

Improving Enrolment of Students in Electrical Installation and Maintenance Works Trade in Technical Colleges North East Nigeria

L. C. Ezugu, P. C. Duhu, A. Tanimu Department of Electrical Technology Education, Modibbo Adama University of Technology, Yola, Adamawa State

ABSRACT

The study investigated the factors affecting enrolment of students in electrical installation and maintenance works trade in technical colleges in North East, Nigeria. Two research questions and two null hypotheses were formulated to guide the study. A descriptive survey research design was used for the study. The population for the study all the students and EIMWT teachers in all the Technical Colleges in the North East. Purposive sampling was employed to sample 11 Science and Technical Colleges from the existing 28 Technical Colleges in the North East Nigeria which gave a populate 338 made up 44 teachers and 294 students. The instrument used for data collection was structured questionnaire containing 60 items, titled "Questionnaire for Improving Enrolment of Students in Electrical Installation and Maintenance Works Trade Technical Colleges in North- East Nigeria (QIESEIMWTTC)". Cronbach's Alpha was used to determine reliability of the instrument which was found to be 0.997. Mean and standard deviation were used to answer the research questions, while the t-test was used to test the null hypothesis at 0.05 level of significance. Findings of the study revealed among others that; lack of public enlightenment on the prospects of EIMWT, poor public perception of EIMWT, Lack of guidance and counseling service, lack of educational facilities affect students' enrolment in technical colleges EIMWT programmes. It was recommended that; career guidance service should be provided in technical colleges, parent should develop interest and enroll their children in EIMWT, teachers should possess the necessary skills needed for training their students, and workshop facilities should be upgraded to acceptable standards

ARTICLE INFO

Article History

Received: October, 2019

Received in revised form: Dec., 2019

Accepted: January, 2020 Published online: March, 2020

KEYWORDS

Electrical installation, enrolment, self-reliant, facilities, skills, workshops

INTRODUCTION

Part of the effort of Nigerian Government to reduce poverty and unemployment, is the establishment of technical colleges where different trades for self-employment are taught such as; Auto-Mechanics, Building Construction, Electrical Installation, Wood-work, Carpentry and Joinery, Plumbing, Welding, Radio and Television repairs, (Kailani,2011). According to National Policy on Education (2016), The objectives of establishing Technical Colleges is to



skilled, self-reliant produce enterprising craftsmen as well as advance craftsmen who can apply their technical knowledge and vocational skills in solving industrial, agricultural and economic problems of the nation. According to the Federal Republic of Nigeria FRN, (2013), main objective of establishing Technical Colleges is the production of craftsmen who will meet the lower- level manpower demand of the nation's economy by filling up vacancies of craft level personnel in Nigeria's industries and business sectors. Specifically, Technical Colleges were designed to produce craftsmen for industries and government establishments and craftsmen who shall be self-reliant economically, and usher in the desired technological advancement which is very much required for the elevation of the country from a "consumer nation" to a "producer nation", from a "developing nation to a developed nation". Acquisition of appropriate technological skills is necessary to cope with the challenges presented by needs of our industries; this plan can only be achieved by increasing enrolment rate of students in technical colleges in the North-Eastern Nigeria (Mohammad, 2010). The decision taken by government to establish technical colleges is a step taken in the right direction considering the fact that a nation's progress is measured in terms of its teeming (productive) populace Electrical Installation and Maintenance Works Trade (EIMWT) is one of the trades that can contribute to the development (FRN, 2013). National Board for Technical Education (NBTE, 2011) emphasis in these colleges shall be placed on the crafts and cottage (small) industries within the locality.

Electrical Installation and Maintenance Works Trade (EIMWT) is a trade offered at both National Technical

Certificate (NTC) level and Advance National Technical Certificate (ANTC)levels in Technical Colleges. According National Policy on Education FRN, (2016) the philosophy behind the establishment of Technical College programs in Nigeria is to students with the necessary knowledge and skills that could lead to the production of craftsmen and other skilled personnel who can fill up vacancies of craft level personnel in Nigeria's industrial and business sectors. EIMWT is run by Technical Colleges and control by the National **Business** and Technical Educational Board (NABTEB).In Nigeria Educational Research and Development Council (NERDC, 2007), the National Board for Technical Education (NBTE) curriculum was designed to meet the targets of the National Economic Empowerment and Development Strategy (NEEDS), which are expressed as: value re-orientation, poverty eradication, iob creation, generation and using education to empower the citizenry. The major aim of the NTC curricular for EIMW is that; students having successfully passed through the Technical Colleges should have acquired skills in EIMW to enable them create jobs and generate wealth. The programme is geared towards equipping its beneficiaries with knowledge and skills in Electrical Installation and Maintenance Work trade. The training of EIMWT is for the acquisition of knowledge, attitude and practical skills for sustainable development (Tumba and Shuaibu, 2016).

