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ASSESSMENT OF UP-SKILLING NEEDS OF WOODWORK TEACHERS IN NIGER STATE TECHNICAL COLLEGES FOR NATIONAL DEVELOPMENT

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ABSTRACT

This study was designed to assess up-skilling needs of woodwork teachers in Niger state technical Colleges. Specifically the study determined the skill required, skill possessed and up-skilling needs of teachers. Three research questions were formulated to guide the study and a 30-item structured questionnaire was used for data collection. The research questions assessed the skill required, skill possessed and up-skilling needs of technical colleges' teachers in Niger state. The questionnaire was validated by 2 Woodwork lecturer from the Industrial and Technology Education Department, Federal University of Technology, Minna. The questionnaire was filled by teachers and was used for the analysis using IBM Statistical Package for the Social Sciences (SPSS), version 20. Mean and standard deviation were used for answering two research questions. While Discrepancy model was used to determine the up-skilling needs as a difference between skill required and skill possessed by soughting for the mean difference between skill required and skill possessed using t-test. The findings revealed that the skill possessed by woodwork teachers is low compared to the skill required by the teachers which indicates that there is need for up-skilling. Based on these findings, some recommendations were made, among which are that the state Ministry of Education should use the skill need to upgrade curriculum of technical colleges and the management of the colleges under study should use the identified skills needed to organize a capacity building workshop for teachers.

BACKGROUND OF THE STUDY

The widespread of skill shortages in Technical education does not left out the woodwork technology teachers. According to Okebukola (2002), the National Summit on higher education was convened to develop the forth review in a series of surveys designed to fashion out appropriate strategies for quality university education in Nigeria in the 21st century. The implication of this for the technical teachers in general and woodwork teachers in particular is that today's training skill shortages are tremendous. Consequently, skill shortages in woodwork technology teachers are having an extensive impact on technical college students' performance (Adavbiele, 2013). Therefore, for a nation to be developed technologically, there is need for the improvement in skill acquisition of technical teachers.

The contributions of woodwork teachers to National Development cannot be over emphasized as they were involved in the area of training students in theoretical and practical aspects of woodwork which also includes maintenance of laboratory woodwork tools, equipment and workshop management as job tasks in the workshop.

However, the woodwork industry is undergoing a lot of transformation as a result of technological development. The technological development in woodwork involves the new advanced processes of woodworking. The development of new technology has led to the introduction of new woodwork tools, machines, and above all new ways of wood processing from forest to room. The new tools includes introduction of shaping machines, orbital sanders, wood splitters, wood processing machine, spindle moulder machine, wood router, radial arm saw, sophisticated thicknesser, woodwork lathes, jointer, portable power saw, portable electric drill, mortiser, jig saw routers, moreso, refined sensors of forms and online control of sawmilling operations has recently been developed (Agbo, 2004).

According to Umar, Idris, Audu, Hamza, Igwe & Maaji (2014), the effect of these new tools and equipment are the new ways of wood processing, for instance the joint making, planing, sawing, cuttings, smoothing, surfacing and many other operations are carried out using Computer Numerical Controlled machines (CNC). The implication of these technological developments to the woodwork teachers of technical colleges is the need for up-skilling in order to be up-to-date in their primary assignment as well as to help the students in workshop practical's and maintenance.

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Up-skilling can be referred to as the renewal or updating of skill of worker's attitude, knowledge, competences and work habits to enable them perform to the expectations of the employers and earn credit for their performance (Imhabekhai, 2000). Also, Up-skilling according to (the Canadian chamber of commerce, 2013) refers to the skills development and up-grading of employees knowledge, with the purpose of enhancing skill sets of employees to provide better performance in their current positions. Consequently, up-skilling of teachers in technical colleges refers to up-grading the skills and knowledge of the teachers to meet up with the challenges of technological development in woodwork technology. These type of up-skilling need may includes induction training, upgrading skills, multi-skilling, on-the-job and off-the-job training. Such up-skilling takes place in formal settings which includes, Tertiary institutions, National Agency for Science and Engineering Infrastructure (NASENI), Federal Ministry of Labour, Productivity and Industries, among others.

