchased then; this is bad. The difference between the developed nations and developing nations is that the developed nations simply change the way they do things as new discoveries emerge while in the developing countries, we love to manage the ones we have instead of discarding them for new ones.



*Figure 1.* Students sharing one work bench in their school woodwork workshop.



*Figure 2.* Six students producing one stool chair with their instructor due to lack of materials.

Most technical education institutions lack modern equipment relevant to societal needs and for effective training to take place. Most of them use obsolete materials and equipment, while some do not have equipment at all. The students now depend only on the theoretical aspects of the training program, which makes it difficult for them to cope in the world of work after graduation. Studies have shown that most of the schools do not sponsor their workshop technicians and craftsmen to attend conferences and academic workshops to enable them update their skills in woodwork workshop use and management. Many of them do not obey workshop rules and regulations; some exhibit no observation of workshop safety rules; many of their students do not even wear workshop overalls and boots as seen in Figures 1, 2 and 3 (pictures). From my personal experience as a tutor in a technical school, it was found that most school management boards finds it very difficult sponsoring some of their staff to attend International Conferences and workshops to enable them update their knowledge and ideas in their respective fields of study. If a teacher's knowledge about a certain field of study is obsolete, what then has he got to teach the students? Most of the craftsmen and technicians who manage the Woodwork Workshops do not have Information and Communications Technology (ICT) skills. In fact, it is surprising to see that some higher institutions in Nigeria do not have the latest computers and internet facilities for their technical education students; how then do they want to empower and equip them to become productive citizens, capable of contributing to economic growth and development?



*Figure 3. Students sharing one tool as they produce Mortise and Tenon Joints.*

In most cases, the ICT skilled personnel employed are not given a free hand to operate or manage the workshops. Adebayo (2005) stated that poor practical work by the students was due to lack of modern equipment and lack of professionally trained technicians who operate the equipment; will only leave the students in a state of confusion whenever they find themselves in their fields of work after graduation or not. Hence the need to effectively manage not only the woodwork workshops but all workshops necessary for improving students' academic performance and excellence. This study therefore examined how woodwork workshops in higher institutions in Nigeria can be properly managed for effective skills acquisition to empower the trainees to become self-employed or self-reliant after graduation since practical work done at the workshops is the key for developing the required skills necessary to be fit in the world work, be it self-employed or not. According to Abdullahi (2005), the most disturbing phenomenon is that teachers in these Technical Education Institutions sometimes borrow workshop tools, machines and materials from the works department of their institutions and woodworkers in the town to teach students. This is seen in most developing nations where the standard of education is poor or where the importance of technical education is unknown. But since the situation is like this and the government is not forthcoming towards changing the situation, it may be necessary for administrators of the affected schools to be creative especially in the use of various mechanisms for improving the management/ supervision and the provision of facilities for wood workshops instead of relying on government alone.

Availability of facilities in wood workshops will eventually lead to improvement in teaching and learning of woodwork technology especially in the aspect of practical skills acquisition by woodwork students. The present situation of woodwork workshops in most Technical Colleges and other Higher Institution in Nigeria is pathetic. The decay of teaching/ learning facilities in schools has greatly rendered the system inactive. The most disturbing



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phenomenon is that teachers in these schools borrow tools, machines and materials from works places or industries and woodworkers in the town to teach students and at times these people feel reluctant to release these facilities. Inadequate training facilities prevent students from acquiring essential practical skills that would enable them get useful employment after graduation. These problems occur as a result of over reliance on government. Federal and state government alone cannot cope with the demands of technology education so other avenues have to be used to support government efforts. When different mechanisms are utilized for improving the provision of facilities for wood workshops, the problems of inadequate training facilities would be greatly reduced if not totally solved. Hence, effective management of this sector of Technology Education becomes imperative to devise a lasting solution to problems of Technological backwardness in our societies. Adebayo (2003) posited that no matter how vibrant and well-meaning the technical education program could be, success and achievement of its goals will largely depend on its efficient management process.

## **PURPOSE OF THE STUDY**

The study intends to investigate effective management of Woodwork Workshops in tertiary institutions for sustainable youth empowerment in Nigeria. Specifically, the study intends to:

- Determine availability of modern equipment and materials for effective management of Woodwork workshops in Tertiary Institutions in Nigeria.
- Find out availability of adequate funds for effective management of Woodwork workshops in Tertiary Institutions in Nigeria.
- Determine the training/re-training of Technicians, Craftsmen, and Teachers for effective management of Woodwork workshops in Tertiary Institutions in Nigeria.

