

Nigerian Online Journal of Educational Sciences and Technology (NOJEST)

Volume 1, Number 2, 2020



OF EDUCATIONAL SCIENCES

AND TECHNOLOGY

NIGERIAN ONLINE JOURNAL OF EDUCATIONAL SCIENCES AND TECHNOLOGY (NOJEST)

NIGERIAN ONLINE JOURNAL nojest@unilag.edu.ng

ASSESSMENT OF WOOD WORKSHOP FACILITIES MANAGEMENT PRACTICES FOR EFFECTIVE TEACHING AND LEARNING IN TECHNICAL COLLEGES OF LAGOS STATE, NIGERIA

Shobowale, I. Olukayode

Department of Science and Technology Education, Faculty of Education, University of Lagos ishobowale@unilag.edu.ng

Oladipo, S. Adebayo Department of Educational Management, Faculty of Education, University of Lagos Ayeoribe, S. Toyin Department of Woodwork Technology Education, Federal College of Education (T), Akoka, Yaba, Lagos, Nigeria

To cite this article:

Shobowale, I. O., Oladipo, S. A. & Ayeoribe, S. T. (2020). Assessment of wood workshop facilities management practices for effective teaching and learning in technical colleges of Lagos State, Nigeria. *Nigerian Online Journal of Educational Sciences and Technology (NOJEST)*, 1 (2), -1

This article may be used for research, teaching, and private study purposes.

Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

Authors alone are responsible for the contents of their articles. The journal owns the copyright of the articles.

The publisher shall not be liable for any loss, actions, claims, proceedings, demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of the research material.

ASSESSMENT OF WOOD WORKSHOP FACILITIES MANAGEMENT PRACTICES FOR EFFECTIVE TEACHING AND LEARNING IN TECHNICAL COLLEGES OF LAGOS STATE, NIGERIA Shobowale, I. Olukayode, Oladipo, S. Adebayo & Ayeoribe, S. Toyin Department of Science and Technology Education, University of Lagos, Nigeria ishobowale@unilag.edu.ng

Article Info Abstract Article History The study assessed wood workshop facilities management practices for effective teaching and learning in technical colleges of Lagos State, Nigeria. The study adopted a descriptive survey Received: 06 March 2020 research design. Three research questions guided the study. The population for the study consisted of 158 respondents, made up of 113 technical teachers and 45 administrators from all technical Accepted: 07 June 2020 colleges in Lagos State. There was no sampling because the population is of manageable size. A structured questionnaire developed by the researchers, titled: Wood Workshop Facilities Keywords Management Practices Assessment Questionnaire (WWFMPAQ) was used for the study. A reliability co-efficient of 0.86 was Assessment, obtained using Cronbach Alpha to determine the internal Management constituency of the WWFMPAQ items. Data collected were practices, analyzed using Mean and Standard Deviation to answer the Technical colleges, research questions. Findings of the study revealed 11 management Wood workshop practices adopted in the planning of wood workshop facilities, 10 facilities management practices adopted in the maintenance of wood workshop facilities and 12 mechanisms adopted for improving wood workshop facilities management practices. It was recommended that technical teachers should participate in the management practice planning of wood workshop facilities, there should be a planned maintenance policy for wood workshop facilities and regular industrial skills in-service teacher training should be organized for improving wood workshop facilities management practices in technical colleges of Lagos State, Nigeria.

Introduction

Wood is a hard, porous and fibrous structural tissue found in the stems of trees. Technically, the term *wood* includes other parts of the tree such as the roots and branches. Woodwork is the art or practice of making products or items such as furniture-tables, chairs, shelves, kitchen and bathroom cabinets and upholstered furniture in a home, room and office from wood. Woodwork in the view of Osita (2013) is a major capital investment and profitable business among a few woodworkers in Nigeria. Woodwork areas of specializations in the national policy of Federal Government of Nigeria (FGN, 2013) include: carpentry and joinery; cabinet making/furniture making; wood machining; and Upholstery. Woodwork as a vocational subject is geared towards training the students to acquire the appropriate knowledge and the necessary practical skills required in the woodworking industries. Therefore, woodwork is taught in the comprehensive secondary school as well as in technical colleges in Nigeria.

