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Factors Affecting Skills Acquisition among Students of Electrical Installation and Maintenance Work Trade in Technical Colleges of Gombe State

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ABSTRACT

The study examined the factors affecting skills acquisition among students of electrical installation and maintenance work trade in technical colleges of Gombe state. The study has four specific objectives. In order to achieve these objectives, four research questions were poised and four null hypotheses were formulated to guide the study. Pragmatism theory propounded by Charles Sanders Peirce in 1870s was adopted as the theoretical framework. The design of the study was a descriptive survey. The population of the study consisted of 438 respondents. Stratified sampling technique was used to draw 280 respondents that consist of 220 students, 36 teachers and 26 administrators across the six technical colleges of Gombe State. The instrument for data collection was structured questionnaire based on Likert scale which was developed by the researcher and validated by three experts. The instrument was trial tested on 20 students, 5 teachers and 5 administrators in one Technical College in Yola Adamawa. Cronback Alpha was used to compute the internal consistency of the instrument which yielded a reliability index of 0.89. The data collected were analyzed using Statistical Package for Social Sciences (SPSS). Mean and standard deviation were used to answer research questions. While, Analysis of Variance (ANOVA) was used to test the null hypotheses at 0.05 level of significance. The findings of the study revealed teachers' and students' related factors which among others include inappropriate methods of teaching practical; inadequate consumable materials for practical skills training; teachers' lack of professionalism, low level of knowledge and skills; and students' personal interest, inadequate workshop materials, high academic expectation, personal safety and workplace hazards respectively as responsible for the failure of practical skills acquisition in Technical Colleges of Gombe State. The study further revealed that that socio-economic background and carrier aspiration of the students and parents have effect on acquisition of practical skills in electrical installation and maintenance work. The study recommended that factors that hinder practical skills acquisition should be tackled, students should be properly guided to pursue their carrier aspirations, aspirations of parents and their children's carrier should be in harmony.

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INTRODUCTION

Human beings have been striving to master and improve their environment. This quest has continually increased the need for well trained and efficient workforce. Effective training in skills acquisition immensely contributes to the development and economic self-reliance of individual and the nation at large (Amaehula & Nwanaka, 2013). The role of technical education in accelerating the socio-economic environment and technology advancement has made Federal Government of Nigeria to introduce and set objectives of technical education in its National Policy on Education (FRN, 2004). These objectives include:

1. Provide trained manpower in the applied sciences, technology and business particularly at craft, advanced craft and technical levels
2. Provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development
3. Give training and impart necessary skills to individual who shall be self-reliant economically

Formal knowledge and technical skills are obtained from technical and vocational institution in Nigeria (Ahmed, Chinda & Kwami, 2014). These skills training make students from various trades of technical colleges to harness materials and engage in economic production (Magnus, 2015). Many nations were transformed through technical education. Amaehule and Nwanaka (2011) argued that for Nigeria to advance technologically, skills to process raw materials, develop and maintain machineries or equipment must be a focal point of all administrations.

No nation raises above the quality of its teachers (FRN, 2004). Therefore, implementation of technical education cannot be successful if competent teachers are not in place. That is why Diraso (1997) consider competent teacher as an essential component for a successful implementation of vocational or technical skills. These competent teachers are technical experts and can inculcate skills and theoretical knowledge in various trades. Student's desirable learning outcome does not depend only on the teacher's competency but teacher's motivation and availability of workshop facilities. Thus, teacher's motivation, availability of workshop facilities for training and job satisfaction play vital roles in ensuring a successful teaching/learning process.

Electrical engineering trade demands a holistic approach to learning. Hence, all the educational domains of cognitive, affective and psychomotor are effectively incorporated in teaching to achieving the desired outcome in both theory and practical skills training. The graduates of Electrical Engineering Trades of technical colleges of Gombe State after graduation do not become self-employed, where they are supposed to open small scale workshops for electrical engineering and even enlarge the business where opportunities for employment of other youths and training will be possible. The graduates lack skills on the operations been taught under electrical installation and maintenance work (EIMW).