Electrical Installation and Maintenance Works Trade (EIMWT)is made of the following modules: Electrical installation, Maintenance work, Electrical Principles, Cable Jointing Battery charging. Practical works in Electrical Installation and Maintenance Works (EIMW) in Technical Colleges involve various operations such as the use of: measuring instrument/tools,



file, hacksaw, taps, pliers, screw drivers. It also includes; soldering, wiring of simple advance circuits, PVC cables conduits. The programme is designed to provide training for individuals interested in electrical competence in installation. works. performing routine and preventive maintenance on electrical circuits through fault diagnosis and constructing new electrical circuits, and consequently providing employment opportunities for earning a living (NBTE, 2011). Despite the importance of the programme, study conducted Federal Ministry of by Education (FME) reveals that the target enrolment and retention has never been realized in any of the Technical Colleges in Nigeria, especially in the North-Eastern part of the country. The study attributed the negative development to poor public view and perception of technical colleges. And other factors (Ministry of Education, Policy and Planning Division, 2008). Paul and Mshalbwala (2008) observed that due to sharp practices during admission, inability of the programme to fully attract the target audience, inadequate funding, enrolment attrition, distance to school, socio-economic socio-cultural factors Technical College programmes have not achieved the purpose for which it was established. North East Nigeria comprises of six states namely; Adamawa, Bauchi, Borno, Gombe, Taraba, Yobe States. Technical colleges that offer courses in EIMW vary in nomenclature, student's composition and locations. In some states they are designated single stream (gender) Technical Colleges as obtained in Borno states and Yobe are called Government Science and Technical Colleges in some like Adamawa and Taraba they simply identified as Science and Technical Colleges.

The term enrolment is often used in technical colleges to describe well-

planned strategies tactics to sharp the enrolment of technical colleges in order to meet the established goals. Enrolment is an organizational concept and a systematic set of activities designed to enable Technical Colleges to exert more influence over the new student intakes (Bailey *et al.*,2006). Enrolment also can be defined as an organizational concept a systematic set of activities designed to enable Technical Colleges to exert more influence over their student.Levitz (2011) argued that the primary goal of enrolment includes:

- Stabilizing enrolments (reverse declining enrolment, control growth plan for fluctuations).
- ii. Linking academic student service programs. Improving services (increase satisfactions reduce paperwork).
- Improving access to information (putting our information systems to optimum usage).
- iv. Responding to economic forces (expansion, recession, employment rates).

Reducing vulnerability to demographic changes (age, sex, parental income, parental education, religion, home size home location), Levitz N (2011). The goal of Enrolmentis to manage the overall size and shape of Technical colleges, stimulate future enrolment growth support the development of students. Using a well-planned coherent participation strategy that supports the technical college mission, ethos strategic academic, financial, student development equity, its emphasis is mainly on:

- Client-oriented organizational culture and quality of student life;
- ii. Effective enrolment management plan
- iii. Significant student leadership development programmes;
- iv. Effective student development plan administrative services;



 v. Significantly improved access, retention rates, student equity, Levitz, (2011).

National Policy on Education (2016), emphasized that there should be equal education opportunity for all citizens of the nation at primary, secondary tertiary levels. In spite of the government policy in this area of education (Technical College) students enrolment is not encouraging especially enrolment of students into EIMW trade in technical colleges (Okorie, 2006, & Yaduma, 2013). Yaduma went further to say that these challenges are also present with challenges posed by the poor insecurity, Progressive opportunity, poverty, limited resources traditional attitudes of the society, whilst quality of Technical Education remains uneven. Okworie, (2008) identified some factors that contributed to low enrolment of students as parental factors, religious factors and cultural factors and the general societal attitude towards Technical College. Agnes (2014) identify factors affecting students' enrolment include socio-

economic teacher, parent, gender, environmental employment opportunities. In Nigerian societies, most people believed that Technical College are for less privilege once, people tend to drift to other areas of education (Okoye, 2009). In rural areas of Northern Nigeria, Osinulu (2006) observed that young people do assign some duties such; farm work, fetching firewood, hawking on the street taking care of children among others take up their time thus affect enrolment of students into technical colleges. Chiroma observed that the poor state of students enrolment into Technical Colleges in the North East States calls for concern. Therefore, there is a need for strategies that can improve student's enrolment in Technical Colleges of the North East States of Nigeria especially in EIMW trade.

The following are the summary of student's enrolment for four academic sessions gathered by the researcher during the preliminary survey to technical colleges of the North East Nigeria, from 2014/2015 - 2017/2018 sessions.