Up-skilling is planned based on Assessment of skill needs. Huba and Freed (2000) described assessment as the process of ascertaining skills, knowledge and competences of workers. Therefore, assessment in the context of this study is a systematic process of identifying up-skilling needs of woodwork teachers in Technical Colleges in Niger state for national development. Establishing up-skilling needs require the use of needs assessment model. There are various models of Needs assessment (McKillip, 2000). These models of needs assessment are the Discrepancy Model (DM) which is described as most straight forward and thus widely used in education and also it's about determining the skills required for job performance, the skills possessed and the difference between the skills required and possessed which are the needs. The Marketing Model (MM) which is a feedback process of need assessment that aids organizations to adapt and learn about the needs of their clients. Decision Making Model (DMM) involves the use of Multi Attribute Utility Analysis (MAUA) to solve problems on modeling and synthesis in applied research work. The most appropriate model for this type of study is therefore the Discrepancy Model because it helps in determining the difference between actual level of job performance and the expected level of job performance and this can be used for developing training programme (Kaufman, 1998). This model shall therefore be used as a guide in formulating the objectives of the study and conducting the study. Recognising the contributions of the technology teachers generally and woodwork teachers in particular to National Development and the Technological Development that has been going on in woodwork sectors and their implications to the technical education, it is therefore necessary to carry out Need Assessment using the Discrepancy Model of Assessment to determine up-skilling needs woodwork teachers in Niger state technical colleges.

STATEMENT OF PROBLEM

Woodwork teachers are service providers in technical colleges for national development. The services includes teaching students in art of general woodworking, such as construction of wood products, workshop management and maintenance. The woodwork teachers receive training through formal educational system and obtained Nigeria Certificate in Education (NCE) (Tech), Bachelor of Education (B.Ed Tech) in woodwork technology. However, in recent times there are a lot of advancements in the tools and equipment used for providing such services as well as woodwork processing (Bushra, 2015). The implications of these developments in equipment and tools to the wood teachers is that the training received by them is outdated because some of them were not trained with the modern tools, equipment and as such may find it difficult to operate these new tools and equipment even if they are made available to them (Umar, Idris, Audu, Hamza, Igwe, & Maaji, 2014). This also means that their performance in workshop poses a negative effect on student practicals as some of them cannot adequately guide students when it comes to design and construction of wood projects.

Purpose of the Study

The purpose of this study is to use the discrepancy model to assess the up-skilling needs of woodwork teachers in technical colleges in Niger State, Nigeria. Specifically, the objectives of the study are to determine the:

- Skills required by woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.
- Skills possessed by woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.
- The up-skilling needs of woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.

Research Questions

The following research questions were established to guide the study.

- What are the skills required by woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.
- What are the skills possessed by woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.
- What are the up-skilling needs of woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.

METHODOLOGY

This study is a descriptive survey research and it adopted a cross sectional survey research design. It involves the use of structured questionnaires on up-skilling needs of woodwork teachers in technical colleges in Niger state to solicit information from woodwork technology teachers. The cross sectional survey design was considered most appropriate for this study because according to Louis, Lawrence and Keith (2007), cross-sectional study is one that seeks the views of a cross section of a population from different background with a view to describing the view of all population.

The study was carried out in Government Technical College Minna, Bida, Shiroro, Kontagora and Pandongari Niger State, Nigeria. The choice of Technical colleges in Niger state was considered because of the fact that these collges trained students on various fields in woodwork Technology, with a large population of students and resource materials needed to carry out the research study. The population of the study consisted of all woodwork technology teachers in the five technical colleges under study. The population is 20, based on the information from various colleges. Since the sample size was small the entire population was used.

A structured questionnaire developed from the literature reviewed was used for the data collection. The questionnaire had 40 items on the skill required and skill possessed, which were to be responded to by woodwork teachers. The response modes were: Highly Required (HR, 4.50 - 5.00) , Required (R, 3.50 - 4.49), Moderately Required (MR, 2.50 - 3.49), Slightly Required (SR, 1.50 - 2.49) and Not Required (NR, 1.50 - 2.49) for the section on skills Required. Highly Possessed (HP, 4.50 - 5.00), Possessed (P, 3.50 - 4.49), Moderately Possessed (MP, 2.50 - 3.49), Slightly Possessed (SP, 1.50 - 2.49), Not Possessed (NP, 1.50 - 2.49) for the section on skills possessed.

