Technical Skills Requirements for Self Reliance in Automobile Occupations in Nigeria

Idris A. M., Audu, R., Abdulkadir, M., Abutu F. & Mustapha, A.

Department of Industrial & Technology Education
Federal university of Technology Minna, Niger State, Nigeria
Email: francis.a@futminna.edu,ng **Phone:** 08067901229.

Abstract
This study determined the technical skills requirements for self reliance in automobile occupations in Nigeria. The instrument for data collection was a 24 items questionnaire with four point scale on a population of 125 respondents sampled from Kaduna State; Niger State and Federal Capital Territory, Abuja. The questionnaire was validated by three experts chosen among automobile practitioners and automobile technology lecturers in the study areas and the corrected validated instrument pilot tested outside the study area. The reliability of the piloted tested instrument was established to be 0.82 using Cronbach Alfa statistic. Research questions were answered using Mean and Standard Deviation. While z-test was used to test the null hypotheses at .05 level of significance. Findings of the study revealed among others that: the technical skills required for self reliance in automobile mechanics occupation includes among others : technical skills in the use of automobile diagnostic tools and equipment, technical skills in the servicing, maintenance and repairs of the systems and sub systems of the motor vehicles. The study also identified possible ways for acquisition of technical skills for self reliance in automobile mechanics occupation in Nigeria. There is no significant difference in the mean responses of automobile technology teachers and automobile practitioners on the technical skills requirements for self reliance in automobile occupations. The study recommended among others that there is need to exploit the innovation technical skills requirements for self reliance in automobile occupations in Nigeria and recommended also the establishment of technical skills training and skills development centers to provide lifelong technical training opportunities required for self reliance in automobile occupations in Nigeria.

Keywords: Skills, Automobile, Automobile mechanics', Occupation, Skills, Self reliance.

Introduction
The Nigerian economy has been experiencing a lot of difficulties in terms of flourishing for over three decades partly due to poor implementation of development policies. This trend generated development crises that rendered Nigerians vulnerable to socio-economic hardships. This cannot be unconnected with the high level of unemployment the youth of Nigeria are faced with. Unemployment has assumed a high proportion and it is also seen as one of the causes of poverty in the country. Unemployment has been on the increase and is getting worse on daily basis as the numbers of graduates are increasing annually. The present situation in Nigeria poses serious threats and challenges to both government and well meaning citizens. The problems facing the country centre on high rate of poverty; youth and graduate unemployment; over-dependence on foreign goods and technology; low economic growth and development and poor technical skills among others. The rising rate of youth unemployment in Nigeria could be attributed to the gross deficiency in technical skills needed for employment among youths. The automobile mechanics technical skills in the context of this study, refers to the automobile trade skills needed for carrying out diagnostics, repairs and maintenance of motor vehicles. The automobile mechanics technical skills encompasses a wide range of skills sets including among others, skills in diagnostics, servicing, repairs as well as general maintenance of motor vehicles to keep them in good operating condition.

The current hardship experienced in Nigeria demands that youths acquire innovative technical skills and knowledge for self reliance. In the field of automobile technology, overcoming these economic hardships requires innovative technical skills for self reliance in the variety of trade options in automobile mechanics occupations. Innovation refers to a new way of doing things. Technological dynamism has brought innovations in the method of diagnosing, maintenance and repairs of modern motor vehicles thereby creating more job opportunities in the automobile mechanics occupation. Automobile mechanics occupation is a technical trade where automobile mechanics carry out varieties of automobile maintenance and repair tasks to earn a living and be self reliance. Being self reliance implies that an automobile mechanics possesses all the requisite technical knowledge and skills to successfully carry out the task of automobile mechanics to earn a living. The Industrial Training Fund (ITF) (2017) defined self reliance as the social and economic ability of an individual, household or community to meet basic needs (including protection, food, water, shelter, personal safety, health and education) in a sustainable manner and with dignity. Self-reliance, as a programme approach among automobile mechanics, refers to developing and strengthening livelihoods of automobile mechanics of concern and reducing their vulnerability and long-term reliance on humanitarian or external assistance. This should assist automobile mechanics in becoming self-reliant.