Table 1: Enrolment Statistics of Technical College Students of North-East from 2014/2015 to 2017/2018

STATE	2014/2015	2015/2016	2016/2017	2017/2018	TOTAL
Adamawa	92	114	65	69	340
Bauchi	61	62	101	73	297
Borno	62		47	33	142
Gombe	73	92	96	78	339
Taraba	44	72	57	58	231
Yobe	94	130	100	68	392
06	426	470	466	379	1,741

Corresponding author: Duhu, P. C. Education particles particles and particles are particles are particles and particles are particles and particles are particles and particles are part



Table 2: Distribution of Teachers and Present EIMW Students per Sample States for 2018/2019 session

States	Teachers	NTC II Students
Adamawa	7	61
Bauchi	9	50
Borno	7	27
Gombe	9	49
Taraba	7	52
Yobe	5	55
06	44	294

There sudden declining of low enrolment in technical colleges of the North East Nigeria especially in EIMWT. Electrical Installation and Maintenance Work trade at the NTC level in technical colleges is designed to produce skilled craftsmen who will be able to perform basic works in electrical installation maintenance works both in private public sector (Tumba and Shuaibu, 2016).Yet there has been a low rate of enrolment of students over the years in technical colleges of North-East States of Nigeria, especially in Electrical Installation and Work Trade Maintenance (EIMWT) (Adamawa State Educational Resource Centre 2014). EIMWT in technical colleges across North Eastern States of Nigeria faces many challenges, in terms of quality, quantity relevance, these challenges include, poor economic, environment traditional factors, poor attitudes of the people toward Technical College, these challenges affect enrolment of students, (Yaduma 2013). Other factors that contributed to low enrolment of students are parental attitude, religious attitude cultural attitude of the society towards Technical College, Lack of Admissions Selectivity, Counseling, Academic support 2017).The (Abdulmutallib al.. et Government of Nigeria is emphasizing on poverty eradication job creation through Vocational Technical Education Training (NPE,2016).

Purpose of the Study

The main purpose of this study is to investigate strategies for improving Enrolment of students in electrical installation and maintenances work trade in technical colleges in the North-East States. Specifically, the study sought to:

- 1. Determine strategies that could be used to improve students' enrolment into electrical installation and maintenance work trade in technical colleges in North-East States.
- Determine strategies that could be used to improve students' enrolment into electrical installation and maintenance work trade in technical colleges in North-East States.

Research Questions

In line with the specific purpose of the study, answers to the following questions are sought;

- What are the factors affecting enrolment of students in electrical installation and maintenance work trade in technical colleges in North-East States?
- 2. What are the strategies that could be used to improve student's enrolment of students into electrical installation and maintenance work trade in technical colleges in North-East States?

Hypotheses

The following hypotheses were formulated to test at 0.05 level Of significance to guide the study:

Ho1. There is no significant difference between the mean response of teachers and students on the factors affecting enrolment of students in electrical installation and maintenance work in technical colleges in North-East States.

Ho2. There is no significant difference between the mean response of teachers and students on the strategies for improving the Enrolment of students in electrical installation and maintenance work in technical colleges in North-East States.

METHODOLOGY

Descriptive Survey research design was adopted for the study. The area of this study is North Eastern States Nigeria consisting of six states. These six states are; Adamawa, Bauchi, Borno, Gombe, Taraba, Yobe states. The population of the study is 338subjects consisting of44 teachers and 294 NTC II students offering EIMWT. Simple random sampling was employed to sample 11 Technical Colleges from the existing Technical Colleges in the North East State Nigeria. The entire

population (338 respondents) of the 11Technical Colleges sampled was used for the study because it is not too large to handle. The instrument for data collection was structured questionnaire named "Questionnaire for Improving Enrolment of Students in Electrical Installation and Maintenance Works Trade Technical Colleges in North-East Nigeria (QIESEIMWTTC). The instrument was validated by three specialists and hereafter was trial tested on 26 students and 4 teachers from Government Technical College (GTC) Kano. A reliability coefficient Of 0.997 was obtained Cronbach's Alpha formula. Two research questions were answered using mean and standard deviation, the corresponding hypotheses were tested using t-test of difference at 0.05 level of significance. The decision to consider item as agree or disagree was based on the upper limit of point 3.0 on the five point scale which is 3.50. Thus, all items with mean rating of 3.50 and above were considered as agree and below 3.50 were considered as disagree.

RESULTS

Research Question 1

What are the factors affecting enrolment of students in electrical installation and maintenance works trade in technical colleges in North East Nigeria?