## **RESEARCH QUESTIONS**

Having stated the purpose of this study, the following research questions will be answered by the study;

- How available are the modern equipment and materials for effective management of Woodwork workshops in Tertiary Institutions in Nigeria?
- How adequate are funds for effective management of Woodwork workshops in Tertiary Institutions in Nigeria?
- How often do the schools train/re-train their Technicians, Craftsmen, and Teachers for effective management of Woodwork workshops in Tertiary Institutions in Nigeria?

## **RESEARCH METHODOLOGY**

Research design according to Uzoagulu (1998) can be described as an outline, a general arrangement or plan from which something may be made. Nworgu (2001) stated that a research design is a plan or blueprint which specifies how data relating to a given problem should be collected and analyzed; it provides the procedural outline for the conduct of any given investigation. The study adopted descriptive survey research design due to the nature of the problem investigated. The study was carried out at the Woodwork/Carpentry and Joinery Departments of two Technical Colleges and two Higher Institutions in Ebonyi and Enugu States respectively. In each of these schools selected, Woodwork is studied as a subject as stipulated by the Ministry of Education, National Board for Technical Education and National Business and Technical Examination Board (NABTEB) curriculum and syllabus. Therefore, the subjects of study comprise the Woodwork/ Carpentry Technology Teachers in the Technical Colleges, the



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Technicians/ Lecturers in the Building/Woodwork Technology in Technology and Vocational Education Department of Enugu State University, Abia State College of education (Technical), Ebonyi State University, and Enugu State College of Education (Technical).

Random technique was used and the sample comprised students and teachers/lecturers from each of the Institutions chosen for this study. Therefore, a total of 50 people were randomly interviewed as resource persons and at the same time given questionnaires to answer for the study. Also, books, journals, and the internet were also used as sources for data collection and findings. Various information obtained were crosschecked with independent sources for fair assessment and authenticity. Where traces of bias or prejudice were found such data were discarded. In the case of oral interviews, conscious efforts were made to distinguish facts from personal opinions. This necessitated in-depth analysis. Information obtained was analyzed qualitatively to arrive at the synthesis presented. However, in some instances, historical, descriptive and comparative approaches were adopted. Data obtained from interviews and discussions with resource persons were analyzed in a descriptive form.

## FINDINGS/ DISCUSSIONS

**Research Question 1:** How available are the modern equipment and materials for effective management of Woodwork workshops in Tertiary Institutions in Nigeria?

Table 1

*Percentage Responses of Respondents on Availability of Modern Equipment and Materials for Effective Management of Woodwork Workshops in Tertiary Institutions in Nigeria*

Items	N	Agree	%	Disagree	%
Lack of modern equipment for Woodwork practical works.	50	45	90.0	05	10.0
Teachers sometimes borrow materials for student's practical works from the roadside carpenters.	50	42	84.0	08	16.0
Woodwork Technology Teachers often teach the students theoretical aspects of woodwork due to lack of instructional materials and equipment.	50	43	86.0	07	14.0
Where equipment are available in most workshops, they are often obsolete.	50	40	80.0	10	20.0
Teachers should cultivate the habit of improvising non-available facilities.	50	41	82.0	09	18.0



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Table 1 proved that all the respondents agreed or are in favor of all the items on availability of modern equipment and materials for effective management of Woodwork workshops in Tertiary Institutions in Nigeria. Lack of modern equipment for Woodwork practical work in schools is responsible for the graduates' lack of competence in the world of work. Facilities such as classrooms, workshops, laboratories, studios, equipment and materials are grossly inadequate in many schools and colleges. The difficulty in facilities procurement does not give room for practical skill acquisition by learners. Similarly, the facilities are absent partly due to high cost of vocational and technical education and also high inflation rate in Nigeria (Imarhiagbe, 1992). The impact of inadequate educational facilities and modern equipment is that training of the students becomes impeded and they end up not acquiring skills demanded by the labour market. According to Odu (2006), the effect of limited workshop facilities, materials, laboratories, and studio activities, among others, can cause low productivity and result in ineffective and inefficient teaching (training).