Shobowale, I. O, Oladipo, S. A & Ayeoribe, S. T 73 NOJEST, 2020, 1 (2)

Technical colleges are regarded as the principal vocational institutions in Nigeria that give full vocational training intended to prepare students for entry into the various occupations (Okoro, 1993). The responsibilities of technical colleges according to Abdulkadir (2011) include: provision of full time or part-time courses of instruction and training in technology, applied science and commerce, in such other field of applied learning, relevant to the needs of the development in the areas of industrial, commercial and vocational agriculture, professional studies in woodwork trades, among others and pursue further education in advancecraft/technical programme and in post-secondary institutions such as polytechnics, colleges of education (technical) and universities. To date, there are six technical colleges owned and funded by the federal and state government of Nigeria in Lagos State. These technical colleges according to Shobowale (2007) include: Federal science and technical college-Yaba; Government Technical college-Odomala-Epe; Government Technical college-Ikotun; Government Technical college-Ikorodu; Government Technical college-Agidingbi; and Government Technical college-Adosoba. A woodwork graduates from technical college in the opinion of Okwori, Adamu, and Odo (2013) should be capable of independent work; they should interpret technical drawing; perform all the calculations relating to his or her trade; and have sufficient knowledge of elementary science to understand the materials in which he or she works with. The authors stated further that the training in technical colleges should be geared towards securing employment at the end of the programme as craftsmen; set up their own businesses; and pursue further education in advanced craft technical programme or in tertiary technical institutions. However, attainment of the goals and objectives of technical colleges is largely dependent on the effective teaching and learning process.

Teaching is the act of imparting instructions to the learners in the classroom situation. In other word, teaching is the task of a teacher, which is performed for the development of a learner (Sequeira, 2017). The author stated that learning is about a change that brought about by developing a new knowledge, skills, understanding a scientific law and changing an attitude. According to Awanbor (1997) learning is a relatively permanent or persistent change in behaviuor patterns of the human organism, which occurs as a result of training, practice or experience. To maintain a productive teaching and learning instructions in woodwork, it requires the use of functional workshop facilities.

A workshop is a place where students acquire knowledge on the operations of various processes involved in manufacturing woodworking industry. The woodworking industry in the opinion of Jaggar, and Smith (2000) is the sector of the economy that plans, designs, constructs, refurbishes, maintains, repairs and eventually finishing woodworking products of all kinds. Wood workshop is a learning and project jointing activities environment of woodwork facilities. The Wood workshop offers students and teachers the space they need to create prototypes, project activities and short-run production using facilities. Facilities as sources of knowledge and information from which students can expand and enrich their learning experiences; these facilities are indispensable for teaching and learning to take place (Essien, 1996). Facilities are sources of knowledge and information used for teaching and learning of skills in woodwork. These facilities according to Shobowale (2015) include: Machinescomputers, combination machine, thicknesser machine, lathe-machine, drill-press machine, among others; Equipment-compressors; spray guns; portable electric drills; portable jig saws; portable sander; among others); Hand Tools-holding and supporting tools, geometrical tools, percussion and impelling tools, and cutting tools; and Consumable-Materials-solid-wood, manufactured-boards, stuffing, fittings, adhesives, abrasives, and finishes. Puyate (2013) stated that the availability and effective use of educational facilities for training in any technical college enhance the vital process of skills development, which will in turn empower its students

to be productive and contribute to the national development. In this study, wood workshop facilities are sources of knowledge and information from which students can expand and enrich their economic and production skills experiences. These skills experiences can be acquired in a well-managed workshop.

Management in the view of Osinem (2008) is the co-ordination of all the resources of an organization through the process of planning, organizing, directing and controlling in order to attain organizational economic and productive goals and objectives. Asiabaka (2008) described management as the application of scientific methods in the planning, organizing, decision-making, co-ordination, and maintaining of the physical learning environment for the actualization of the educational goals and objectives. Asiabaka stated that management involves collective decision making in relation to design, manufacturing, renovation and modernization of old plants, and provision of training facilities for academic practice. Practice is a learning technique that involves the repetition of specific facts or skills over a period time. Lynch (2019) described practice as an activity in which individual apply acquired information at a stage when the teacher remains available to assist.