Table 3: Mean rating and standard deviation of responses of respondents on factors affecting enrolment of students'

S/N	ITEMS		Nt-44		Ns-294		SDig	Remark
		\overline{X}_t	SD_t	\overline{X}_{s}	SD_s			
1.	Lack of public enlightenment on the prospects of EIMWT	4.14	1.13	4.13	1.15	4.13	1.15	Agree
2.	Poor public perception of EIMWT	4.27	.973	4.02	1.19	4.05	1.16	Agree
3.	Low prestige accorded to EIMWT	3.81	.178	4.08	.984	4.05	0.88	Agree



JOURNAL OF SCIENCE TECHNOLOGY AND EDUCATION 8(2), JUNE, 2020 ISSN: 2277-0011; Journal homepage: www.atbuftejoste.com

S/N	ITEMS	Nt	-44	Ns-	294	Xi	SDig	Remark
		\overline{X}_t	SD_{t}	\overline{X}_{S}	SDs			
4.	EIMWThas not been given enough	4.15	1.14	4.12	1.04	4.13	1.05	Agree
5.	Low economic status hinders parents from publicity it deserves	3.47	1.33	3.51	1.49	3.51	1.47	Agree
6.	Lack of role models among EIMWT graduate in the society	3.95	1.01	4.12	1.14	4.10	1.12	Agree
7.	Lack of interest of youths in EIMWT	3.61	1.20	4.12	1.15	4.06	1.16	Agree
8.	Lack of guidance counseling of students about EIMWT	4.45	.663	4.22	1.04	4.25	0.99	Agree
9.	Parents believes that only school dropout or dull students go to Technical College	4.09	1.09	4.10	1.10	4.10	1.10	Agree
10.	Girls do not enroll into EIMWT due to gender Stereotyping attitude in career choice of the parents	4.43	.759	4.18	1.12	4.21	1.07	Agree
11.	There is a general wrong notion in the society that EIMWT is meant only for society that EIMWT is meant only for less privilege	4.31	.739	4.11	1.24	4.13	1.17	Agree
12	Students refused to enroll in EIMWT trade because of the labour involved in practical work	2.95	1.05	2.15	1.16	2.26	1.15	Disagree
13.	EIMWT is a course for those who don't have Career opportunities	3.56	.545	2.01	1.10	2.21	1.03	Disagree
14.	Lack of adequate practical equipment tools in EIMWT workshop	4.02	1.02	3.04	1.84	3.17	1.73	Disagree
15.	EIMWT workshop environment is not Conducive for practical class	3.75	1.24	4.06	1.10	4.02	1.12	Agree
16.	EIMWT is not common in a nearby schools	2.59	1.36	2.04	1.18	2.11	1.20	Disagree
17.	Lack of qualified teachers to teach EIMWT in technical colleges	3.40	1.04	3.78	1.25	3.73	1.22	Agree
18.	Lack of relevant facilities for teaching learning EIMWT	4.34	.607	4.29	.969	4.30	0.92	Agree



S/N	ITEMS	Nt	Nt-44		Ns-294		SDig	Remark
		\overline{X}_t	SD_t	\overline{X}_{S}	SD_s			
19.	Lack of people self confidence in EIMWT	3.84	1.03	4.32	.953	4.26	0.96	Agree
20.	EIMWT has limited progressive Opportunity in the labour market XG/SDG	3.70 3.8				4.08 .6 3.7	1.06 4 1. 1	Agree

The results presented in table 3 shows that both teachers students agreed that items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 15, 17, 18, 19 and 20 are factors affecting enrolment of students into electrical installation and maintenance works trade in technical colleges in North East Nigeria. This is because the item means ranging between 3.51 and 4.30 which is above the bench mean of 3.50. However, the

respondents disagreed with items 12,13,14,16 with grand mean of 2.26, 2.21, 3.17, and 2.11 respectively.

Research Question 2

What are the strategies that could be used to improve student's enrolment in electrical installation and maintenance works trade in technical colleges in North East Nigeria?

Table 4: Mean rating and standard deviation of responses of respondents on strategies that could be used to improve enrolment of students'.

