UPHOLSTERY FURNITURE MAKING SKILLS NEED FOR TECHNICAL COLLEGE STUDENTS' EMPLOYABILITY IN AKWA IBOM STATE

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Abstract

The study sought to determine the upholstery furniture making skills need for Technical College students' employability in Akwa Ibom State. Six specific objectives, six research questions and six null hypotheses were formulated to guide the study. The study involved a survey design and a population of 86 respondents. The entire population was studied since it was of manageable size. Questionnaire was used for collecting data and the instrument was validated by five experts while the reliability co-efficient was ascertained using Cronbach Alpha technique. Mean and Improvement Need Index (INI) were used to answer the research questions; while the t-test analysis was used to test the null hypotheses at 0.05 level of significance. The findings of the study revealed that employability skills of Technical College students of upholstery furniture making are determined by the level of training they acquired while undergoing the training. On the basis of the findings and conclusion of the study, the following recommendations were made: Technical College teachers should guide students of upholstery furniture making to exhibit competence in: hand tools handling, carcase construction, webbing, cording, padding and fabric covering skills by exposing them to practical classes and real work experience while in school.

Keywords: Technical College, Upholstery Furniture making skills, Employability and Akwa Ibom State.

Introduction

Technical education is a workshop-based education. It is an aspect of education meant to equip individuals with intellectual, manipulative and effective work competencies that would make them self-reliant and useful members of the society (Udoh and Utuk, 2019). Education at the primary, secondary and tertiary levels is subject to change in response to the dynamic nature of the society. Curriculum changes demand for changes in approaches and methods of teaching as well as the techniques for enhancing students' skills and academic performance especially in Technical Colleges where cognitive, affective and psychomotor skills are emphasized.

Technical Colleges are institutions that provide secondary level education in technical education. Technical education according to Federal Republic of Nigeria (2013) is that aspect of education that leads to the acquisition of practical and applied skills as well as basic scientific knowledge. In the same vein, (UNESCO, 2007), defined technical and vocational education as a comprehensive term referring to those aspect of educational process involving, in addition to general education the acquisition of practical skills, attitudes and understanding of knowledge relating to educational life. Utuk, Udofia and Udo (2019) stressed that Technical Education is that aspect of education, which leads to the acquisition of practical and applied skills as well as basic scientific knowledge. The technical teacher plays a significant role in the development of a functional technical education system in Nigeria. Hence, the quality of the technical teacher and their input into the development of the instructional system could influence the quality of the Technical College graduates including those who study upholstery-making.

Upholstery-making is the art of producing functional cushioned or padded sitting furniture for homes and offices. Upholstery furniture making basically involves the skills in the design of upholstery

patterns, skills in handling the hand tools to convert wood in the construction of carcases, forming of the platform for sitting and backing; webbing with strong felts, cording the edges of the carcase for aesthetics; padding with the foam material for comfort and covering with fabric for beauty and style (Utuk, Udofia and Udo, 2019). Many technical college graduates of upholstery making are jobless because they are not sufficiently skilled for the labour market (Usoro and Utuk, 2018). According to the National Board for Technical Education (2013), furniture and upholstery making is designed to produce graduates with essential knowledge and skills that will enable them perform proficiently in all aspects of furniture making. Furniture making components, according to NBTE (2013), consist of the following: basic wood joints, wood-based projects, wood working machines, furniture design and construction and upholstery design and construction. The objectives of establishing technical colleges may be achieved through demonstration and other methods used in teaching for students to acquire knowledge and skills. According to Usoro and Utuk (2018), the inability of the Vocational Technical Education (VTE) teachers to impart the necessary skills on students has contributed to high level of unemployment in the country. The authors pointed out that the quality of vocational technical education in Nigeria is low because the desired knowledge and skills are not imparted to the learners in the colleges. It is observed that the number of concepts that need to be covered in upholstery furniture making continue to increase. The traditional mode of instruction, teacher skills, lack of tools, equipment and training materials fall short of accomplishing the intended objectives of upholstery furniture making. The consequence of this is that there is emphasis on strategies rather than steps in skill acquisition. The short fall negates the overall objectives of both the technical education and upholstery making skills as the graduates of this course could be seen roaming the streets in search for white collar jobs or join "keke" riding where less knowledge and skills are required. It could be deduced that among furniture craft students, less satisfactory level of employment or self-reliance could be attributed to lack of skills in upholstery making.