The operations taught under EIMW, according to National Board for Technical Education (NBTE, 2001), in Technical Colleges are:

1. Basic Electricity
2. Domestic Installation
3. Industrial Installation and Electric Motors
4. Cable Jointing
5. Battery Charging and Repair
6. Winding of Electrical Machine
7. Solid State Devices and Circuits.

Graduates from Gombe State Technical Colleges lack requisite technical skills, they are not competent in the world of work and unfit to operate small-scale workshops in their respective trades (Ahmed, Chinda, & Kwami, 2014). This situation is sympathetic and need to be addressed. Hence, the focus of this study is to find out the problems that affect skills acquisition among students of electrical engineering trades in technical colleges in Gombe State.

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STATEMENT OF THE PROBLEM

Gombe State Government has made effort in promoting Technical and Vocational Education (Abubakar & Musa, 2015) yet, the impact of technical and vocational education is far to be achieved due to the inability of the graduates of EIMW to practice what they have learned in Technical Colleges (Ahmed, Chinda & Kwami, 2014). Electrical Installation and Maintenance Work (EIMW) graduates who have acquired skills that will prepare them for further studies, be self-reliant and or to be gainfully employed as artisans thereby repairing, maintaining of electrical installations and appliances.

On the contrary, EIMW graduates are seen roaming on the streets adding more number to unemployed youths. Most of them are not enrolled into higher institution of learning, neither engaged in menial repair, maintenance of electrical installations and appliances. This phenomenon is distasting and undermining the objective of Technical education at secondary school sub-level. The focus of this study is to find out the factors affecting skills acquisition among students of electrical engineering trades in technical colleges in Gombe State.

Purpose of the Study

The main purpose of this study is to determine teachers' and students' related problems that affect practical skills acquisition among EIMW students in Technical Colleges in Gombe state. Specifically, the study sought to find:

1. Teachers' related factors that affect acquisition of practical skills by EIMW students.
2. Students' related factors that affect the acquisition of practical skills by EIMW students.
3. Determine the socio-economic background related factors that affect EIMW students' practical skills acquisition in Technical Colleges of Gombe State.

Research Questions

The following research questions were raised to guide the study:

I. What are the teachers' related factors that affect acquisition of practical skills by EIMW students?
2. What are the students' related factors that affect the acquisition of practical skills by EIMW students?
3. What are the socio-economic background related factors that affect EIMW students' practical skills acquisition in Technical Colleges of Gombe State?

Hypotheses

Three null hypotheses were formulated and tested at 0.05 level of significance. The hypotheses include:

HO1. There is no significant difference in the mean response of school administrators, EIMW teachers and students on teachers' related factors that affect acquisition of practical skills in EIMW by students.

HO2 There is no significant difference in the mean response of school administrators, EIMW teachers and students on student's related factors that affect acquisition of practical skills by EIMW students.

HO3 There is no significant difference in the responses of the school administrators, EIMW teachers and students on the effect of socio-economic background of students on the acquisition of practical skills by EIMW students.

METHODOLOGY

Research Design

The design for the study was a descriptive survey design. A survey is a type of research used to collect or sought data using questionnaires or interviews from a sample selected to represent a population, to which the findings can be generalized to whole population (Enemali, 2010).

Area of the Study

The study was conducted in Gombe State of Nigeria; the geographical location of Gombe State is at the latitude 110 - 171 North and longitude 110 - 101 East. Gombe State shares

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common boundaries with Borno State at the east, Bauchi State at the West, Yobe State by the north and. Adamawa State by the south. The study was carried out within the technical colleges in Gombe State, which is situated in the north eastern zone of Nigeria, which comprises of GSTC Gombe, GSTC Kumo, GSTC Deba, GSTC Kwami, GSTC Tula and GSTC Amada (Ministry of Education Gombe State, 2018).