S/N	ITEMS		-44	Ns-	294	\overline{X}_{i}	SDig	Remark
		\overline{X}_t	SD_{t}	\overline{X}_{S}	SD_s			
21.	Government should provide all needed equipment's/tools for practical to help students carrying out their practical	4.59	.497	4.15	1.05	4.21	0.98	Agree
22.	Reduction of school fees for students in EIMWT	4.31	.707	4.14	1.03	4.16	0.99	Agree
23.	Parents should develop interest enroll their children in EIMWT in Technical Colleges	4.50	.731	4.21	1.18	4.24	1.12	Agree
24.	Philanthropists' NGO should be encouraged to offer private grants to deserving teacher students of EIMWT	4.36	1.03	4.33	.945	4.34	0.96	Agree
25.	Linkage of EIMWT to the labour market	4.18	.994	4.23	1.13	4.23	1.11	Agree
26.	Adequate infrastructures/facilities like textbooks, instructional materials, functional workshop, modern machines/tools should be provided to make learning attractive worth to students	4.59	.816	4.13	1.18	4.19	1.13	Agree



S/N	ITEMS	Nt	-44	Ns-	294	\overline{X}_{i}	SDig	Remark
		\overline{X}_t	SD_t	\overline{X}_s	SD_s			
27.	Career guidance services should be provided in Technical school to encourage both boys girls to enroll in EIMWT	4.54	.627	4.05	1.14	4.12	1.07	Agree
28.	There should be regular provision of EIMWT training materials	4.56	.545	4.09	1.09	4.15	1.02	Agree
30.	Assisting students in identifying areas of specialization that will suit their area of choice of career	4.00	.000	4.15	1.12	4.13	0.97	Agree
31.	Encouraging students to persuade/recruit friends prospective candidate from basic education to join them in EIMWT	4.34	.568	4.07	1.13	4.10	1.06	Agree
32.	Encouraging EIMWT students' participations in related professional seminar/workshop	4.29	.878	4.04	1.14	4.07	1.11	Agree
33.	The society students should be made to understand that age is not a barrier to skill acquisition of EIMWT	4.34	.805	4.09	1.11	4.13	1.07	Agree
34.	The state government should re- introduce the allowance given to teachers/instructor students to motivate prospective candidate to enroll in EIMWT	4.54	.627	4.12	1.03	4.17	0.98	Agree
	\overline{X} G/SDG	4.40	0.68	4.14	1.10	4.17	1.04	

The results presented in table 4 revealed that both teachers and students accepted all the items (35 to 47) as strategies that could be used to improve students' enrolment in electrical installation and maintenance works trade in technical colleges in north east Nigeria. This is because the items have grand mean

ranging between 4.07 and 4.34 which is above the cut off mean of 3.50.

Hypothesis 1

There is no significant difference between the mean response of teachers and students on the factors affecting enrolment of students into EIMWT in technical colleges in North East Nigeria.

Table 5: Summary of t-test of difference between the responses of teachers and students on the factors affecting students' enrolment into EIMWT.

	N	X	SD	SE	df	t	Р	Remark
Students	20	3.73	.772	.173	19	934	.362	Uphold Ho₁
Teachers	20	3.84	.487	.109				5 p

Corresponding author: Duhu, P. C. Ed. patrickchindad@gmail.com Department of Electrical Technology Education MAUTECH, Yola. © 2020, Faculty of Technology Education, ATBU Bauchi. All rights reserved



The results of the paired sample t-test presented on the table 3 showed that the P- value .362 is greater than the significant level of confidence hence, the null hypothesis was uphold. Therefore, there is no significant difference between the mean response of teachers and students on the factors affecting Enrolment of students into EIMWT in technical colleges in North East Nigeria. This implies that both teachers and students shared similar opinion in regard

to the factors affecting Enrolment of students into EIMWT in technical colleges in North East Nigeria.

Hypothesis 2

There is no significant difference between the mean response of teachers and students on the strategies for improving Enrolment of students' in EIMWT in technical colleges of the North East Nigeria.

Table 6: Paired Sample t-test analysis of difference between the responses of teachers' and students on the Strategies to be used to Improve enrolment into EIMWT.

	N	X	SD	SE	dft	Р	Remark
students	13	4.14	.082.023				
				12	-4.37	.001	Uphold H ₀₂
teachers	13	4.40	.181.050				

P<0.05; SD= significant difference

The result of the paired t-test presented on table 4 showed that the p-value .001 is less than the significant level of confidence hence, Ho₃ was accepted; therefore, there is significant difference between the mean response of teachers students on the strategies for improving enrolment of students in EIMWT in technical colleges in North East Nigeria. This implies that teachers and students differ in the opinion with regard to the strategies that could be used to improve enrolment of students into EIMWT in technical colleges in North East Nigeria. This difference could be seen in their mean rating.