Management practices is an entity of analytical instruments used to support the managers at work in the implementation of the selected management concept. Common management practices according to Sutherland and Canwell (2004) include: preparing for training facilities; empowering staff, training students; and introducing schemes of various forms of new technology for improving quality of training. Abdulkadir and Ma'aji (2014) posited that the available facilities in wood workshop have been grounded and overstretched; they lack adequate management practice to equip students with the requisite knowledge, attitude and skills needed for gainful employment. With reference to this study, management practices are the application of scientific methods in the planning organizing, coordinating and maintaining of woodwork shop facilities to enable learners to test their abilities learn over a period of time for economic and production skills entropies. This explained that there is a need to constantly assess the wood workshop facilities management practices in order to equip students with requisites economic and production skills experiences.

Assessment is the process of documenting knowledge, attitudes or beliefs and skills of an individual in a particular subject area or field of study (Ifeanyieze, 2012). Assessment according to Fadil and Ruslan (2006) is a vital part of the training design which endeavours to investigate the performance gaps of people on their jobs in order to identify what needs to be learnt. Okoro (2002) commented that assessment enables teachers provide proper guidance to students, determine students' understanding of what they are being taught and provide feedback to them on how well they are going academically. In other words, assessment must start with a need to identified a gap between training deficiencies and the wood workshop facilities management practice adopted for requisite skills acquisition. In view of this study, assessment is a systematic process of gathering and documenting information, knowledge, strength, weakness and quantifying data with a view to making value judgment about wood workshop facilities management practices adopted for requisite economic and production skills acquisition in technical colleges. however, assessment of wood workshop facilities management practices demands innovative planning strategies to succeed.

Planning is one of the basic managerial functions. Planning is a process whereby a teacher visualizes and forecast into the future of what, why and how of the teaching process; determine means and ends, and constructs a framework that will guide his or her future actions. Santos (2014) asserted that planning is an indispensable element in teaching and learning process. Planning in the view of Appleby (1994) is the formal process of developing goals, objectives, strategies, tactics, and action plans regarding the transformation of inputs (production factors

Shobowale, I. O, Oladipo, S. A & Ayeoribe, S. T 75 NOJEST, 2020, 1 (2)

such as natural and human resources, technology, capital, and entrepreneurship) into outputs (products and services). According to Mcgrawhill (2016), instructional planning helps a teacher to identify specific learning outcomes, carefully select materials that will help in realizing the expected outcomes and coherently organize learning experiences into a reinforcing succession. Similarly, Nkom (2008) argued that instructional planning gives a teacher the opportunity to select the contents of the curriculum, choose a topic to teach, select appropriate facilities, design learning activities, select appropriate teaching methods and allocate instructional time wisely. Doyin (2004) contended that lack of planned practice policy in the workshop affects the available facilities, which in turn affect the teaching and learning of technical college courses. The author stated that planning requires administration to assess where the workshop is presently set, and where it would be in the upcoming goals and objectives. This implies that planning of wood workshop facilities is closely connected with creativity, innovation and drawing up plans that will enhance adequate maintenance wood workshop facilities for optimal health and safety benefits.

Maintenance is the activity of measurement, replacements, adjustment, and repairs a functional unit to its required functions (Iloma, 2013). Maintenance in the opinion of UCSC Physical Plant (2004) is concerned with the repair or replacement of facility components or equipment requiring immediate attention because the health, safety or security of life is endangered. Nhlapo (2006) argued that facility maintenance is basically relates to the repair, replacement and general upkeep of physical facilities found in school workshops, grounds and safety systems. Dabban and Abbas (2000) opined that periodic oiling of machines reduces the wear of moving parts and prolong the life span of the equipment. Facilities maintenance according to Szuba and Young (2003) are preventive, predictive, corrective and routine activities of measurement for ensuring that facilities are always in good working order and provides safety for educators and learners. Carter & Carter (2001) stated that routine maintenance refers to the repair, replacement and general upkeep of the equipment and buildings. To ensure maximum functional facilities for economic and productive skills output, appropriate mechanisms for improving management practices are required.