Population of the Study

The population of this study was 438, which consisted of 24 school administrators, EIMW teachers and 378 EIMW NTC II students' of 2025/2026 academic session from six Technical Colleges of Gombe state.

Sample and Sampling Techniques

There is no population size reduction for the school administrators and EIMW teachers due to the small size of the population. In case of the EIMW students 220 respondents obtained the population, whereby random sampling was used, since the population of 280 respondents was manageable there was no population size reduction. 24 school administrators, 36 EIMW teachers and 220 EIMW students formed population of 280 respondents.

Validation of Instrument

Three (3) experts, two from the department of Electrical Technology Education MAUTECH Yola and one from Electrical/Electronic department FCE (T) Gombe validated the instrument for appropriateness and usability. Their suggestions and corrections was used in producing the final draft of the questionnaire.

Reliability of the Research Instrument

After the instrument has been validated, it was trial tested on 20 students and five teachers in GSTC Yola. The data obtained was used to test the reliability of the instrument using Cronbach Alpha. The result of the reliability test was 0.89, which means the instrument was suitable (Uzoagulu, 2011).

Method of Data Analysis

The data collected were analysed by statistical software Statistical Package for Social Sciences (SPSS). The data collected were subjected to descriptive and inferential analysis. The mean analysis was used to answer the research questions, while Analysis for Variance (ANOVA) was used to test the null hypotheses at 0.05 level of significance. The results of the study are presented based on the research questions and the hypotheses employed. Each presentation is followed by the analysis of the relevant data in order to arrive at all conclusive result.

RESULTS

Research Question 1

What are the Teachers' related factors that affect acquisition of practical skills by EIMW students?

Table 1: Mean Analysis of Teachers' Related Factors that Affect Acquisition of Practical Skills by EIMW Students

		STUDENT n=220		TEACHER n=36		ADMINISTRATOR n=24		N=280	
S/N	Item	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}_G$	Remark
1.	Use of inappropriate methods of teaching practical	3.7	0.03	3.61	0.58	3.60	0.56	3.48	Agreed
2.	Inappropriate teaching strategies	2.78	0.03	2.78	0.50	3.18	0.61	2.95	Disagreed
3.	Absence of consumable materials for practical skills training	3.11	0.08	3.33	0.10	3.32	0.91	3.22	Agreed

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S/N	Item	STUDENT n=220 $\bar{x}$	SD	TEACHER n=36 $\bar{x}$	SD	ADMINISTRATOR n=24 $\bar{x}$	SD	N=280 $\bar{x}_G$	Remark
4.	Teacher often misleads students on career choice	2.61	0.10	2.06	1.45	2.64	0.24	2.45	Disagreed
5.	Educational level of teachers affect practical skills acquisition	3.11	0.10	3.17	0.69	0.55	0.51	3.29	Agreed
6.	Professionalism affects practical skills of teachers	2.89	0.12	3.44	0.78	3.36	0.47	3.34	Agreed
7.	Knowledge of practical skills of teachers affect students' acquisition of practical skills	2.39	0.10	3.89	0.52	3.68	0.01	3.34	Agreed
8.	Academic work load of teachers affect students' acquisition of practical skills	3.94	0.12	3.88	0.08	3.82	0.93	3.86	Agreed
9.	Workshop work load of teachers affect students' acquisition of practical skills	3.61	0.14	3.72	1.56	4.14	0.22	3.84	Agreed
10.	Poor remuneration of teachers affect students' acquisition of practical skills	3.61	0.24	4.00	0.70	3.82	0.51	3.81	Agreed
11.	Lack of education of teachers affect students' acquisition of practical skills	2.89	0.27	3.83	0.52	3.22	0.09	3.31	Agreed
12.	Lack of teaching interest in teachers affect students' acquisition of practical skills	3.67	0.28	3.67	1.44	4.18	0.25	3.86	Agreed
13.	Attitude of school administrators towards practical skills training affect teachers' morals in impacting practical skills to students	3.06	0.29	3.16	0.36	3.45	0.70	3.26	Agreed
	Grade Mean	**3.18**	**0.15**	**3.43**	**0.17**	**3.30**	**0.46**	**3.38**	**Agreed**