The art of upholstery furniture making begins with the conceptualization of its design. Design is the intentional planning, drafting and making of furniture for a particular use. It is a purposeful creation, the result of intentional constructive thinking to evolve new patterns to the taste of customers and in keeping with the dynamic nature of the society (Usoro and Utuk, 2018). Next is the construction of upholstery carcase. Carcase is the skeleton or the framework made of wood to give rigidity, support and shape to the upholstery. The construction of the carcase begins with the choice of wood. Wood is a ligno-cellulosic material obtained from the trunk and branches of trees (Usoro and Utuk, 2017). The authors found out that proper hand tool handling is essential for effective manipulation of wood to obtain wooden articles. The wood may be softwood or hardwood and the ability to choose the right wood for the job marks the beginning of the success of the construction process (Walton, 2010). The other factors include the observation of wood shop safety first, the proper handling of hand tools, the proper use of: mechanical fasteners such as nails, screws, spikes and pins; chemical fasteners such as glues and adhesives, the choice of appropriate fabric or leather, skills in webbing, padding and the covering of fabric. Walton (2010) stated that upholstery carcases are constructed using simple framing method, consisting of a frame-like skeleton stiles, posts and rails. Denig, Eugene and William (2018) found out that the upholstery frame gives the structural support and determines the basic shape of the upholstery furniture, setting limits upon the final design, webbing, padding, cushioning and covering. Webbing is the process of providing a network of strong fabric in belt form, interwoven in different patterns to provide a support for the foam materials. Walton (2010) confirmed that the webbing is tacked with four 8-ounce tacks to the centre of the rail and the end of the webbing is then turned back over the first row of tacks and secured with five more tacks. Cording is the art of fixing a padded fabric cord at the edges of the carcase to conceal the head of nails for aesthetics. James (2015) stated that there is need of fixing a padded fabric cord at the edges of the carcase to conceal the head of nails for aesthetics. Walton (2010) confirmed that cording is a vital finishing process which enhances the beauty of the upholstery. Padding, is the process of adding or placing rubber or plastic foam materials on the web to provide comfort on the seat, arm and back of the upholstery (Gate, 2018). James (2015) stated that padding is an essential process which involves placing rubber or plastic material or any other suitable stuffing on the web to provide comfort on the seat and back of the upholstery. Gate (2018), in his study, found out that

three distinct processes of padding are necessary for making the upholstery furniture soft to touch and keeping wrinkles out of the fabric. The covering fabric could be made of clothing material or leather, used to overlay the upholstery padding to give beauty and style. Gate (2018) stated that the choice of an upholstery fabric depends on the style of the furniture and its function; and that upholstery are covered in sections; the seat, back rest, inner and outer sides, bottom and arm rest. On the other hand, James (2015) asserted that colour is usually the main reason most people uses to select certain fabrics.

Interestingly, upholstery making is one of the practical-based courses that is taught in the technical colleges under Furniture Craft. Students of upholstery making, in the technical colleges, need to acquire skills in order to be employable in the industry or become self-employed upon graduation. Employability is the state in which one acquired enough stills to be hired (employed) on a paid job. According to NABTEB (2007), employability prospects of upholstery-making graduates depend largely on the acquired work skills whether in self or paid employment. However, Bukar (2014) noted that the process of skills acquisition and development, as it cuts across the three domains of educational objectives is cumbersome, tedious and time consuming. The ultimate test of a good technical education programme is not how much factual information students can remember, but what technical skills they possess to perform in technical fields of employment (Okoro, 2016). There is need also for the students to be trained with the materials as applicable in the real work situation. According to Prosser in Ben (2010), effective vocational training can only be given where the training jobs are carried out in the same way, with machines as in the occupation itself. Secondly, vocational training will be effective in proportion, as the specific training experiences for forming right habits of doing is those of the finished skills necessary for gainful employment. Consequently, upholstery making graduates of technical colleges in Akwa Ibom State seem not to be properly skilled in practical work. It is against this background that the researchers had decided to carry out the study to identify the upholstery making skills need for technical college students' employability in Akwa Ibom State.