A mechanism is a device that transforms input forces and movement into a desired set of output forces and movement. Mechanisms generally are technical and mechanical devices for effective managing of wood workshop facilities in teaching-learning environment. Abdulkadir and Ma'aji (2014) emphasized that mechanisms on the security of equipment would improve wood workshop facilities management practice, which will in turn lead to improved skills acquisition in technical colleges. Mechanisms needed for wood workshop facilities management practice in the opinion of Okorie (2000) include: machines should be fixed on the floor firmly; carefully organizing the, equipment, tools, consumable items in the store; and establishing clear rules and regulations. However, mechanism refers to technical and mechanical transform input forces and movement desired for improving wood workshop facilities management practices needed for economic and productive skills acquisition in technical colleges.

Indeed, assessment of wood workshop facilities management practices adopted in technical colleges aimed to provide teaching and learning instructions that will enable learners acquire productive skills for self- employment and become labour assets in the woodworking industries in Lagos State, Nigeria.

Statement of the Problem

Technical colleges are mainly established for the training of students to acquired economic and productive knowledge, attitudes and skills in woodwork. Woodwork is taught in in technical colleges, with emphasis geared towards training the students to acquire the appropriate knowledge, necessary economic and production skills to plan, designs, constructs, manufactures, maintains, repairs, and apply finishes on woodwork products of all kinds needed in the woodworking industries. Ogwo and Oranu (2006) explained that the major concern of good workshop facilities management is the identification and judicious utilization of available resources to achieve the objective of helping the learners to learn and to encourage them to practice what they have learnt. Wood workshop facilities management practice for teaching and learning appears to provide clean and safe environments for students with the requisite practical knowledge, attitude and skills needed for gainful employment and improve students' abilities to maintain harmony and order in the school workshop. Observations also reveals that wood workshop facilities management practice shows how teachers can prevent misbehaviours, by carefully establishing clear rules and regulations that are needed for requisite practical skills acquisition. Incidentally, these technical colleges appear not fulfilling these objectives and observations revealed that some of the available facilities have been grounded, lack appropriate management practices in planning and maintenance in the wood workshop. It does appear that management practices adopted for planning and maintaining in the wood workshop facilities by the woodwork teachers may be responsible for these deficiencies, which has greatly rendered the system in active. Hence, the need to observe appropriate mechanisms for improving the wood workshop facilities management practices for effective teaching and learning in technical colleges. It is against this backdrop that this study was conceived to assess wood workshop facilities management practices for effective teaching and learning in technical colleges of Lagos State, Nigeria.

Purpose of the Study

The major purpose of this study was to assess the wood workshop facilities management practices for effective

teaching and learning in technical colleges of Lagos State, Nigeria. Specifically, the study sought to determine:

- 1. Management practices adopted in the planning of wood workshop facilities in technical colleges.
- 2. Management practices adopted in the maintenance of wood workshop facilities in technical colleges.
- 3. The mechanisms adopted for improving wood workshop facilities management practices in technical colleges.

Research Questions

The following research questions were formulated to guide the study.

- 1. What are the management practices adopted in the planning of wood workshop facilities in technical colleges?
- 2. What are the management practices adopted in the maintenance of wood workshop facilities in technical colleges?
- 3. What are the mechanisms adopted for improving wood workshop facilities management practices in technical colleges?

Method

A descriptive survey research was adopted for this study. The study was carried out in Lagos State, Nigeria. The population for the study consisted of 158 respondents, made up of 45 administrators and 113 technical teachers from all the six technical colleges in Lagos State. There was no sampling because the population (administrators and technical teachers) is of manageable size. A structured questionnaire developed by the researchers, titled: Wood Workshop Facilities Management Practices Assessment Questionnaire (WWFMPAQ) was used as instrument for data collection. The instrument was validated by three experts, two teachers from technical colleges and one lecturer from the Department of Science and Technology Education, University of Lagos, Nigeria. The questionnaire was assigned Five Likert points rating scale of strongly agree (5), agree (4), undecided (3), disagree (2), and strongly disagree (1) respectively. 158 copies of questionnaire were distributed to the respondents by the researchers with the help of three research assistants appointed for the study. Out of 158 copies of questionnaire distributed, 138 copies of the questionnaire were dully filled and returned by the respondents to the researchers and the retuned rate was 88.4%. Mean and Standard Deviation were used to analyzed the data for answering the three research questions. A Mean score of 3.50 was used as a bench mark for accepting or rejecting items. Therefore, items with a Mean score of 3.50 and above were considered Agreed; while items with Mean score of 3.49 and below were considered Disagreed.