Key: $\bar{x}$ = mean; $\bar{G}$= Grand Mean; SD = Standard Deviation; SDG= Grand Standard Deviation; n= sample of the group; N= sample size

The results in table 1 presents the mean opinion of students, teachers and school administrators on teachers' related factors that affect acquisition of practical skills of students in EIMW in Technical Colleges in Gombe State. The result of this analysis indicated that all items presented on related factors that affect acquisition of practical skills of students in EIM were agreed by the respondents with the exceptions of items 2 and 4 which have grand mean score of 2.95 and 2.45, and standard deviation of 0.38 and 0.60

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respectively. The mean of these items were below the cut-up point of 3. While the standard deviation of these items signified that the mean responses of the groups are closely tied to each other. This means these two items are not teachers' related factors that affects acquisition of practical skills of students in EIMW in Technical Colleges in Gombe State. While, the remaining 11 items were agreed upon as their mean and grand mean scores were above the cut-up point. The score of these 11 items were within the mean of 3.22 and 3.86. Moreover, the grand mean of the whole items was 3.38 and 0.44 standard deviation. The grand mean and the standard deviation indicated the level of agreement and how close their opinion was to one another.

Research Question 2

What are the students' related factors that affect the acquisition of practical skills by EIMW students?

Table 2: Mean Analysis of Students' Related Factors that Affect Acquisition of Practical Skills by EIMW Students

		STUDENT n=120		TEACHER n=36		ADMINISTRATOR n=24		N=180	
S/N	Item	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}$	SD	$\bar{x}_G$	Remark
14.	Personal interest of students Affect practical skills acquisition	3.28	0.35	3.67	0.76	3.77	0.47	3.59	Agreed
15.	Lack of materials in the workshops affect practical skills acquisition	3.94	0.36	4.33	0.80	4.27	0.46	4.19	Agreed
16.	High academic expectations Affect practical skills acquisition	3.22	0.36	3.28	0.03	3.18	0.98	3.22	Agreed
17.	Fear of electrical hazards Affect practical skills acquisition	3.67	0.39	3.06	1.11	3.41	0.34	3.38	Agreed
18.	Too much stress during practical skills acquisition	3.83	0.44	3.17	0.47	3.95	0.09	3.67	Agreed
19.	Gender factor affects practical skills acquisition	2.44	0.47	2.67	0.39	2.82	0.68	2.65	Agreed
20.	Lack of parental support Affect practical skills Acquisition	3.83	0.50	3.33	0.56	3.91	0.57	3.72	Agreed
21.	Health status of students Affect practical skills Acquisition	4.22	0.52	3.72	1.38	4.23	0.26	4.07	Agreed
22.	Peer group pressure affect practical skills acquisition	3.89	0.52	3.33	1.53	3.91	0.23	3.72	Agreed
23.	Workshop environment Affect practical skills Acquisition	3.50	0.56	3.28	0.14	3.50	0.87	3.43	Agreed
24.	Societal perception of technical education	2.89	0.58	3.44	3.32	4.18	0.04	3.55	Agreed

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	by students affect practical skills acquisition								
25.	Age of students affect	3.33	0.66	1.89	0.72	3.14	0.01	2.81	Disagreed
26.	Personal interest of students Affect practical skills acquisition	3.28	0.35	1.89	0.76	2.81	0.47	3.14	Agreed
	Grade	**3.33**	**0.66**	**3.26**	**0.45**	**3.69**	**0.95**	**3.50**	**Agreed**

Key: $\bar{}$ = mean; $\bar{G}$= Grand Mean; SD = Standard Deviation; SDG= Grand Standard Deviation; n= sample of the group; N= sample size