FINDINGS OF THE STUDY

The study arrived at the following findings;

 Factors that negatively affect enrolment are; Lack of public enlightenment on the prospects of EIMWT, Poor public perception of EIMWT, Lack of guidance counseling of students about EIMWT, there is a

- general wrong notion in the society that EIMWT is meant only for less privilege, and Lack of relevant/adequate facilities for teaching and learning EIMWT.
- Strategies that could be used to improve enrolment are; Provision of adequate infrastructure/facilities like furniture, textbooks/instructional materials must be provided in schools to make learning attractive and worthwhile to students, and Career guidance services should be provided in schools to encourage both boys girls to enroll in EIMWT,

DISCUSSION OF FINDINGS

The study identified several factors that negatively affect enrolment of students in EIMWT programmes namely: lack of public enlightenment on the prospects of technical college graduates., Lack of relevant/adequate facilities for teaching and learning EIMWT, and EIMWT has not been given enough publicity it deserves and as such many people are

Corresponding author: Duhu, P. C. Patrickchindad@gmail.com Department of Electrical Technology Education MAUTECH, Yola. © 2020, Faculty of Technology Education, ATBU Bauchi. All rights reserved



ignorant of the great opportunities that await graduates of this sector in the nearest future. Another problem is that of the poor public perception of EIMWT. This agree with ministry of Education Policy and Planning Division (2008) who stressed that the public even parents consider the EIMWT fit only the academically less endowed. In view of this, there is the need to make EIMWT less dead-end. The low prestige accorded to EIMWT in the society is also an issue of great concern. This agrees with the assertion of Okwelle, el at (2018): who state that EIMWT was perceived by the society at large from inception as a discipline for those who have low cognitive ability, those that cannot cope-up with their academic work, but it is for those that use their hand in molding and repairing things only. This agrees with Okeke, (2010) who stated that EIMWT has not been given enough publicity it deserves.

The finding of the study also revealed lack of interest of youths in EIMW trade as one of the factors responsible for low enrolment in EIMWT this agrees with Aliyu (2008) who asserts that one of the reason why student today are not interested in EIMWT could be as result of lack of proper delivery of what is expected in the sector. Consequently. parents/students look at this sector of education as inferior discipline and there for preferred other disciplines rather than EIMWT. Lack of guidance and counseling of students is also seen as problem responsible for low enrolment into EIMWT. This agrees with the finding of Usoro et al., (2010) who stated that lack of lack of adequate guidance and counseling services in Nigerian schools to assist students in their career plans and choices contribute immensely to low enrolment in EIMWT. Gender stereotyping attitude in career choice has also been identified as factor responsible for female enrolment in EIMWT, this agrees with Sule (2009) who stated that women/girls are often encouraged by parent and society at large to take courses often termed as feminine subjects and this result in gender disparity in education low level of girl's enrolment in EIMWT in technical colleges.

The study identified several strategies to be adopted for improving students' enrolment in **EIMWT** programmes such as financial aid for students' of EIMWT program, this agree with Jummai, (2014) who suggested automatic scholarship for EIMWT students as an incentive to attract more prospective candidate to EIMWT, Ogwa, (2015) who stated that other factors that could affect enrolment of students into EIMW trade. socio-economic financial affect enrolment of students in EIMWT this agrees Levitz, (2011) who stated that factors affecting Enrolment include tuition level, quality of the availability of government school institutional financial aid. Reduction in tuition fees for EIMWT is also identified as a strategy. This agrees with the human capital model in Gale (2008) which postulated that to understand enrolment behavior of EIMWT, it is necessary to look at such factors as tuition level, student financial aid, and average wages for EIMWT graduate, and the difference in lifetime earnings between graduates of other discipline. This agrees with Sule (2009) who advocated provision of automatic scholarships to men and women who are qualified and willing to pursue EIMWT. Motivation of philanthropists nongovernmental organizations to offer private grants to deserving students in technical college with Mohammad, (2010) who suggested creative financial aid that might include flexible payment plan tuition reimbursement. Linkage of technical college to the labour market, this agrees



with ministry of education policy and planning division (2008) who stated that the ultimate aim of Technical/vocational training is employment; therefore, EIMWT program have to be linked to the job market. In this way, the socio-economic relevance of EIMWT can be enhanced.

Provision of adequate infrastructure/facilities like furniture, textbooks/instructional materials must be provided in schools to make learning attractive and worthwhile to students. Career guidance services should be provided in schools to encourage both boys girls to enroll in EIMWT, this agrees with Usoro, at el (2010) who suggests the intensification of guidance counseling services in Nigerian technical colleges to assist students in their career plans choices; the recommendation of Daniel, at (2009).That suggested establishment of guidance and counseling unit to guide the students in their choice of occupation; Sule (2009) who advocated career guidance services in technical colleges to encourage boys and girls to enroll in technical colleges. Regular provision of training materials in technical college workshops, this agrees with Nwabudike (2008) who advocated the encouragement of students' participation related professional seminar programmes that requires professional skills acquisitions.