Research findings revealed that, a wide variety of occupational trade areas or opportunities are available in the field of automobile technology. Nyapson (2015) stated that each of the major systems, sub systems, units and accessories in a motor vehicle provides an occupational area where individuals can earn a living and be self reliance economically. Isaac (2015) pointed that individuals can earn a living and be self reliance by specializing on servicing and repairs of any of the following: braking system, transmission system, ignition system, suspension and steering system, air conditioning and refrigeration system, charging system and battery, fuel supply and injection system, automobile wiring and electrical supply system, among others. The National Automotive Design and Development Council (NADDC) (2017) stated that innovative occupational areas in automobile trade includes sensor maintenance and installation, fault diagnosis, vehicle costing and valuing, installation of vehicle anti theft security gadgets, and Electronic control unit (ECU) servicing and repairs.

Other research works identified engine oil recycling business, sales of automobile spare parts and accessories, owning automobile repair shops, harvesting and sales of scrap metals from dead vehicles as options where individuals can specialized to earn a living and be self reliance (Okolie, 2019). In a survey of job opportunities in automobile trade, (NADDC) (2017) further highlighted automobile occupational areas to include: auto body mechanic, auto detailer (car wash), auto glass installer, auto maintenance technician, auto body paint technician, auto body repair technician (panel beater), automobile mechanic, automotive electrical systems repair technician (automotive Electrician), automotive service technician, battery and charging system technician, brake repair technician, car maintenance technician, car stereo and electronics systems, chassis fabrication technician ,cooling system technician, diesel truck mechanics, electric car engineer, electric motor technician, engine machinist, hybrid car technician, tire servicing and repair technician, transmission repair technician as well as truck maintenance and repair technician.

The list of occupational areas in the field of automobile mechanics is inexhaustible due to continuous innovations in the automobile industry which invariably creates more occupational areas for self reliance (Peter, Chris & Misiel, 2016). In this regard, Peter et al. (2016), stated that automobile occupational areas also include: diesel fuel injection technicians, motorcycle mechanic, small engine mechanic, heavy duty diesel mechanic, vehicle trimmer among others. Despite the existence of these varieties of opportunities in automobile mechanics occupation, exploiting these trade areas demands acquisition of sound technical knowledge, entrepreneurial knowledge and skills. A sound entrepreneurial knowledge and skills is needed for self reliance as it provides automobile entrepreneurs with the basic capacity and ability to appropriately choose a particular occupational trade area and manage such to earn a living thereby reducing economic hardship. To overcome the untold hardship occasioned by the global economic meltdown, many nations of the world have introduced one form of economic policy or the other in their training curriculum in formal and informal institutions to improve on their economic condition. In addition, various economies have employed different techniques and practices to successfully grow their economies.

Therefore, there is a need for youths to explore innovative technical skills required for self reliance in automobile occupations in Nigeria to ensure self reliance and poverty reduction in the society. Through technical skills acquisition, the recipient should be able to acquire the essential knowledge and experiences needed to meet challenges in the automobile workplace. Technical skills acquisition for self reliance encourages communal wealth creation and productive use of human resources, thus forestalling unemployment, economic hardship and enhancing self reliance. It is against this background that this paper determined the technical skills requirements for self reliance in automobile occupations in Nigeria.

Statement of the Problem

Nigeria as a country is very rich in human and material resources. Unfortunately, it has a large population of unemployed youth idling about without jobs. The high rate of economic hardship in Nigeria resulting from chronic unemployment among Nigerian youths is alarming and scaring, because of the disastrous consequences that accompany idleness among youths. Madugu (2019), stated that the rise in the level of unemployment and hardship is an indication that the measures adopted by various governments are not yielding the desired objectives. For instance, the National Bureau of Statistics (NBS) (2020), revealed that, there are over 64 percent unemployment rate among youths in Nigeria with over 25 percent youths suffering underemployment in underpaid jobs. This is a large population that could constitute a threat to the Nigeria's economy, and thus requires adequate government attention. Unemployment in Nigeria after 60 years of political independence is said to be the highest and this has made life difficult especially among the youth with enormous consequences.