Problem Statement

Furniture/Upholstery making is one of the trade subjects that is taught in technical colleges in Akwa Ibom State. The intention is to inculcate adequate knowledge, skills, value and attitude in the students to enable them function successfully in an active society like Akwa Ibom State. The Upholstery furniture making skill include: the skills in the design of upholstery, the skill in handling upholstery tools, the skill in carcase construction, the skills in cording the edges of the carcase and the skill in covering fabric among others. The technical colleges sometime may not impart these upholstery making skills to the students because of improper mentoring by the technical teachers and the workshop technicians. Regrettably, students' enrollment in Furniture/Upholstery making in technical colleges in Akwa Ibom State is on the decline in recent years (Usoro, Inyang and Akpan, 2016). This is because most students loose interest in the trade subject probably because of the way it is being taught in the technical colleges.

Justification

Most graduates of Upholstery-making are limited in skills which could be attributable to improper mentoring while in the college (Usoro and Utuk, 2018). Most of them had not acquired enough workshop practical experience. A closer observation at technical colleges in Akwa Ibom State shows that the school workshop environment in which the students are trained is not a replica of the working environment in which they were expected to serve. At most cases in the wood working industry, these students are rejected by employers on the ground that they are incompetent. Consequently, most graduates of Upholstery-making from the technical colleges are often seen roaming the streets in search for "white collar jobs". Some are engaged in menial jobs; others join militancy in the Niger Delta Region; some are engaged in youth restiveness and other social vice, to mention but a few.

Many Technical College graduates of upholstery making are jobless. They are jobless not because of the absence of job opportunities but partly because they are not sufficiently skilled technically to take up the available industrial jobs in the furniture companies. There are ample literature evidences showing that no empirical studies had been carried out on the subject matter. To address these problems, the study seeks

to determine the upholstery furniture making skills need for Technical College students' employability in Akwa Ibom State.

Purpose of the Study

The main purpose of the study is to determine the Upholstery- furniture making skills need for technical college students' employability in Akwa Ibom State. Specifically, the study seeks to determine:

1. upholstery tools handling skills need for Technical College students' employability in Akwa Ibom State.
2. carcase construction skills need for Technical College students' employability in Akwa Ibom State.
3. webbing skills need for Technical College students' employability in Akwa Ibom State.

Research Questions

The study seeks to provide answers to the following research questions:

1. What are the Upholstery tools handling skills need for Technical College students' employability in Akwa Ibom State?
2. What are the carcase construction skills need for Technical College students' employability in Akwa Ibom State?
3. What are the webbing skills need for Technical College students' employability in Akwa Ibom State?

Hypotheses

The following null hypotheses were formulated and tested at 0.05 probability level:

Ho_1: There is no significant difference between the mean responses of teachers and students in Upholstery Tools Handling skills need for Technical College students' employability in Akwa Ibom State.

Ho_2: There is no significant difference between the mean responses of teachers and students in Carcase Construction skills need for Technical College students' employability in Akwa Ibom State.

Ho_3: There is no significant difference between the mean responses of teachers and students in Webbing skills need for Technical College students' employability in Akwa Ibom State.

Literature Review

Related empirical studies on upholstery furniture making skills need for Technical College students' employability in Akwa Ibom State were reviewed to determine the existing gap in the study. Silas (2016) conducted an empirical study on the competency needs of electronics craftsmen for maintenance of electronic appliances in Akwa Ibom State, Nigeria. The descriptive survey research design was used. Two research questions and two null hypotheses guided the study. The population for the study consisted of 786 registered electronics craftsmen. A sample of 258 electronics craftsmen was selected through multi-stage sampling technique. A questionnaire structured on a 5 point likert type scale was used for data collection. The questionnaire has an internal consistency reliability index of 0.88. The data collected were analyzed using the mean, standard deviation and t-test. The study found that out of twenty items, eleven competencies were needed by electronics craftsmen for maintenance of television sets while five technical competency items were needed for maintenance of audio amplifiers. There was a significant difference in the mean responses of urban and rural-based electronics craftsmen in Akwa Ibom State on their competency needs for maintenance of the two electronic appliances namely television sets and radio amplifiers. The study relates to the present study on the area of competency needs of workers. The study was conducted in Akwa Ibom State and used descriptive survey research design, the mean and t-test for analyses, these have major similarities with the current study.