Encouraging students to persuade/recruit friend and prospective candidate from basic education to join them in technical college, this agrees with Okworie (2008) and Aliyu (2008) who asserted that students' enrolment can be enhanced in technical college by encouraging students to persuade and recruit their counterparts in technical college to join EIMWT, the society and students should be made to understand that age is not a barrier to skill acquisition

in technical college. This agrees with Sule (2009) who stated that one of the most viable strategies for ensuring effective men women enrolment in EIMWT in technical colleges intensive mobilization campaign at grassroots level, this will greatly lead to an increase in enrolment of students in school, introduction of allowance to EIMWT students, this agrees with Paulsen John (2002) who found that the cost of attending college the financial aid given to lower college costs were significant factors in a low-income student's college choice decision enrolment

CONCLUSION

Based on the outcome of the study, the following conclusions were drawn, the factors affecting low enrolment of students in EIMWT in technical colleges in North East Nigeria are, lack of public enlightenment on the prospects of EIMWT graduates, poor public perception of EIMWT in North East Nigeria, lack of guidance and counseling of students at junior secondary school level, and lack of educational facilities such as computer, library, books, and workshop While the following are strategies that could be adopted to improve the enrolment of students in EIMWT programmes technical colleges namely; financial aid to motivate students of EIMWT in technical college. Philanthropists non-governmental organizations should be encouraged by the government through the Ministry of Education to offer private grants to deserving students in technical colleges adequate infrastructure and instructional materials, functional workshop, modern machines, electricity supply must be provided in technical colleges to make learning attractive worthwhile to students, career guidance services should be provided in schools encourage both male female to enroll in EIMWT programmes.



teachers possess the necessary skills needed for training their students etc.

In view of the above, it is believed that these strategies could improve students' enrolment of students in EIMWT in technical colleges. Consequently, this could lead to the production of adequate number manpower required to turn the nations' economy around and usher in the desired technological advancement which is very much required for the elevation of Nigeria from a "consumer nation" to a "producer nation", from a "developing nation" to a developed nation.

RECOMMENDATIONS

- i. Teachers and parents should change their attitude dispositions towards the EIMWT. They should learn to be positive about the trade. They need to encourage their students' children to think about careers toward trades in Technical College at an early age. Because the earlier children start thinking about the careers they would enjoy, the better they would be when the actual time comes to start the career.
- ii. Many parents are yet to see or understand the socio-economic relevance of the course; as such EIMW trade practitioners, teachers, government, need to do more in sensitizing the public by way of creating awareness in the benefits accruable from the EIMW trade. By this, many parents would come to understand the socio-economic relevance of the EIMW trade.
- iii. Technical Colleges should see it as point of duty to always organize seminars; workshops symposia as well promote all training programmes in EIMWT, as this would help in ensuring the relevance of the trade.

- iv. There is need for Teachers to inform EIMW trade students of the earning potentials in the trade.
- v. Employment opportunities for EIMWT graduates to be enhanced, if government will employ EIMW trade graduates to teach the trade at all levels of education instead of allowing other subject teachers to teach EIMW trade, enrolment will improved. (Agnes, 2014).

REFERENCES

- Abdulmutallib, et al, (2017). Perceived Factors Influencing Girl Child Enrolment in Vocational Technical Education in Bauchi State.
- Adamawa State Government (2014).

 Reviewed syllabus for the training of artisans at Business Apprenticeship
 Training Centers in Adamawa State.

 Kano: Digital graphics Ltd.
- Agnes, A. O. (2014). A Study of Factors Influencing Students' Enrolment in Social Studies Education at the Post-Secondary School Level in Nigeria
- Aliyu M. B. (2008). An Evaluation of introductory Technology Teacher Preparation programmes in Single Dual Institution in Nigeria.

 Unplished Ph.D. thesis of Vocational Technical Education Programme, School of Technology Education, Abubakar Tafawa Balewa University (ATBU), Bauchi. Nigeria.
- Bailey, T. R., Leinbach, D. T., &Jenkins, D. (2006). Is student success labeled institutional failure? New York: Community College Research Center at the Teachers College, Columbia University.
- Chiroma, V. L. (2004). The major constraints on women Education in North Nigeria. *Gombe Technical Education*. *Journal vol. IV* (1) 61-69



- Daniel, W, S., Milosevic, L., & Daniels, S., (2009). Gender behavior and achievement: A preliminary study of pupil perceptions and attitudes. Gender and Education, 12 (1): 87 113.
- Federal Republic of Nigeria (FRN, 2013). National Policy on Education (Revised). Lagos: NERDC Press, Yaba.
- Gale Encyclopedia of Education (2008).

 College students' retention.