Results

Research Question 1

What are the management practices adopted in the planning of wood workshop facilities in technical colleges? The data for answering research question 1 are presented in Table 1.

Table 1: Mean Rating of Responses of the Respondents on the Management Practices Adopted in the Planning of Wood Workshop Facilities in Technical Colleges.

N=138				
S/N	Management Practices Adopted in the Planning of Wood Workshop Facilities	\overline{x}	SD	Remar ks
1.	Technical teachers participate in the planning of wood workshop facilities.	3.8 8	1.21	Agreed
2.	Formulating alternative plans of wood workshop facilities management practices	3.5 9	1.35	Agreed
3.	Safety precautions are taken into consideration when planning of wood workshop facilities.	3.7 5	1.39	Agreed
4.	Curriculum contents determine the planning of wood workshop facilities.	3.4 5	1.47	Agreed
5.	Student enrolments are taken into consideration when planning for wood workshop facilities.	3.9 5	1.47	Agreed
6.	Selection of relevant equipment, tools and materials needed to implement tasks during planning.	4.0 9	1.05	Agreed
7.	The number of practical periods determines planning of wood workshop facilities.	3.9 5	1.21	Agreed
8.	Training objectives influences the planning of wood workshop facilities.	4.3 3	0.87	Agreed
9.	Attention is given to subject topics areas during planning of wood workshop facilities.	3.8 5	1.23	Agreed
10.	Provision of the spare parts are taken into consideration during planning of wood workshop facilities.	3.6 0	1.42	Agreed
11.	Planning of wood workshop facilities depends on what the workshop is design for.	4.3 0	1.34	Agreed

The data presented in Table1 revealed that all 11 items had their *Mean* values ranges from 3.45 to 4.33. This indicated that the *Mean* scores were above the cut-off point of 3.50, showing that the respondents agreed to all the 11 items as the management practices adopted in the planning of wood workshop facilities for effective teaching and learning in technical colleges of Lagos State, Nigeria.

Research Question 2

What are the management practices adopted in the maintenance of wood workshop facilities in technical colleges? The data for answering research question 2 are presented in Table 2.

Table 2: Mean Rating of Responses of the Respondents on the Management Practices Adopted in the Maintenance of Wood Workshop Facilities in Technical Colleges. N_{-} 128

	N=138				
<i>S</i> /	Management Practices Adopted in the Maintenance of Wood	\overline{x}	SD	Remar	
N	Workshop Facilities			ks	
1.	There is planned maintenance policy for facilities in the wood	3.6	0.8	Agreed	
	workshop.	9	1		
2.	Routine maintenance is observed on wood workshop facilities	3.4	0.8	Agreed	
	regularly.	5	8		
3.	Predictive maintenance is observed on wood workshop facilities	3.9	0.9	Agreed	
	regularly.	5	4		
4.	Damaged wood workshop facilities are being replaced or repair	3.9	0.9	Agreed	
	regularly.	5	1		
5.	Students are encouraging to clean and oiling wood facilities after use.	4.3	0.6	Agreed	
		5	1		
6.	Corrective maintenance is observed on wood workshop facilities	3.5	1.1	Agreed	
	regularly.	4	9		
7.	Operational maintenance manuals are available for wood workshop	3.7	1.1	Agreed	
	facilities.	5	0		
8.	Preventive maintenance is observed on wood workshop facilities	3.6	0.8	Agreed	
	regularly.	9	4		
9.	Qualified personnel are involved in the maintenance of wood workshop	3.4	1.3	Agreed	
	facilities.	5	5		
10.	Adequate fund is provided for the maintenance of wood workshop	3.9	1.1	Agreed	
	facilities.	0	0		

The result of data analysis presented in Table 3 showed that all 10 items had their Means ranging from 3.45 to 4.35. Each item was above the cut-off point of 3.50, this implies that all the respondents agreed with all the 10 items on the management practices adopted in the maintenance of wood workshop facilities for effective teaching and learning in technical colleges of Lagos State, Nigeria.

Research Question 3

What are the mechanisms adopted for improving wood workshop facilities management practices in technical colleges? The data for answering research question 3 are presented in Table 3.