In another study on the foundation laying skills need of building construction craftsmen in the construction industry, Okure (2016) used a population of 150 building construction teachers from technical colleges and 108 foremen from the construction industries in South-South Nigeria. Out of these, 78 building

construction Teachers, and 53 foremen were sampled from three states constituting 50 percent of the six states in south-south geo-political zone of Nigeria. One specific purpose and one specific research question formulated to guide the study were converted to one null hypothesis which was tested at .05 alpha level using t-test analysis. A researcher developed instrument called "Foundation Laying Skill Need of Building Construction Craftsmen in the Construction Industry Questionnaire" (FLSNOBCCITCIQ) was validated by three experts in Building Construction Industry and used to collect data for the study. The reliability of instrument was determined through split-half method to be 0.78. Findings of the study showed that Building Construction Craftsmen employed in the Construction Industry require some level of training in all the skill areas of foundation laying. The study was conducted in the South-South Nigeria of which Akwa Ibom State is a part and used t-test statistical tool.

Usoro, Inyang and Akpan (2016) conducted an empirical research to determine the capacity building needs of TVET teachers in kinesthetic learning styles for promoting students' academic interests in technical courses in Technical Colleges in Akwa Ibom State, Nigeria. A survey research design was adopted which sought representatives' views of Construction and Engineering Trade Teachers in Technical Courses. Two research questions were posed and answered in line with the purposes of the study. t-test was used to test the hypotheses at 0.05 level of significance. The population of the study was 135. The sample size was 77 consisted of 40 construction and 37 engineering trade teachers. A structured questionnaire was the instrument used for data collection, which consisted of items developed from the literature reviewed. The research identified role playing, drawing diagrams, writing symbols and the use of physical objects for promoting students' academic interests in technical courses. The study is related to the current work on the area of capacity building needs of TVET teachers. The study was conducted in Akwa Ibom State; survey research design was adopted for the study and t-test analysis was used to test the hypotheses at 0.05 level of significance.

The study, therefore, attempts to fill the gap by determining the upholstery furniture making skills need for Technical College students' employability in Akwa Ibom State. Specifically, the study will assess the needs of: hand tools handling, carcase construction, webbing, cording, padding and fabric covering of upholstery furniture, making use of information from literature as a pivot to arrive at some progressive recommendations for implementation. The present study would be beneficial to the students as it would highlight a comprehensive step-by-step sequence of operations involved in upholstery making. It would expose students to the various skills, techniques and attitude required in upholstery making, thereby making them proficient on the job. This research would contribute to knowledge as it would be an indigenous resource on upholstery furniture making, for future reference. It would be a guideline that would help upholstery teachers and technicians to improve their practical skills, knowledge and attitude to keep abreast with the trend in the industry.

Methodology

, In carrying out the study, descriptive survey design was adopted for this study. The study was carried out in Technical Colleges in Akwa Ibom State. The targeted population for the study was used 86, comprising all the 68 Senior Technical (ST) II students offering Furniture/Upholstery-making, and 18 teachers who teach the subject in the Technical Colleges in Akwa Ibom State. Purposive sampling technique was used as the entire population was studied. The instrument used for data collection was a structured questionnaire entitled "Upholstery Making Skills Need for Technical College Students' Employability in Akwa Ibom State (UMSNTCSE) was used as the instrument for data collection. The instrument for the study was subjected to face and content validation by five validates to ensure that the instrument measures the intended attributes. In order to ensure the reliability of the instrument, the researcher administered the questionnaire to respondents who were not be part of the study but possessed the same qualities and characteristics of those used for the study.

Results and Discussion

Results

The results of the study obtained from the research questions are presented in Tables 1 - 6.

Research Question 1:

What are the upholstery tools handling skills need for Technical College students' employability in Akwa Ibom State?