The results in table 2 presents the mean opinion of students, teachers and school administrators on students' related factors that affect the acquisition of practical skills in EIMW in Technical Colleges in Gombe State. The result of this analysis indicated that all items presented were agreed upon by the respondents except item 19 and 25, with grand mean scores of 2.65 and 2.81 with standard deviation of 0.33 and 0.54 respectively. The mean of these items were below the cut-up point of 3 and hence these items are not students' related factors that affect the acquisition of practical skills in EIMW in Technical Colleges in Gombe state. Conversely, the remaining items were agreed upon as their grand mean scores were above the cut-up point. Consequently, all items were considered as students' related factors that affect the acquisition of practical skills in EIMW in Technical Colleges in Gombe State as their grand mean was 3.14 and 0.54 standard deviation. With small value of standard deviation, this means the mean of the groups were closely tied to each other, meaning there is solid agreement in their opinion.

Research Question 3

What are the socio-economic background related factors that affect EIMW students' practical skills acquisition in Technical Colleges of Gombe State?

Table 3: Mean Analysis on the Effect of Socio-Economic Background on Practical Skills Acquisition by EIMW Students

		STUDENT n=120		TEACHER n=36		ADMINISTRATOR n=24		N=180	
S/N	Item	$\bar{}$	SD	$\bar{}$	SD	$\bar{}$	SD	$\bar{G}$	Remark
37.	Inability of parents to provide practical supporting materials	3.39	0.66	3.89	0.72	3.59	0.01	3.43	Agreed
28.	Parental reinforcement of carrier choice on their wards affects practical skills	3.56	0.69	3.89	0.28	4.00	0.76	3.83	Agreed
29.	Parents inability to pay children school fees affects practical skills acquisition	4.11	0.70	3.44	1.13	4.22	0.33	3.95	Agreed
30.	Parent's inability to pay students' practical skills acquisition	2.72	0.721	2.50	0.99	2.86	0.06	2.71	Disagreed
31.	Parent's ignorance affects students' practical skills acquisition	3.28	0.76	3.67	0.273	3.32	0.76	3.41	Agreed
32.	Parental low social status affects students' moral towards practical skills acquisition	2.89	0.78	2.78	0.66	2.95	0.52	2.88	Disagreed

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33.	Poor feeding of children affects students' moral towards partial skills acquisition	4.28	0.80	3.78	0.10	3.68	0.91	3.90	Agreed
34.	Poor learning environment affects practical skills acquisition	4.33	0.99	4.28	1.38	4.14	0.26	4.24	Agreed
35.	Lack of parental motivation affects students' practical skills acquisition	3.39	1.107	4.06	0.29	3.86	0.75	3.78	Agreed
36.	Lack of parental motivation affects students' practical skills acquisition	3.00	1.12	3.00	0.11	3.00	0.05	3.00	Agreed
37.	Children of well-to-do parental background pay less attention to practical lesson	3.78	1.378	3.33	0.235	4.86	1.00	4.05	Agreed
38.	Socio economic background of parents affect practical skills acquisition	3.72	1.38	3.83	0.44	3.55	0.65	3.69	Agreed
	Grade Mean	**3.54**	**0.94**	**3.49**	**0.53**	**3.67**	**0.52**	**3.57**	**Agreed**

Key: $\bar{x}$ = mean; $\bar{G}$= Grand Mean; SD = Standard Deviation; SDG= Grand Standard Deviation; n= sample of the group;

The results in table 3 presents the mean opinion of school administrators, teachers and students on the effect of socio-economic background on practical skills acquisition by EIMW students in Technical Colleges in Gombe State. The result of this analysis indicated that items 29 and 3 1 were disagreed upon by the respondents as their mean and grand mean were below the cut-up point 3.00 respectively. Conversely, the mean and grand mean of the remaining items were above the cut-up point of 3.00 which justified the agreement of the respondents. On the whole, the grand mean was 3.57 and 0.66 standard deviation. Hence, the opinions of the groups. were closely related as indicated by low standard deviation.