The National Board for Technical Education (NBTE)(2020) stated that, the full implementation of the training objectives in the automobile mechanics programme is expected to empower trainees with the required occupational skills needed to effectively carry out diagnostics, repairs and maintenance of motor vehicles. The National Directorate of Employment (NDE)(2020), also stated that upon competition of the auto mechanics training

programme, trainees should among others be able to gain employment in automobile service enterprise or maintenance industry, set up their own auto repair shop and also be able to proceed for further professional development in auto mechanics occupation.

Despite the laudable objectives of the automobile mechanics occupational programme, several youths graduating from automobile mechanics training programme and are found jobless, unable to gain employment and are unable to set up their own automobile mechanics workshop upon graduation due to the prevalence of skill gaps. There appear to be a mismatch between what training institutions teaches compared to what is needed in the automobile workplace. The prevailing skill mismatch makes it difficult for graduates to achieve self reliance upon graduation from the automobile mechanics training programme. On the basis of this, this study investigated the technical skills required for self reliance in automobile occupations in Nigeria.

Purpose of the Study

The purpose of the study was to determine the technical skills required for self reliance in automobile mechanics occupations in Nigeria. Specifically, the study determined:

1. The technical skills required for self reliance in automobile mechanics occupation in Nigeria.
2. The ways for acquisition of technical skills for self reliance in automobile mechanics occupation in Nigeria.

Research Questions

The following research questions were raised to guide the study:

1. What are the technical skills required for self reliance in automobile mechanics occupation in Nigeria?
2. What are the ways for acquisition of technical skills for self reliance in automobile mechanics occupation in Nigeria?

Research Hypotheses

Three null hypotheses were tested at .05 levels of significance.

H_{O1}: There is no significant difference in the mean responses of automobile technology teachers and automobile practitioners on the technical skills required for self reliance in automobile mechanics occupation in Nigeria.

H_{O2}: There is no significant difference in the mean responses of automobile technology teachers and automobile practitioners on the ways for acquisition of technical skills for self reliance in automobile mechanics occupation in Nigeria.

Methodology

Survey research design was used to determine the technical skills required for self reliance in automobile mechanics occupations in Nigeria. A convenient sampling technique was used to select the study areas which are: Zuba-Abuja, Kaduna and Minna town because there are good concentration and cluster of automobile practitioners and automobile workshops in these cities. The automobile practitioners in the context of this study, encompasses all professionals in the field of automobile diagnostics, maintenance and repairs. The population of the study was 125 respondents comprising of 40 Automobile Technology Teachers (ATT) and 85 Automobile Practitioners (AP) spread across the study area. A 24 item questionnaire structured on a 4- point scale response option was used to collect data from the respondents.

The questionnaire for research question 1 was structured to indicate the extent to which an item is required as Highly Required (HR), Moderately Required (MR), Required (R), and Not Required (NR). While that of research question 2 was structured to indicate the extent of agreement to the items identified. The response category was assigned numerical values as 4,3,2,1. The questionnaire was validated by three experts chosen among automobile practitioners and automobile technology lecturers in the study areas and the reliability of the piloted instrument (questionnaire) was established to be 0.82 using Cronbach Alfa statistic. Corrections were made appropriately before it was administered. The weighted (average) Mean and Standard Deviation (SD) were used to answer the research questions. Therefore items with mean score below 2.50 (cut off point) were regarded as not required while those with mean score of 2.50 and above were regarded as required. The z-test was used to test the hypotheses at .05 level of significance. The z-test was considered suitable because according to Uzoagulu (2011) the z-test is more appropriate when the sample size (n) is greater than 30 but maintains the same parametric assumptions, table usage and other conditions as in the application of t-test. The z-critical (z-table) value for accepting or rejecting the null hypotheses was ±1.96 at a degree of freedom (df) of 123.