Practical work constitutes an essential component of technical education. It is obvious, therefore, that without suitable workshop spaces, classrooms and laboratories, program implementation and structuring would be very difficult if not impossible. Some technical education institutions and colleges in Nigeria have a number of uncompleted standard workshops, dilapidated classrooms and laboratories making skill training problematic in terms of acquiring appropriate and marketable competencies for graduate employability. Teachers sometimes borrow materials for student's practical works from the roadside carpenters. This sometimes affects the teaching and learning activities in the woodwork workshops because, if the teacher is unable to borrow materials or equipment sometimes from the industry or road side workshops, then the lessons for the day would be theory based. But, we know that learning vocational technical trade (subjects) which in no doubt is skill-based and practical oriented requires appropriate delivery, teaching or training method if instructors and trainees are to effect any meaningful academic achievement.

What is seen today is that skill training in Nigerian Technical Education Institutions with goal on training people to be employed in commerce and industry or any enterprise using tools and machinery for operation, production, construction and distribution of goods and services has been too theoretical which has not placed much emphasis on the trainees' practical skill acquisition. Instructors in most cases, use inappropriate delivery methods such as, lecture method and deductive/inductive method as subject delivery for training learners for the World of Work. According to Arubayi, Nworgu, Akpochafor, and Odu (2009), appropriate delivery methods should be emphasized in skill training. Such methods include:

- (a) Demonstration
- (b) Real life application
- (c) Concept formation
- (d) Job related skills acquired by trainee
- (e) Diagrams/illustrations/drawings.

Also, it has as well been discovered that Woodwork Technology teachers often teach the students theoretical aspects of woodwork due to lack of instructional materials and equipment and where equipment are available in some workshops, they are often obsolete.

**Research Question 2:** How adequate are funds for effective management of Woodwork workshops in Tertiary Institutions in Nigeria?

Table 2 gives the percentage responses of respondents on adequacy of funds for effective management of woodwork workshops in tertiary institutions in Nigeria



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Table 2

*Percentage Responses of Respondents on Adequacy of Funds for Effective Management of Woodwork Workshops in Tertiary Institutions in Nigeria*

Items	N	Agree	%	Disagree	%
Government does not usually monitor how running cost released to administrators are utilized.	50	40	80.0	10	20.0
There are sometimes no funds to purchase modern equipment and materials for practical works especially in private schools.	50	42	84.0	08	16.0
Running cost released to woodwork workshop maintenance are often diverted to other things or misappropriated.	50	45	90.0	05	10.0
Government should increase the percentage of education budget to technical education.	50	40	80.0	10	20.0
Alternative sources of funding should be encouraged instead of Government alone.	50	41	82.0	09	18.0

Table 2 also proved that all the respondents agreed or are in favor of all the items on adequacy of funds for effective running of the Woodwork workshops in Tertiary Institutions in Nigeria. Education according to Nwaham (2010) is a consumer industry. A lot of money is needed to procure the human and materials resources required. Inadequate funds have crippled academic activities in most of the teaching institution. Worst of all is that the Government does not usually monitor how running cost released to administrators of these institutions are utilized. This is also another area that must be looked into if the Tertiary Institution's workshops are to be properly and effectively managed. Corruption has been stated as the cankerworm that has eaten deep into the fabric of the nation. It is a disease that needs serious cure in order to salvage the education sector of Nigeria. The study also found that there are sometimes no funds to purchase modern equipment and materials for practical works especially in the private schools, therefore running cost released to woodwork workshop maintenance are often diverted to other things most important to the institution or even misappropriated by the school management. The study proposed that the Government should increase the percentage of education budget allocated to technical education and let there be an alternative sources of funding by the schools instead of Government alone. This will help solve problems of inadequate funding in the institutions for proper management of the workshops and that of woodwork workshops especially.

**Research Question 3:** How often do the schools train/re-train their Technicians, Craftsmen, and Teachers for effective management of Woodwork workshops in Tertiary Institutions in Nigeria?



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Table 3 gives the percentage of responses of respondents on how often school management boards train re-train their technicians, craftsmen, and teachers for effective management of woodwork workshops in tertiary institutions in Nigeria.

Table 3

*Percentage of Responses of Respondents on how often School Management Boards Train Re-train their Technicians, Craftsmen, and Teachers for Effective Management of Woodwork Workshops in Tertiary Institutions in Nigeria.*

Items	N	Agree	%	Disagree	%
There is lack of training/re-training of the woodwork teachers, craftsmen and technicians.	50	45	90.0	05	10.0
Most schools do not sponsor their staff to international conferences for proper updates and skills on current issues in woodwork technology.	50	42	84.0	08	16.0
Programs once initiated are often not evaluated.	50	43	86.0	07	14.0
Schools should build strong partnership with the Wood Industries to help train their teachers.	50	40	80.0	10	20.0
Most Woodwork Teachers lack ICT skills.	50	41	82.0	09	18.0