Table 3: Mean Rating of Responses of the Respondents on the Mechanisms Adopted forImproving Wood Workshop Facilities Management Practices in Technical Colleges.

$\frac{N=138}{Mechanisms Adopted for Improving Management Practices of x SD Remarks}$				
S/N	Wood Facilities	л	52	Remains
1.	Regular industrial skills in-service training for wood workshop technical teachers.	4.08	0.81	Agreed
2.	Disciplinary actions should be taken against any theft cases in the wood workshop.	4.32	0.88	Agreed
3.	Reporting personal health and accident issues to the school authority promptly.	4.22	0.72	Agreed
4.	Conferences and seminars should be organized for wood workshop teachers regularly.	4.65	0.74	Agreed
5.	Keeping of maintenance records of all the wood workshop facilities accordingly.	3.54	0.76	Agreed
6.	Adequate supervision should be given to oiling of wood workshop facilities.	3.97	0.77	Agreed
7.	Qualified personnel should be employed as technician in the wood workshop.	4.05	0.93	Agreed
8.	Proper layout of workshop to show clearly carriage ways/locations of wood facilities.	4.24	0.59	Agreed
9.	Arrange equipment and tool on the shelves and boxes based on the function they perform.	4.42	0.66	Agreed
10.	Establishing clear rules and regulations for training in the wood workshop.	3.75	0.87	Agreed
11. 12.	Fixing machines on the wood workshop floor firmly. Store inflammable materials in a save places in the wood workshop.	4.06	0.64	Agreed Agreed

Analysis in Table 3 showed that all 12 items had their Mean ranged from 3.54 to 4.65. Each item was above the cut-off point of 3.50. The items were, therefore, found suitable as mechanisms adopted for improving wood workshop facilities management practices for effective teaching and learning in technical colleges of Lagos State, Nigeria.

Discussion

The findings as contained in Table 1 revealed that all the respondents agreed on the 11 items as management practices adopted in the planning of wood workshop facilities for effective teaching and learning in technical colleges. The management practices adopted in the planning of wood workshop facilities include: technical teachers participate in the planning of wood workshop facilities; formulating alternative plans of wood workshop facilities management practices; safety precautions are taken into consideration when planning of wood workshop facilities; student enrolments are taken into consideration when planning for wood workshop facilities; among others in the management practices adopted in the planning of wood workshop facilities for effective teaching and learning in technical colleges. The findings agreed with the views of

Jojoh (2006) who stressed that improper planning of the workshop facilities results in wastages as well as poor management of human and resources. The findings also in line with the view of Aromolaran (2000) who stated that effective planning of workshop facilities determines the achievement of training goals and objectives. The findings and the opinions of authors cited above helped to justify the findings of this study on 11 items as management practices adopted in the planning of wood workshop facilities for effective teaching and learning in technical colleges of Lagos State, Nigeria.

Findings in Table 2 revealed the views of respondents on the 10 items as management practices adopted in the maintenance of wood workshop facilities in technical colleges. The management practices adopted in the maintenance of wood workshop facilities include: there is planned maintenance policy for facilities in the wood workshop; routine maintenance is observed on wood workshop facilities regularly; predictive maintenance is observed on wood workshop facilities regularly; damaged wood workshop facilities are being replaced or repair regularly; students are encouraging to clean and oiling wood facilities after use; among others as the management practices adopted in the maintenance of wood workshop facilities in technical colleges. The findings are in agreement with the work of Dabban and Abbas (2000) who opined that periodic oiling of machines reduces the wear of moving parts and prolong the life span of the equipment. The findings also agreed with the views of Szuba and Young (2003) who argued that scheduled maintenance of facilities are crucial for ensuring that facilities are always in good working order and provides safety for educators and learners. The findings and works of authors above gave credence to the findings of this study on 10 items as management practices adopted in the maintenance of wood workshop facilities for effective teaching and learning in technical colleges of Lagos State, Nigeria.