Hypothesis 1

There is no significant difference in the mean response of school administrators, EIMW teachers and students on teachers related factors that affect acquisition of practical skills in EIMW by students.

Table 5: Analysis on Teachers' Related Factors that affect Teaching of Practical Skills

Source of Revenue	SS	df	MS	F	P-value	Decision
Between Groups	1.573	2	0.786			
Within Groups	57.98	277	1.05	0.75	0.48	Accepted
Total	59.55	279				

Key: SS = sum of square, df= degree of freedom, MS = Mean square, F= F value

The outcome of the above table indicated that F (2, 277) = 0.75, P = 0.48. Since P-value is greater than 0.05, the null hypothesis was therefore accepted. This followed that the mean response of the administrators, teachers and students are significantly the same at 0.05 level of significance. In other words, the group mean opinion with regard to teachers' related factors that affect teaching of practical skills to EIMW students were not different.

Hypothesis 2

There is no significant difference in the mean response of school administrators, EIMW Teachers and students on student's related factors that affect acquisition of practical skills by EIMW students.

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Table 6: Analysis on teachers' related factors that affect acquisition of practical skills

Source of variance	SS	df	MS	F	P-value	Decision
Between Groups	1.64	2	0.82		0.43	Accepted
Within Groups Total	52.65	277	0.96	0.82		
	54.29	279				

Key: SS = sum of square df= degree of freedom MS = Mean square F= F value

The analysis of variance presented on table 6 above indicated that F (2, 177) = 0.86, P = 0.43. P-value is greater than the probability value of 0.05. Consequently, the null hypothesis was therefore accepted. This implied that the mean response of the administrators, teachers and students are significantly the same at 0.05 level of significance. The analysis therefore inferred that the mean opinion of the three groups in regard to students' related factors that affect acquisition of practical skills by EIMW students were the same.

Hypothesis 3

There is no significant difference in the responses of the school administrators, EIMW teachers and students on the effect of socio-economic background of students on the acquisition of practical skills by EIMW students.

Table 7: Analysis on socio-economic background of students on the acquisition of practical skills

Source of variance	SS	df	MS	F	P-value	Decision
Between Groups	0.37	2	0.18		0.85	Accepted
Within Groups Total	62.93	277	I. 14	0.16		
	63.30	279				

Key: SS = sum of square df= degree of freedom MS = Mean square F= F value

The analysis of variance presented on table 7 above indicated that F (2, 277) = 0.16, P = 0.85. Thus, the null hypothesis was therefore accepted since P-value is greater than 0.05. This inferred that the mean response of the administrators, teachers and students are significantly the same at 0.05 level of significance. Meaning that the mean opinion of the three groups in regard to the effect of socio-economic background of students on the acquisition of practical skills by EIMW students are significantly the same.

DISCUSSION OF FINDINGS

The discussion of finding follows the manner in which the research questions and null hypotheses were presented. With respect to research questions one which tended to identify the Teachers' related factors that affect acquisition of practical skills to EIMW students. In this regard, the findings of the study revealed that lack of teachers' interest in teaching affects students' acquisition of practical skills, indicated on table 1 with grand mean responds of 3.86 which is above the cut-up point of 3.00. This showed that teachers' related factors affect acquisition of practical skills to EIMW students in GSTCs of Gombe State. The findings of this study was in consonant with Jimoh (1997), Dahiru (2006) and Mbaga (2011) who affirmed the are factors associated with teachers that served as a major hindrance to the acquisition of practical skills Technical colleges across Nigeria. Similar viewed was held by Diraso (1997) who stressed lack of teachers' skills affect students in great dimension. These factors weakened teachers' morals, affects the effectiveness and consequently affects students' academic performance.