Table 3 reveals the response of the population of the study as all the respondents also agreed with the whole items. The results revealed that there is lack of training/re-training of the woodwork teachers, craftsmen and technicians in most institutions offering Technical Education courses such as woodwork. Also, it was discovered that most schools do not sponsor their staff to attend international conferences for proper updates and skills on current issues in woodwork technology. Without currently updating their skills in their field of study, they will remain stagnant and not grow in knowledge. This will affect the students' performances during schooling and after graduation. Olaitan (1983, in Umunadi, 2010) indicated that for learning process effectiveness, knowledge of subject matter as well as skills in teaching of technical subjects are essential. It is important therefore, to put in place a technical curriculum program designed to train would-be teachers in the methodology and principles of teaching for effective transmission of knowledge to students. The program designed for teachers should be planned so that methodology of equipment usage should be taught thus enabling technical teachers to use the knowledge, skills and competencies acquired to teach the students so that their performance will be enhanced and this can subsequently lead to the promotion of technical education (Nkpa, 1988, in Umunadi, 2010).

Furthermore, Nkpa pointed out that the teachers are the key elements in the change process involved in science, vocational and technical school curriculum reform and productivity. Oladunjoye (2000) supported the point made



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by Nkpa when he stated that efficiency with which any school organization can be operated depends on the competence and interests of the teachers on the job both as individuals and collectively as a team. Teacher performance on the job is considered as a function of two different variables. One of these is the ability or competence of the teacher to perform the jobs, the second is the motivation to use the competence or skills in the actual performance of the job. One should also understand that sponsoring teachers to attend international conferences and workshops in their fields of study is a form of motivation.

It was also discovered that programs once initiated in the institutions are often not evaluated. This affects the management of the institution's workshops and student performances. The study found out that there is high need for woodwork technology departments to build strong partnership with the Wood Industries to help train/re-train the teachers on current issues in woodwork workshop management. Technical teachers need industry experience to acquire new skills as this will help them grow in their chosen field. Also, most Woodwork Teachers lack Information and Communications Technology (ICT) skills. In this new era of ICT, it is unethical for a teacher not to have at least a basic knowledge of ICT. Most drawings made by the teacher before production should be digital drawings. This is one skill which must be possessed by every technical education teacher. Nzewi (2006) pointed out that teachers should possess adequate skills and competencies that will make them adaptable and productive so as to achieve national goals and objectives for technological advancement in Nigeria. Nkokelonye (2008) supported this point when he explained competence as expertise or accuracy of carrying out tasks. ICT skill is very important especially in this 21st century. Okorie (2000) explained that skill is expertness, practiced ability, dexterity and tact. It is an organized sequence of actions, proficiently executed and usually displaying a flexible but systematic temporal patterning. A well-established habit of doing technical work and acquisition of performance capability is another way of defining skill. Implementation will fail if teachers lack necessary skills and competencies as well as awareness of demands of the programs. There is a need to investigate the skills and competence level of technical education teachers who are invariably the implementers of education programs in Nigeria.

### CONCLUSION

Woodwork Technology as an optional course in the Technical Education program was designed to promote acquisition of skills and competencies in the field of study/work chosen by individuals to enable them become an expert in that field, contribute to national economic growth and earn a living. In the face of rising youth unemployment and the attendant youth restiveness, it is necessary that the Tertiary Institutions should be redirected towards achieving the national and global quest for reducing unemployment, poverty and youth restiveness through empowering the youths to become creative and productive citizens. This is what the Woodwork Technology program is aimed at achieving. Therefore, the workshop which is the engine house for skill acquisition must be properly and effectively managed since the general objectives of Woodwork Technology and curriculum are to stimulate and enhance entrepreneurship in woodwork, prepare students for further studies in vocational and technology education, engineering, architecture, estate management, building construction and so forth; and more so, to meet the needs of students interested in making woodwork a second vacation hobby.



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## RECOMMENDATIONS

The following recommendations are made following analysis of the findings of this study:

- There is an urgent need for the government to adequately fund the woodwork workshops in our institutions offering the course of study as this will help to give learners the required skills to be self-employed or self-reliant, and create more employment for the unemployed youths in the country.
- There is a need for working relationship between the institutions and industry as this will help both the teachers and students in the teaching and learning process.
- Workshops should be managed by trained experts for effective teaching and learning.
- Government should once in a while evaluate or revisit the woodwork technology programs/curriculum in tertiary institutions as this will help to improve the standard of teaching and learning.

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