Results
Research Question 1 and Hypothesis 1
Table 1: Mean, Standard Deviation and z-test analysis of respondents on the technical skills required for self reliance in automobile mechanics occupation.

S/N	ITEM STATEMENT	$\bar{x}_1$	SD_1	$\bar{x}_2$	SD_2	$\bar{x}_t$	z-cal	Remark
1	Technical skills in the use of scan tools to diagnose faults in vehicles.	2.65	0.76	2.72	0.71	2.69	1.13	R & NS
2	Technical skills to maintain and repair automatic clutch system .	2.56	0.52	2.49	1.09	2.53	0.85	R & NS
3	Technical skills to maintain and repair automatic gearbox.	3.66	0.76	2.81	0.45	3.24	0.96	R & NS
4	Technical skills to identify sensors, actuators and interpret vehicle identification number.	3.22	1.86	2.61	0.73	2.92	0.95	R & NS
5	Technical skills to maintain and repair steering and suspension system.	3.11	0.68	3.14	1.26	3.13	0.54	R & NS
6	Technical skills to maintain and repair electronic control unit.	2.65	0.73	3.13	0.54	2.89	0.81	R & NS
7	Technical skills to maintain and repair anti lock brake system.	3.11	0.84	2.91	0.75	3.01	1.23	R & NS
8	Technical skills to maintain and repair starting system and electronic ignition system.	2.57	0.48	2.66	0.75	2.62	1.12	R & NS
9	Technical skills to maintain and repair charging sytem, signaling and lighting circuit.	2.40	0.78	2.94	0.35	2.67	0.45	R & NS
10	Technical skills to maintain and repair cooling system.	2.52	0.34	2.50	0.59	2.51	0.57	R & NS
11	Technical skills to maintain and repair cooling system.	3.21	0.82	2.45	0.54	2.83	1.75	R & NS
12	Technical skills to maintain and repair the fuel system (gasoline and diesel).	2.65	0.78	2.90	0.84	2.78	1.12	R & NS

Key: =A= Agreed, R = Required, NS=Not Significant; $\bar{x}_1$=Mean of ATT; $\bar{x}_2$= Mean of AP; $\bar{x}_t$ =Average mean; SD_1=Standard deviation of ATT; SD_2= Standard deviation of AP; z-cal =z-test calculated, z- table (z-critical) value = ±1.96.

Findings from Table 1 shows that all the items had their weighted mean values ranged from 2.51-3.24.Since the values are above the cutoff point of 2.50, it indicates that the respondents agreed that, the items identified with respect to the technical skills requisites for self reliance in automobile mechanics occupation are required. The z-test analysis from table 1 shows that all the items had their z-calculated (z-cal) values less than the z-table (z-tab) value of ±1.96. This implies that there was no significant difference in the mean ratings of the responses of the respondents on the technical skills required for self reliance in automobile mechanics occupation. Hence we uphold the null hypothesis for the 12 items.

Research Question 2 and Hypothesis 2
Table 2: Mean, Standard Deviation and z-test analysis of respondents on the ways for acquisition of technical skills for self reliance in automobile mechanics occupation.

S/N	ITEM STATEMENT	$\bar{x}_1$	SD_1	$\bar{x}_2$	SD_2	$\bar{x}_t$	z-cal	Remark
13	Incorporating genuine school-work based learning content into the auto mechanics training programme.	3.09	0.36	3.10	0.70	3.10	1.21	A & NS
14	Establishing school-based auto service workshop.	3.70	1.31	3.03	0.65	3.37	1.30	A & NS
15	Establishing strong linkage between training institutions and auto maintenance industries.	3.30	0.83	3.81	1.27	3.56	0.60	A & NS
16	Establishing industrial internship programme for learners professional development.	3.28	0.32	3.05	0.81	3.17	0.80	A & NS