Table 1: ***Performance Gap Analysis on Upholstery Tools Handling Skills Need***

	Upholstery-making skills need in handling of hand tools	$\bar{X}N$	$\bar{X}P$	Gap ($\bar{X}N$-$\bar{X}P$)	Remarks
1.	Marking with metre rule.	3.65	2.13	1.52	N
2.	Planing and testing the face edge	3.97	2.17	1.8	N
3.	Gripping the saw with fore-arm	4.11	4.48	-0.37	NN
4.	Sawing in line with pencil marking	3.98	3.63	0.35	N
5.	Chiseling off wastes to create mortice	3.33	2.24	1.09	N
6.	Straight nailing with hammer	4.28	2.63	1.65	N
7.	Skewed nailing with hammer	4.22	2.41	1.81	N
8.	Cramping the glued tenon and mortice of the front brace and post	4.0	4.09	-0.09	NN
9.	Cutting fabric by holding scissors with fore-finger	3.60	1.80	1.80	N
10.	Cutting the foam with hand	4.00	4.22	-0.22	NN
11.	Stitching fabric with machine.	3.23	1.58	1.65	N

Source: Field Survey, 2023.

Table 1 shows that 8 out of 11 upholstery furniture making skills need in handling of tools identified had their positive skills gap ranging from 0.35 to 1.81. Three items had negative skill gap ranging from -0.09 to -0.37. This indicates that Technical College students in Akwa Ibom State require re-training on upholstery furniture hand tools handling skills need for employability. Technically, it will not be possible to isolate the negative items during training without creating a gap because of the overlapping nature of the skills involved in handling of upholstery furniture hand tools. However, during training, less emphasis

would be placed on the negative items.

Research Question 2

What are the carcase construction skills need for Technical College students' employability in Akwa Ibom State?

Table 2: ***Performance Gap Analysis on Carcase Construction Skills Need***

S/N	Carcase construction skills need	$\bar{X}N$	$\bar{X}P$	Gap ($\bar{X}N$-$\bar{X}P$)	Remarks
12.	Marking the dimensions of 25 x 250 x 575mm for single seater front brace	4.64	1.46	3.18	N
13.	Cutting the front brace to the dimensions	3.55	2.05	1.5	N
14.	Marking the two front posts according to the curved pattern/template on 25 x 450mm wooden board	3.78	1.88	1.9	N
15.	Cutting the two front posts in line with pencil marking	3.37	2.70	0.67	N
16.	Marking the two front posts for mortising	4.27	3.67	0.60	N
17.	Marking the front brace for tenoning	3.49	1.89	1.60	N
18.	Chiselling out waste from the two front posts to create mortice	3.67	2.05	1.62	N
19.	Applying cascamite on the tenon and mortice	4.53	2.03	2.50	N
20.	Assembling the glued tenon and mortice joint	3.32	2.00	1.32	N
21.	Nailing the assembled front posts and brace while in cramp	4.47	3.46	1.01	N
22.	Marking the two vertical back posts to dimensions 25 x 50 x 800mm according to curved template	3.63	3.94	-0.31	NN
23.	Cutting the two vertical back posts in line with pencil markings	3.89	2.65	1.24	N
24.	Marking the two horizontal back rests to dimensions of 25 x 50 x 425mm	4.37	3.35	1.02	N
25.	Cutting the two horizontal back rests in line with pencil marking	3.97	1.82	2.15	N
26.	Nailing the two vertical back posts to the	3.86	2.15	1.71	N

	two horizontal back rests	3.43	3.80	-0.37	NN
27.	Marking the two arm rests to the dimensions of 25 x 100 x 750mm	3.23	1.55	1.68	N
28.	Cutting the two arm rests in line with pencil markings	3.87	2.76	1.11	N
29.	Shaping the round edge of the two arm rests	3.15	2.11	1.04	N
30.	Marking the side brace to the dimensions of 25 x 100 x 750mm	4.00	2.01	1.99	N
31.	Nailing the arm rests and side braces to the front and back posts	3.50	1.43	2.07	N
32.	Marking the head rest and the two side levers according to "C" pattern	4.18	3.36	0.82	N
33.	Cutting the "C" pattern in line with pencil marking to obtain 25 x 50mm section	3.48	2.31	1.17	N
34.	Nailing the head rest on the top of the two back posts and the side levers on the top of the back post and the arm rest to form a 'C' pattern.	3.88	2.47	1.41	N
35.	Marking the struts to the dimensions of 25 x 75 x 250mm	3.91	1.70	2.21	N
36.	Cutting the struts in line with pencil marking	4.63	2.52	2.11	N
37.	Nailing the struts strategically to support the arm rests and back rests				

Source: Field Survey, 2023.