The instrument was face validated by 2 experts from the department of Industrial and Technology Education, Federal University of Technology, Minna, Nigeria. A corrected version reflecting the experts' advice was used to draft the final copy of the questionnaire. A pilot testing of the questionnaire was carried out with five respondents (woodwork teachers) of Government Technical College New-Bussa, Niger State, Nigeria. Cronbach Alpha Formula was used to determine reliability coefficient of the instrument. A reliability coefficient of 0.79 was obtained which according to Gliem & Gliem (2003) is the measure of internal consistency with efficient reliability. The data collected for this study is from a self-administered structured questionnaire conducted at colleges under study. Twenty (20) copies of the questionnaire were administered on the respondents and retrieved with 100% return rate.

RESULTS AND DISCUSSION

Descriptive statistics (mean and standard deviation) was used to answer the research questions. To determine the level of skill required, skill possessed and skill needs of woodwork teachers, the resulting mean ratings were interpreted relative to the concept of the real lower and upper limits of numbers 1-5 as used on the rating scale adopted for the study. The decision points were based on the interpretation:

Research Question One

- What are the skills required by woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.

Table 1: Mean and Standard Deviation of Woodwork Teachers in Technical Colleges in Niger State, Nigeria on the Skill required for National Development

S/N	Items	N		SD	Remark
•	State classification of wood into hard and soft wood.	20	3.62	1.35	R
•	Identify both physical and mechanical properties of timber and its characteristics	20	3.60	1.13	R
•	State technical names for marketing wood.	20	3.71	1.13	R
•	Cut, square, and face timber to a given size	20	3.62	1.18	R
•	Mark off and make the joint commonly used in the profession, such as mortise and tenon joints, halving joints, cut housings; bridle joints; and angle bridle joint	20	3.65	1.27	R
•	Fit and fix in doors; windows and architraves	20	3.56	1.27	R
•	Identify modern woodworking tools.	20	3.70	1.21	R
•	Identify wood defects both natural and artificial.	20	3.62	1.26	R
•	Treat wood with relevant preservative materials.	20	3.83	1.18	R
•	State manufacture board process and its application.	20	3.62	1.27	R
•	Identify various types of wood adhesives, abrasives and wood finishing	20	3.69	1.10	R
•	Carry out basic practices of wood sawing and planning	20	3.39	1.25	R
•	Set out and construct straight flight stairs	20	3.71	1.26	R
•	Work to a detailed drawing and transfer details to a full size set out	20	3.86	1.13	R
•	Erect a free standing scaffold in a safe manner	20	3.72	1.13	R
•	Have knowledge of framing and nagging for ceilings and walls and the spacing required suiting various materials.	20	3.44	1.24	MR
•	design based on elements and principles of good design	20	3.56	1.18	R
•	Identify factors of a good design.	20	3.81	1.18	R
•	Construct house and office furnitures based on construction techniques.	20	3.66	1.17	R
•	Maintain wood furniture and iron mongery and fittings (hinges, locks, handles and others)	20	3.74	1.07	R
•	Observe simple rules in the use of machine and equipment	20	3.50	1.37	R
•	Carryout various types of maintenances of wood.	20	3.47	1.27	MR
•	Carry out setting out for small buildings.	20	3.70	1.20	R
•	Timbering to trenches and excavation to formwork.	20	3.82	1.17	R
•	Use modern powered methods of finishing wood.	20	3.66	1.22	R
•	Design and construct upholstery.	20	3.48	1.40	MR
•	Identify upholstery tools and materials.	20	3.57	1.23	R
•	Service and repair tools and equipment used in wood laboratory or workshops.	20	3.71	1.13	R
•	Take inventories, replacements, installation and dismantling of equipment.	20	3.65	1.23	R
•	Develop ideas into a line of furniture acceptable to public	20	3.75	1.00	R
•	Select appropriate tools, materials, process and products	20	3.47	1.20	MR

•	Finish or refinish damaged, worn, used or new furniture to high – grade furniture and specified color finish	20	3.39	1.30	MR
•	Utilize knowledge of wood properties, finishes and furniture styling	20	3.61	1.13	R
•	Repairs and rebuilds upholstered furniture using hand tools and knowledge of fabrics and upholstery methods.	20	3.67	1.20	R
•	Carves Ornamental designs such as inlay, geometrical ornament, Greco-Roman classical analysis among others into wooden furniture parts using hand tools and woodworking machines	20	3.83	1.34	R
•	Carve sculptures of various Object, Animals, Birds and Human being	20	3.82	1.13	R
•	Prepare bill of materials	20	3.61	1.36	R
•	Installs machinery and equipment according to lay out plans, blueprints, and other drawing an Industrial establishment	20	3.89	1.25	R
•	Operate CNC lathe, router, drill machines to perform operations such as turning, facing and many other	20	4.30	1.11	R
•	Make ornamental designs and patterns using CNC machines	20	4.59	1.13	R
	Average		**3.69**	**1.20**	**R**

Key: N = Number of Respondents, = Mean, SD = Standard Deviation, R = Required, MR = Moderately Required.