17	Establish skills acquisition and skills development centres in training institutions.	3.34	1.20	2.47	0.72	2.90	0.69	A & NS
18	Create economically friendly environment based on tax reduction on small scale automobile workshop.	2.50	1.39	3.06	0.63	2.78	0.57	A & NS
19	Motivating qualified trainees with enough incentives to establish their own auto mechanic workshop.	3.01	1.29	3.75	0.74	3.38	0.71	A & NS
20	Providing lifelong learning opportunities for auto mechanics skills development.	3.10	0.75	2.71	0.11	2.91	1.48	A & NS
21	Orientating Nigerians on the potentials of skills acquisition and skills development for self reliance.	3.20	1.30	3.01	0.64	3.11	1.42	A & NS
22	Periodically providing new and emerging automobile occupational information to the public.	3.41	0.45	3.36	0.81	3.39	0.68	A & NS
23	Creating peaceful environment to attract foreign industries.	3.22	0.54	3.11	0.86	3.17	0.65	A & NS
24	Equipping auto workshops with modern training facilities.	2.44	0.69	2.64	0.67	2.54	0.58	A & NS

Findings from Table 2 shows that all the items presented had their weighted mean values ranged from 2.54-3.56. These values are above 2.50 indicating that the respondents agreed that, the items identified as the ways for acquisition of technical skills for self reliance in automobile mechanics occupation are agreed upon. The z-test analysis from Table 2 shows that all the items had their z-calculated (z-cal) values less than the z-table (z-tab) value of ±1.96. This implies that there was no significant difference in the mean ratings of the responses of the respondents on the ways for acquisition of technical skills for self reliance in automobile mechanics occupation. Therefore we fail to reject the null hypothesis 2.

Findings of the Study
Based on the data collected and analyzed, the following findings emerged:
1. The technical skills required for self reliance in automobile mechanics occupation in Nigeria includes among others : technical skills in the use of automobile diagnostic tools and equipment, technical skills in the servicing, maintenance and repairs of the systems and sub systems of the motor vehicles.
2. The ways for acquisition of technical skills for self reliance in automobile mechanics occupation in Nigeria includes among others : incorporating genuine school-work based learning content into the auto mechanics training programme, establishing strong linkage between training institutions and auto maintenance industries, establishing skills acquisition and skills development centres in training institutions, creating economically friendly environment based on tax reduction on small scale automobile workshop, motivating qualified trainees with enough incentives to establish their own auto mechanic workshop as well as providing lifelong learning opportunities for auto mechanics skills development.
3. There is no significant difference in the mean responses of automobile technology teachers and automobile practitioners on the technical skills required for self reliance in automobile occupation in Nigeria.
4. There is no significant difference in the mean responses of automobile technology teachers and automobile practitioners on the ways for acquisition of technical skills for self reliance in automobile occupation in Nigeria.

Discussion of Findings
        With respect to the technical skills required for self reliance in automobile occupation in Nigeria, the automobile teachers and automobile practitioners jointly concurred to the fact that auto mechanics' students requires technical skills : in the use of scan tools to diagnose faults in vehicles; to maintain and repair automatic clutch system; to maintain and repair automatic gearbox; to maintain and repair electronic control unit; to maintain and repair steering and suspension system; to maintain and repair anti lock brake system; to maintain and repair starting system and electronic ignition system; to maintain and repair charging system, signaling and lighting circuit among others. To buttress this findings, the (NADDC) (2017) in a survey of skill requirements, revealed that, the need for technical skills in the use of scan tools to diagnose faults in modern motor is in reaction to transition from pure mechanical systems and components to electronic versions enhanced by numerous sensors and actuators operated through Electronic Control Unit (ECU) in all On Board Diagnostic (OBD)-enabled motor vehicles. With

ECU and OBD on modern automobiles, fault diagnoses can no longer be done mechanically through mere observation or by mere listening to engine sound as was the case decades ago.