 Retrieved from
 http://www.answers.com/educatio
 n+encyclopedia-cid13575519on9/1/20].
- Jummai, A. G., (2014).Factors Militating
 Against the Enrolment Retention of
 Girl-Child Students in Junior
 Secondary Schools in Kaduna State
 Department of Educational
 Foundation Curriculum, Ahmadu
 Bello University, Zaria
- Kailani, and Sa'I H. R. (2011). Analysis of gender balance in male and female enrolment/retention into the trade areas of business apprenticeship training center (Technical Colleges) in Adamawa State, Nigeria. Paper presented at the 6th Annual national conference of the Association of Nigerian Academics (ANA) held at Kaduna polytechnic, Kaduna, Nigeria on March 28th-1st April, 2011
- Levitz, N. (2011). Strategic Enrolment management in an era of changing demographics Mabry. Enrolment Management, ERIC Digest. ERIC Clearinghouse for Junior Colleges Los Angeles CA. http://www.ericdigests.org/pre-926/management.htm.
- Ministry of Education, Policy & Planning Division (2008).A Study on Enrolment and Retention Strategies in Bhutun. Retrieved from: www.education.gov.bt

- Mohammad, K.U. (2010). Skills improvement required by electrical technologists for effective work performance in industries in Kaduna State. Journal of Nigerian Association of Teachers of Technology, 7(1), 163-170.
- National Board for Technical Education.
 (2011) the curriculum for electrical installation and maintenance work:
 National Technical Certificate (NTC)
 Advanced National Technical Certificate (ANTC). Kaduna: NBTE Press.
- National Policy on Education (2016) Report of the committee for Evolution of the New Education Policy
- NBTE (2007).National Board for Technical Education standards Criteria for Approval of Programmes in Vocational Enterprise Institutions (VEIS) & Innovation Enterprise Institutions (IEIS) Programmes. Kaduna, Nigeria.
- Nigeria Educational Research Development Council (NERDC). (2007). Senior Secondary School Trade Curriculum: Electrical Installation Maintenance Work SSS 1-3.SHEDA, Abuja, NERD. Nigeria presented at the 48thsession of the International Conference on Education (ICE).
- Nwabudike, C. N., (2008). Strategies for improvement students' Enrolment into Technical College Programme in Delta State. Journal of Nigerian Association of Teachers of Technology(JONATT), 6 (4) 296-304.
 - Ogwa, C.E. (2015). Teachers Students
 Perception of Instructional
 Supervision on Capacity Building in
 Electrical Installation Trade. *Journal*of Education Practice. 6(29); 182187.
 - Okeke, A.C. (2010). Improving students' skill acquisition through effective



- clothing textile education in tertiary institutions in Anambra State. Journal of Home Economics Research, 6(1), 81.
- Okworie, R. O., (2008). Administrative
 Strategies for Increasing Enrolment
 and Retention of Female Students in
 Nigerian Technical Colleges.
 Unpublished PhD. Thesis, Vocational
 Technology Education Programme,
 School of Technology Education,
 Abubakar Tafawa Balewa University
 (ATBU), Bauchi. Nigeria.
- Okwelle, L., Chijioke, C., and Agwi V., (2018).

 Strategies For Improving Female
 Students' Enrolment in Technical
 and Vocational Education
 Programmes Through Public
 Relations Activities In Nigeria.
 - Okorie, J.U. (2006). Developing Nigeria's workforce. Onitsha Machky Envious Publishers
 - Okoye, K. (2009). Administrative Instructional strategies for increasing Enrolment Retention of female students in Technical Colleges programme. Unpublished Ph.D. Thesis, UNN.
 - Osinulu, C. (2006). Women Education in Akinkugbe (ed). The second Obafemi Awolowo Foundation Dialogue. Nig.

- Education Challenges Ahead Ibadan, Spectrum Book Ltd.
- Paulsen. M. B., & John, E. P., (2002). Social class and college costs: examining the financial nexus between college choice and persistence. *The Journal of Higher Education (Columbus, Ohio)*, 73(2), 187-236.
 - Sule, H. O. (2009). Strategies for Enhancing the Enrolment of Girls in Vocational Technical Institutions in Nigeria for Economic Development. Journal of Vocational Technical Educators (JOVTED) 2(1) 166-173.
 - Tumba, I. & Shuaibu, H. (2016). Strategies for Improving Students' Acquisition of Practical Skills in Electrical Installation Maintenance Work Trade in Technical Colleges in Kano State.
 - Usoro, H. S. U; Usoro, M; Ibrit K; & Udofia, W. U., (2010). Causes of Male Students' Dominance over Female Counterparts in Technical Colleges in Abia State, Nigeria. Journal of Nigerian Association of Teachers of Technology (JONATT), 7(1) 43-49.
 - Yaduma, P.S. (2013).The influence of choice in Science Technical Education in Gombe State. *Journal of League of Researchers in Nigeria* 7(2)132.