The analysis of the result in Table 1 on the skill required by Woodwork Teachers in Technical Colleges in Niger State, Nigeria for National Development, showed that the respondents required up-skilling in virtually all the 40 items. This is because the mean results ranging from 3.39 to 4.59 as displayed in Table 1. This is an indication that nearly all the presented items are required skills by woodwork teachers either moderately required or required and that indication suggested the areas where up-skilling are needed. The standard deviation values of the items in Table 1 ranged from 1.00 to 1.37, which is also an indication that the respondents were closer to each other in their responses to the items. In other words, this implies that the respondents have similar opinion on the woodwork skills required for national development.

Research Question Two

2. What are the skills possessed by woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.

Table 2: Mean and Standard Deviation of Woodwork Teachers in Technical Colleges in Niger State, Nigeria on the Skill possessed for National Development

S/N	Items	N		SD	Remark
•	State classification of wood into hard and soft wood.	20	2.96	1.44	MP
•	Identify both physical and mechanical properties of timber and its characteristics	20	2.76	1.30	MP
•	State technical names for marketing wood.	20	2.59	1.39	MP
•	Cut, square, and face timber to a given size	20	2.60	1.21	MP
•	Mark off and make the joint commonly used in the profession, such as mortise and tenon joints, halving joints, cut housings; bridle joints; and angle bridle joint	20	2.71	1.22	MP
•	Fit and fix in doors; windows and architraves	20	2.54	1.34	MP
•	Identify modern woodworking tools.	20	2.62	1.31	MP
•	Identify wood defects both natural and artificial.	20	2.62	1.24	MP
•	Treat wood with relevant preservative materials.	20	2.50	1.27	MP
•	State manufacture board process and its application.	20	2.35	1.15	SP

• Identify various types of wood adhesives, abrasives and wood finishing	20	2.67	1.20	MP
• Carry out basic practices of wood sawing and planning wood to smooth surface.	20	2.64	1.40	MP
• Set out and construct straight flight stairs	20	2.73	1.30	MP
• Work to a detailed drawing and transfer details to a full size set out	20	2.65	1.14	MP
• Erect a free standing scaffold in a safe manner	20	2.54	1.25	MP
• Have knowledge of framing and nagging for ceilings and walls and the spacing required suiting various materials.	20	2.47	1.25	SP
• Design based on elements and principles of good design	20	2.67	1.18	MP
• Identify factors of a good design.	20	2.73	1.36	MP
• Construct house and office furnitures based on construction techniques.	20	2.63	1.32	MP
• Maintain wood furniture and iron mongery and fittings (hinges, locks, handles and others)	20	2.64	1.24	MP
• Observe simple rules in the use of machine and equipment	20	2.79	1.31	MP
• Carryout various types of maintenances of wood.	20	2.51	1.25	MP
• Timbering to trenches and excavation to formwork.	20	2.42	1.21	SP
• Use modern powered methods of finishing wood.	20	2.41	1.17	SP
• Design and construct upholstery.	20	2.58	1.41	MP
• Identify upholstery tools and materials.	20	2.73	1.36	MP
• Service and repair tools and equipment used in wood laboratory or workshops.	20	2.61	1.26	MP
• Take inventories, replacements, installation and dismantling of equipment.	20	2.47	1.19	SP
• Develop ideas into a line of furniture acceptable to public	20	2.39	1.07	SP
• Select appropriate tools, materials, process and products	20	2.72	1.28	MP
• Finish or refinish damaged, worn, used or new furniture to high – grade furniture and specified color finish	20	2.51	1.17	MP
• Utilize knowledge of wood properties, finishes and furniture styling	20	2.36	1.18	SP
• Repairs and rebuilds upholstered furniture using hand tools and knowledge of fabrics and upholstery methods.	20	2.38	1.24	SP
• Carves Ornamental designs such as inlay, geometrical ornament, Greco-Roman classical analysis among others into wooden furniture parts using hand tools and woodworking machines	20	2.25	1.23	SP
• Sharpen saws and other cutting tools	20	2.74	1.35	MP
• Carve sculptures of various Object, Animals, Birds and Human being	20	2.35	1.20	SP
• Prepare bill of materials	20	2.43	1.24	SP
• Installs machinery and equipment according to lay out plans, blueprints, and other drawing an Industrial establishment	20	2.45	1.20	SP
• Operate CNC lathe, router, drill machines to perform operations such as turning, facing and many other	20	1.70	1.08	SP
• Make ornamental designs and patterns using CNC machines	20	1.93	1.21	SP
Average		**2.55**	**1.24**	**MP**