The result showed that out of 26 identified carcase construction skills need by Technical College students for employability, items 22 and 27 had negative values (adequate), while the rest items had positive values ranging from 0.60 to 3.18. This shows that Technical College students in Akwa Ibom State need retraining on upholstery furniture carcase construction for employability.

Research Questions 3

What are the webbing skills need for Technical College students' employability in Akwa Ibom State?

Table 3: ***Performance Gap Analysis on Webbing Skills Need***

S/N	Webbing skills need	$\bar{X}$N	$\bar{X}$P	Gap ($\bar{X}$N-$\bar{X}$P)	Remarks
38.	Folding the edge of the web	3.97	3.75	0.22	N

39.	Tacking the folded web to the front seat rail	3.50	2.32	1.18	N
40.	Dragging the web backwards to tension over the back seat rail	4.49	2.25	2.24	N
41.	Nailing the tensioned web to the back seat rail	3.75	2.34	1.41	N
42.	Repeating the above process at intervals of 200mm lengthwise and breadth wise to the desired pattern	4.17	4.06	0.11	N

Source: Field Survey, 2023.

Table 3 shows that the webbing skills need for Technical College students' employability had five positive values with a mean gap ranging from 0.11 to 2.24. This indicates that Technical College students in Akwa Ibom State require retraining on upholstery webbing.

Null Hypotheses

The results of the study obtained from the research hypotheses are presented in Tables 7 – 12.

Null Hypothesis I

Ho_1: There is no significant difference between the mean responses of teachers and students in upholstery tools handling skills need for Technical College students' employability in Akwa Ibom State.

t-test statistical analysis was used to test the null hypothesis. The result of the analysis is presented below.

Table 4: ***t-test Analysis of the Mean Responses of Technical Teachers and Students on Upholstery Tools Handling Skills Need***

Variables	N	$\overline{X}$	SD	df	t-cal	Sig.p≥.05	Decision
Teachers	18	46.48	4.60				
				84	7.91	0.04	Significant
Students	68	35.76	5.22				

The summary of data analysis presented the observed t-cal at 7.91. This value was compared with the significant value of 0.04 at 0.05 alpha level and 2.84 degree of freedom. Since the significant value of 0.04 is less than the alpha level of 0.05, null hypothesis which states that there is no significant difference between the mean responses of teachers and students in upholstery tools handling skills need for Technical College students' employability in Akwa Ibom State is rejected. Hence, there is significant difference in the responses of teachers and students in handling of upholstery hand tools.

Null Hypothesis 2

Ho_2: There is no significant difference between the mean responses of teachers and students in carcase construction skills need for Technical College students' employability in Akwa Ibom State.

t-test statistical analysis was used to test the null hypothesis. The result of the analysis is presented below.

Table 5: ***t-test Analysis of the Mean Responses of Technical Teachers and Students on Carcase Construction Skills Need***

Variable	N	$\overline{X}$	SD	df	t-cal	Sig.p≥.05	Decision

Teachers	18	103.64	14.29				
				84	20.38	0.02	Significant
Students	68	62.46	4.58				

The summary of data analysis presented the observed t-cal at 20.38. This value was compared with the significant value of 0.02 at 0.05 alpha level and 2,84 degree of freedom. Since the significant value of 0.02 is less than the alpha level of 0.05, null hypothesis is rejected. Hence, there is significant difference between the mean responses of teachers and students in carcase construction skills need for Technical College students' employability in Akwa Ibom State.

Null Hypothesis 3

Ho_3: There is no significant difference between the mean responses of teachers and students in webbing skills need for Technical College students' employability in Akwa Ibom State.

t-test statistical analysis was used to test the null hypothesis. The result of the analysis is presented below.

Table 6: ***t-test Analysis of the Mean Responses of Technical Teachers and Students on Webbing Skills Need***

Variables	N	$\overline{X}$	SD	df	t-cal	Sig.p≥.05	Decision
Teachers	18	21.37	3.04				
				84	17.42	0.02	Significant
Students	68	12.30	1.57				

The summary of data analysis presented the observed t-cal at 17.42. This value was compared with the significant value of 0.02 at 0.05 alpha level and 2.84 degree of freedom. Since the significant value of 0.02 is less than the alpha level of 0.05, null hypothesis is rejected. Hence, there is significant difference between the mean responses of teachers and students in webbing skills need for Technical College students' employability in Akwa Ibom State.