Similarly, research question two was aimed at determining students' related factors that

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affect the acquisition of practical skills by EIMW students. The finding of the study emerged from this research question shown that lack of materials in the workshops affect practical skills acquisition by students of EIMW in Technical Colleges of Gombe State. This factor was identified based on the grant mean responds of 4.19 which is above 3.00 cut-up point. This indicated that students' related factors affect the acquisition of practical skills of students of EIMW in Gombe State Technical Colleges. This finding was in line with Okiago (2013), who affirmed that absent of equipment and consumable materials hinders teaching of skills in schools and colleges of learning. Likewise, Babikkoi and Abdulrazak (2014), findinwas in consonant to this finding, who also affirmed that inadequate and lack of materials for practical affects students' skills acquisition in many respects.

With regard to research question three, which sought to find the mean perception of school administrators, technical teachers and students on the effect of socio-economic background on practical skills acquisition by EIMW students. The finding of research question three indicated that poor learning environment affects practical skills acquisition in EIMW. The analysis of this finding shown that the grand mean of the group was 4.24 above cut-up point of 3.00. This means that socio-economic background has effect on practical skills acquisition, since grand mean is above the cut-up point of 3.00.

This finding concord with the findings of Joseph (2014), who find out that learning environment has effect on teaching and learning of skills, particularly when the environment is not practically fit for skill training. Similarly, Ahmad (2011) also found out that teaching and learning in poor learning environment has negative effect on learners' academic achievement and motivation on practical skills. Likewise, Schoon, Ross and Martin (2006) found out that good learning environment enhances and accelerates practical skills acquisition; and motivates learners as they engage in friendly good learning environment.

With respect to null hypothesis one, the study revealed that here is no significant difference in the mean response of administrators, EIMW teachers and students on teachers' related factors that affect acquisition of practical skills in EIMW by students. That there was a significant of no difference in the mean of the groups at

0.05 level of significance, F (2, 177) = 0.86, P = 0.43. Thus, the null hypothesis was upheld. In other words, it means that school administrators, technical teachers and students shared similar views on teachers' related factors •that affect teaching of practical skills to EIMW students. Mbaga (2011), Dahiru (2006), Jimoh (1997) and Diraso, (1997) found similar results in their respective studies. Similarly, the test of null hypothesis two shown that there is no significant difference in the mean response of school administrators, EIMW teachers and students on student's related factors that affect acquisition of practical skills by EIMW students. The result was significant of no difference F (2, 177) = 0.82, P = 0.43. Since P is greater that probability value of 0.05. Therefore, the null hypothesis was accepted and consequently upheld. The result of this finding was found related to the studies conducted by Babikkoi and Abdulrazak (2014), Okiago (2013), who jointly agreed that teachers' factors affect practical skills acquisitions.

Moreover, the result of the null hypothesis three also yielded not significant F (2, 177) = 0.16, P = 0.85.). P greater than the probability value of 0.05. This follows that the mean of the group does not differed significantly. Hence, administrators, technical teachers and students have same perception on the effect of socio-economic background of students on the acquisition of practical skills by EIMW students. This means the group did share similar views that socio-economic background can affect students in their quest to acquiring practical skills in EIMW. This finding was found similar to the studies conducted by Joseph (2014), Ahmad (2011); Schoon, Ross and Martin (2006) respectively.

CONCLUSION AND RECOMMENDATIONS

The findings of this study establish that teacher-related factors, student-related factors, and socio-economic background significantly influence the acquisition of practical skills by EIMW students in Government Science and

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Technical Colleges of Gombe State. The inferential analysis revealed no statistically significant difference in the mean responses of administrators, technical teachers, and students, indicating a consensus among the groups on the role of socio-economic background. Based on these findings, it is recommended that government and school authorities prioritize teachers' motivation and professional development, ensure adequate provision of workshop materials and equipment, and improve the learning environment to create conditions that will enhance the effective acquisition of practical skills by EIMW students.

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