Key: N = Number of Respondents, = Mean, SD = Standard Deviation, SP = Slightly Possessed, MP = Moderately Possessed.

The analysis of the result in Table 2 on the skill possessed by woodwork teachers shows that the respondents possessed skill at moderately and slightly possessed levels, with mean range of 2.96 to 1.70. This implies that the respondents possesses some level of skills in woodwork technology that actually made them employable but the skills possess are not adequate enough to enable them function effectively in the performance of their tasks as teachers in technical colleges in Niger state, Nigeria. The fact that there are other two levels of skill possessed, which are highly possessed and possessed levels, shows that, generally, the teachers possesses some level of skills, but not at high level of possession, therefore, there is need for the teachers to be up-skilled in the profession for retainance of the job and more importantly for production of eminent students. The standard deviation values of the entire items in Table 4.3 ranges from 1.07 to 1.44, shows that the respondents have similar opinion on the skill possessed in woodwork teacher, this is noted in the closeness of their responses, as according to the average standard deviation above.

Research Question Three

3. The up-skilling needs of woodwork teachers for optimal performance in technical colleges in Niger State Nigeria.

Mean Difference and Standard Deviation on Up-skilling needs of Woodwork Teachers in Technical Colleges in Niger State, Nigeria for National Development

S/N	ITEMS	N		S D	Remark
•	State classification of wood into hard and soft wood.	20	3.29	1.43	MN
•	Identify both physical and mechanical properties of timber and its characteristics	20	3.18	1.29	MN
•	State technical names for marketing wood.	20	3.15	1.38	MN
•	Cut, square, and face timber to a given size	20	3.11	1.30	MN
•	Mark off and make the joint commonly used in the profession, such as mortise and tenon joints, halving joints, cut housings; bridle joints; and angle bridle joint	20	3.18	1.33	MN
•	Fit and fix in doors; windows and architraves	20	3.05	1.40	MN
•	Identify modern woodworking tools.	20	3.16	1.37	MN
•	Identify wood defects both natural and artificial.	20	3.12	1.35	MN
•	Treat wood with relevant preservative materials.	20	3.16	1.39	MN
•	State manufacture board process and its application.	20	2.99	1.37	MN
•	identify various types of wood adhesives, abrasives and wood finishing	20	3.18	1.26	MN
•	Carry out basic practices of wood sawing and planning wood to smooth surface.	20	3.01	1.38	MN
•	Set out and construct straight flight stairs	20	3.22	1.37	MN
•	Work to a detailed drawing and transfer details to a full size set out	20	3.26	1.29	MN
•	Erect a free standing scaffold in a safe manner	20	3.13	1.33	MN
•	Have knowledge of framing and nagging for ceilings and walls and the spacing required suiting various materials.	20	2.95	1.33	MN
•	Design based on elements and principles of good design	20	3.12	1.26	MN
•	Identify factors of a good design.	20	3.27	1.38	MN
•	Construct house and office furnitures based on construction techniques.	20	3.15	1.34	MN
•	Maintain wood furniture and iron mongery and fittings (hinges, locks, handles and others)	20	3.19	1.28	MN
•	Observe simple rules in the use of machine and equipment	20	3.15	1.38	MN
•	Carryout various types of maintenances of wood.	20	2.99	1.34	MN
•	Timbering to trenches and excavation to formwork.	20	3.12	1.38	MN
•	Use modern powered methods of finishing wood.	20	3.03	1.35	MN
•	Design and construct upholstery.	20	3.03	1.47	MN
•	Identify upholstery tools and materials.	20	3.15	1.36	MN