Discussion of the Findings

The result showed that eight (8) out of eleven (11) upholstery furniture making skills need in handling of hand tools identified had their positive skills gap ranging from 0.35 to 1.81, indicating that Technical College students in Akwa Ibom State need re-training on handling of upholstery furniture hand tools for employability. Also, the corresponding Hypothesis 1 showed that there is significant difference between the mean responses of technical teachers and students in upholstery furniture tools handling skills need for Technical College students' employability in Akwa Ibom State. The finding, therefore, is in line with Walton (2010) who found out that the success of the upholstery construction process involves the observation of wood shop safety first, the proper handling of hand tools and the proper use of mechanical fasteners such as nails, screws, spikes and pins. Secondly, Usoro and Utuk (2017) found out that proper hand tool handling is essential for effective manipulation of wood to obtain wooden articles. It is therefore imperative that there should be improvement in the learning environment. Based on these findings, there is a clear need for retraining Technical College students in upholstery hand tools handling techniques to equip them for employability in the industry.

Out of the twenty-six (26) identified upholstery furniture carcase construction skills need for Technical College students' employability, only items 22 and 27 had negative values (adequate), while the rest items had positive values ranging from 0.60 to 3.18. This shows that Technical College students in Akwa Ibom State require re-training on upholstery furniture carcase construction for employability. Also, the corresponding Hypothesis 2 showed that the difference in the mean responses of teachers and students in upholstery carcase construction skills need for employability is statistically significant. The finding, therefore, is collaborated with Walton (2010) who, in his study found out that upholstery carcases are constructed using simple framing method, consisting of a frame-like skeleton stiles, posts and rails. Denig, Eugene and William (2000) found out that the upholstery frame gives the structural support and determines

the basic shape of the upholstery furniture, setting limits upon the final design, webbing, padding, cushioning and covering. Students should be trained using the tools and materials as applicable in the industry. As the work are in congruence with the earlier findings, it is imperative that there should be improvement in the learning environment. Based on these findings, there is a clear need for the re-training of Technical College students in upholstery furniture carcase construction to make them employable in the industry.

The result indicated that the five (5) identified webbing skills need for Technical College students' employability had positive values ranging from 0.11 to 2.24. This implies that Technical College students in Akwa Ibom State require re-training on upholstery webbing for employability. The corresponding Hypothesis 3 showed that the difference in the mean responses of teachers and students in upholstery furniture webbing skills need for employability is statistically significant. The finding is in consonance with James (2015) who found out that three strips of webbing can run crosswise and two lengthwise on the bottom of the footstool frame depending on the size of the platform. Walton (2010) confirmed that the webbing is tacked with four 8-ounce tacks to the centre of the rail and the end of the webbing is then turned back over the first row of tacks and secured with five more tacks. Students should be trained using the tools and materials as applicable in the industry. As the work had agreed with the earlier findings, it therefore mean that there should be improvement in the learning environment. Based on these findings, there is a need for the re-training of Technical College students in upholstery furniture webbing to ensure that they are employable in the industry.

Out of five (5) cording skills identified, only item 44 had negative value (adequate). The rest of the items had positive values ranging from 1,73 to 2.39 indicating that Technical College students in Akwa Ibom State require re-training on upholstery furniture cording for employability.

Conclusion

Based on the findings of the study and the discussions that followed, it is concluded that upholstery furniture making students of Technical Colleges in Akwa Ibom State need to improve their skills in the areas of: hand tools handling, carcase construction, webbing, cording, padding and fabric covering. The lack of these skills would make the students not to be employable in the industry.

Recommendations

Based on the findings and conclusion of the study, it is recommended that;

1. Technical teachers should guide upholstery furniture making students to improve their competence in: hand tools handling, carcase construction, webbing, cording, padding and fabric covering skills by exposing them to practical classes as well as real work experiences while in training.
2. Akwa Ibom State Government, through the officials of State Technical Schools Board, should provide training materials and tools for the Technical teachers to use in training the students while in school.

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