Analysis in Table 3 revealed that all the respondents agreed with all the 12 items as the mechanisms adopted for improving management practices of wood workshop facilities in technical colleges. The mechanisms adopted for improving management practices of wood facilities include: regular industrial skills in-service training for technical teachers; disciplinary actions should be taken against any theft cases in the wood workshop; reporting personal health and accident issues to the school authority promptly; conferences and seminars should be organized for wood workshop teachers regularly; keeping of maintenance records of all the wood workshop facilities accordingly; among others as mechanisms for improving management practices of wood workshop facilities adopted for effective teaching and learning in technical colleges The findings of the study are in agreement with the work of Abdulkadir and Ma'aji (2014) who contended that mechanisms on the security of equipment would improve the effective management of workshop as well as the facilities, which will in turn lead to improved skills acquisition in technical colleges. The findings of the study also supported the view of Okorie (2000) who opined that machines should be fixed on the floor firmly; carefully organizing the, equipment, tools, consumable items in the store; and establishing clear rules and regulations. The opinions and study of authors above gave credence to the findings of this study on 12 items as mechanisms adopted for improving wood workshop facilities management practices for effective teaching and learning in technical colleges of Lagos State, Nigeria.

Conclusions

Based on the findings of this study, it was concluded that technical teachers participate in the planning of wood workshop facilities and planning of wood workshop facilities depends on what the workshop is design for. The study posited that there is planned maintenance policy

for facilities in the wood workshop and adequate fund is provided for the maintenance of wood workshop facilities. This study concluded to identify regular industrial skills in-service training for wood workshop technical teachers; establishing clear rules and regulations for training in the wood workshop; store inflammable materials in a save places in the wood workshop; among others as mechanisms for improving of wood workshop facilities management practices, which will in turn lead to improved economic and production skills acquisition. Consequently, graduates from technical colleges will be able to acquire adequate economic and production skills training to enable them set-up and run their own woodworking enterprise or be employable in the woodworking industries of Lagos State, Nigeria.

Recommendations

Based on the findings of this study, the following recommendations were made:

- 1. Technical teachers should participate in the management practice planning of wood workshop facilities for effective teaching and learning in technical colleges.
- 2. There should be a planned maintenance policy for facilities in the wood workshop for effective teaching and learning in technical colleges.
- 3. Regular industrial skills in-service training should be organized for improving wood workshop facilities management practices for effective teaching and learning in technical colleges.

References

- Abdulkadir, M. (2011). Assessment of teaching-learning practices in practical motor vehicle mechanics work at technical college level in Niger State, Nigeria. (Unpublished M. Tech thesis). Federal University of Technology, Minna.
- Abdulkadir, M., & Ma'aji, S. A. (2014). Assessment of workshop facilities management practices in Technical Colleges of Niger State *International Journal of Scientific and Research Publications*, 4(7), 1-6.
- Appleby, C. R. (1994). Modern business administration. 6th Ed. London: Pitman Publishing.
- Aromolaran, E. A. (2000). Fundamental of management. Shomolu. Lagos: BVL Print Technologies.
- Asiabaka, I. P. (2008). The need for effective facility management in schools in Nigeria. New York Science Journal. Retrieved August 24, 2019 from http://www.sciencepub.net/newyork/0102/02, 10-21.

Awanbor, D. (1997). Learning and learning difficulties. Osasu Publishers Benin City, do State.

- Carter, S. P., & Carter, S. L. (2001). *Planning safer schools*. USA: Primedia Business Magazines and Media Inc.
- Dabban, M. I., & Abbas, Z. S. (2000). Involvement of technical teachers in the maintenance of introductory technology equipment for effective teaching in schools. *Journal of Technical education (JOVED)* Federal College of Education, Katsina 2(1), 29-37.
- Doyin, O. O. (2004). Strategies for improving the teaching and learning of Motor Vehicle Mechanic trade in some selected technical colleges in Osun State. (Unpublished Undergraduate Study). Kaduna Polytechnic, Kaduna.
- Essien, E. E. (1996). An evaluation of technical education programmes in secondary schools In Akwa Ibom State. (Unpublished M.Ed. Thesis). Department of Vocational Teacher Education. University of Nigeria, Nsukka.
- Fadil, H., & Ruslan, A. A. (2006). Imperatives of construction workforce training: Improving the Provisions with Training Best Practice. In: *Proceedings of the International*

Conference in the Built Environment in the 21st Century: ICiBE 2006. Kualalunpur, Malasia.13-15 JUNE.