• Service and repair tools and equipment used in wood laboratory or workshops.	20	3.16	1.31	MN
• Take inventories, replacements, installation and dismantling of equipment.	20	3.06	1.34	MN
• Develop ideas into a line of furniture acceptable to public	20	3.07	1.24	MN
• Select appropriate tools, materials, process and products	20	3.09	1.29	MN
• Finish or refinish damaged, worn, used or new furniture to high – grade furniture and specified color finish	20	2.95	1.31	MN
• Utilize knowledge of wood properties, finishes and furniture styling	20	2.99	1.31	MN
• Repairs and rebuilds upholstered furniture using hand tools and knowledge of fabrics and upholstery methods.	20	3.02	1.38	MN
• Carves Ornamental designs such as inlay, geometrical ornament, among others into wooden furniture parts using hand tools and woodworking machines	20	3.04	1.51	MN
• Sharpen saws and other cutting tools	20	3.23	1.40	MN
• Carve sculptures of various Object, Animals, Birds and Human being	20	3.08	1.38	MN
• Prepare bill of materials	20	3.02	1.43	MN
• Installs machinery and equipment according to lay out plans, blueprints, and other drawing an Industrial establishment	20	3.17	1.42	MN
• Operate CNC lathe, router, drill machines to perform operations such as turning, facing and many other	20	3.52	1.30	N
• Make ornamental designs and patterns using CNC machines	20	3.50	1.37	N

Key: N = Number of Respondents, = Mean, MN = Moderately Needed, N = Needed

The data presented in table 3 shows 40 items of skill required by woodwork teachers. The mean differen of skill required and skill possessed where ranging between 3.52 and 2.95. However, all the items shows th woodwork teachers moderately needed up-skilling based on the mean rating criterion. This implies th woodwork teachers require up-skilling at higher level of needs. Items 39 and 40 which poses questions the use of Computer Numerical Controlled machines with mean ratings of 3.52 and 3.50 respectively sho that Woodwork teachers needed up-skilling in the two items than they needed in the remaining 38 iten This is because items 39 and 40 are in the Needed level of need while other items are in the Moderat Needed level of needs based on the mean rating criterion.

DISCUSSION OF FINDINGS

Findings of the study revealed that all teachers required skills in all the items suggested by the stu However, there is a slight different in the level at which the teachers required the skills as majority of t teachers required the skills at required level while others required the same skills at moderate level requirement. This findings is in support of Okparake (2004) highlighted that woodwork teachers requir safety practice skills in the used of equipment and tools in block laying and concreting. Atsumbe, Um Mele and Afolayan, (2012) also corroborates this finding that mechanical engineering technologist requ skills in the areas of automatic and Computer Numerical Control machines (CNC).

The Finding also shows that majority of the woodwork teachers possessed the skills at moderate level skill possessed. This implies that, woodwork teachers possesses some level of skills but the skill possess are not adequate enough to enable them function reasonably in their job and that is why high percentage students are not also practically sound. Erewari (2008), who stated that technical college graduates possess low technical skills, knowledge and competencies for self employment therefore the need for techni college graduates to possess relevant technical skills, knowledge and competencies are essential.

Findings on the up-skilling needs of woodwork teachers in technical colleges in Niger State, Nige revealed that there is a difference in the average mean of respondents' responses on skill required and sk possessed by woodwork teachers in North Central Nigeria. This indicated that the teachers needed u skilling because the difference between the average mean of skill required and skill possessed is consider significant. Therefore, it was concluded that there is need for up-skilling of the teachers in woodw technology in technical colleges in Niger State, Nigeria. This finding is supported by Olabiyi (2013) w

highlighted that a substantial number of technical graduates are lacking in majorly physical skills due to the glaring gap between the skill required and the skill possessed by the graduates. It was also highlighted that not only that there are skill shortages, but the level of shortages is high and therefore needed to be bridged through a continuous process of up-skilling.

CONCLUSION AND RECOMMENDATION

Conclusively, the woodwork teachers in Niger State, Nigeria needed up-skilling in woodwork technology as the level of skill possessed by the woodwork them is low compared to the level of skill required for them to function optimally. This is due to the rapid change in technological development which have major effect on the tools, equipment and processing in woodwork technology. Based on the findings of this study, it is recommended that the state Ministry of Education should use the skill need to upgrade curriculum of technical colleges and the management of the colleges under study should use the identified skills needed to organize a capacity building workshop for teachers.

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