- Federal Government of Nigeria (2013). *Nigeria National Policy on Science and Technology* (2" Edition) Lagos: Federal Ministry of Science and Technology.
- Ifeanyieze, F. O. (2012). *Skill improvement needs of teachers of agricultural education in soil conservation in colleges of education in South-Easther, Nigeria.* (Unpublished Ph.D Thesis), Department of Vocational Teacher Education, University of Nigeria, Nsukka.
- Iloma, U. (2013). Effects of digital technology in the teaching and learning of basic technology in Junior Secondary Schools in Rivers State. *Journal of Studies in Education* 7(1), 59-66.
- Jaggar, D., & Smith, J. (2007). Building cost planning for the design Team. Oxford: Butterworth-Heinemann.
- Lioyd, C. F., & Robert, B. M. (2006). *Delegating skills for leaders*. An action plan for success as a manager. Thomson Place, Boston, MA. Retrieved May 26, 2013, from http://www.axzopress.com/downloads/pdf.
- Mcgrawhill (2016) *Instructional planning and assessment*. Retrieved on March 5, 2019 from http://highered. mheducation.

com/sites/dl/free/0070959668/405859/ Airasian_88697_ ch03.pdf.

- Nhlapo, V. A. (2006). *Managing school safety in the primary school*. Vanderbijlpark: North West University.
- Nkom, A. A. (2008). General *methods for the professional teacher: A training manual*. Kaduna: BI-SHAAN Publishing.
- Ogwo, B. A., & Oranu, R. N. (2006). *Methodology in formal and non-informal technical/vocational education*. Enugu, Ijejas Printers and Publishers Company.
- Okorie, J. U. (2000.) Developing Nigeria's work force. Calabar. Mackey Environs Publishers.
- Okoro, O. M. (2002). *Measurement and evaluation in education*. Uruowulu-Obosi, Pacific Publishers.
- Okoro, O. M. (1993). *Principles and methods in vocational and technical education*. Enugu: University Trust Publishers.
- Okwori, R. O., Adamu, M. M., & Odo, I. M. (2013). Evaluation of Practical Skills Possessed by Woodwork Graduates of Technical Colleges in Niger State, *Nigeria. Multilingual Academic Journal of Education and social sciencies.* 1(2), 73-82.
- Osinem, E. C. (2008). *Management agricultural education and training: Resources, principles and methods*. Enugu: Ijeyas Printer and Publishers Co.
- Osita, O. H. (2013). Entrepreneurial skill development in woodwork trade: A panacea to the challenges of youth unemployment. *Mediterranean Journal of Social Sciences MCSER Publishing, Rome-Italy, 4(8), 99-105.*
- Puyate, S. T. (2013). Survey of vocational education facilities in government technical colleges in Rivers State. *The Journal of Nigeria Association of Teachers of Technology (NATT)* 4 (1), 175 – 176.

Santos, A. (2014). *Instructional planning*. Retrieved on February 2, 2019 from: http://www.slide share.net/gerouggy/

instructional- planning-38791965.

- Sequeira, A. H. (2017). Introduction to concepts of teaching and learning. Retrieved July 24, 2019 from https://www.researchgate.net/publication/256035169.
- Shobowale, I. O. (2015). Development of entrepreneurship skills training module in upholstery and furniture-making for improvement of craftsmen in Lagos State, Nigeria. (Unpublished Ph.D Thesis), Department of Vocational Teacher Education, University of Nigeria, Nsukka.

Sutherland, J., & Canwell, D. (2004). *Key concepts in management*. New York: Palgrave MacMillan.

Szuba, T., & Young, R. (2003). *Planning guide for maintaining school facilities*. Washington, DC: National Forum on Education Statistics.

UCSC Physical Plant (2004). *Frequently asked questions. University of California. Available.* Retrieved July 24, 2019 from http://ucscplant.ucsc.edu/ucscplant/index.jsp?page=FAQ#faq11.

Authors Information				
*Shobowale, I. Olukayode	Oladipo, S. Adebayo			
Department of Science and Technology	Department of Educational Management,			
Education, University of Lagos, Nigeria.	University of Lagos, Nigeria.			
ishobowale@unilag.edu.ng				
	Ayeoribe, S. Toyin			
	Department of Woodwork Technology			
	Education Federal College of Education (T),			
	Akoka, Yaba, Lagos, Nigeria.			