To support the views of the respondents, Igwe, Ikenwa and Jwasshaka (2017) in a study on automobile mechanics competencies stressed that, there is need for auto mechanics to specialize in the maintenance and repairs of any of the major systems or units of the motor vehicle, as specialization increase expertise and experience for self reliance in a particular area. The need for sound technical skills in the use of diagnostic scan tools by automobile maintenance practitioners in the automobile trade is therefore paramount since without it, efficient diagnosis, maintenance and repairs cannot be carried out on modern automobiles. However, Nyapson (2015) in a study on skills improvement needs of automobile craftsmen lamented that the extent of availability of technical skills in the utilization of computer scan tools and varieties of other maintenance equipment and machines in the Nigeria automobile maintenance trade is worrisome as most modern vehicle users visit auto mechanic repair shops with fear of their vehicles been wrongly only to further worsen the situation later.

Findings on the ways for acquisition of technical skills for self reliance in automobile occupation in Nigeria showed that both the automobile teachers and automobile practitioners agreed that, the items are possible ways for acquisition of technical skills for self reliance in automobile mechanics occupation. The ways for acquisition of technical skills for self reliance in automobile mechanics occupation includes among others : incorporating genuine school-work based learning content into the into the auto mechanics training programme, establishing strong linkage between training institutions and auto maintenance industries, establishing skills acquisition and skills development centres in training institutions, creating economically friendly environment based on tax reduction on small scale automobile workshop, motivating qualified trainees with enough incentives to establish their own auto mechanic workshops as well as providing lifelong learning opportunities for auto mechanics skills development.

The views of the respondents are in line with current happenings in developed and developing countries. Peter, Chris and Misiel (2016) findings in a similar study revealed that in many countries, including United States, high schools offers vocational and technical training programme for life-long trade, and many of them offer courses that enable students to meet their general academic requirement while learning a trade. Similarly, Udogu (2015) in a study on emerging technology skills required by technical college graduates of Motor Vehicle Mechanic's work found out that schools in an effort to further increase their technical skills capacity for global competition in world economy, have shifted emphasis to training in computers, information technology, and related fields. Udogu (2015) added that public schools work closely with willing industries to establish practical based curriculum and programmes to meet their skill demand. On hypothesis 1, the study found out that there was no significant difference in the mean ratings of the responses of the respondents on the technical skills required for self reliance in automobile mechanics occupation in Nigeria while on hypothesis 2, there is no significant difference in the mean responses of automobile technology teachers and automobile practitioners on the ways for acquisition of technical skills for self reliance in automobile occupation. Hence the opinions of the respondents did not differ in the items identified. This implies that a lot of technical skills are required in automobile mechanics occupations to ensure self reliance among graduating trainees in Nigeria. Therefore, we uphold the null hypotheses for the study.

Conclusion

With regards to the findings of the study, it is glaring that the automobile practitioners and trainees strongly require technical skills for self reliance in automobile mechanics occupation. The ways for acquisition of technical skills for self reliance in automobile mechanics occupation were also unveiled. The study also exposed the technical skills required for self reliance in automobile mechanics occupation in Nigeria as well as the ways for acquisition of technical skills for self reliance in automobile mechanics occupation. Therefore, there is need to exploit the identified requisites technical skills for self reliance in automobile mechanics occupations in Nigeria. Automobile teachers should show willingness and positive attitude towards technical skills acquisition and skills development in automobile mechanics occupation to enhance self reliance among trainees upon graduation. This will go a long way to preparing auto mechanics trainees to be self-reliant, self-employed and prevent them from being in financial difficulty after graduating from the training programme.

Recommendations
Based on the findings from the study, it is recommended that:
1. The possible ways for acquisition of technical skills for self reliance in automobile mechanics occupation identified in the study should be considered by the various government and stake holders.
2. Technical skills acquisition objectives should be built into curriculum in training institutions in Nigeria.

3. The government should periodically organize sensitization workshops and seminars for teachers and students on the relevance of technical skills in automobile mechanics occupation.
4. Technical skills acquisition in automobile mechanics occupation should be encouraged for individual empowerment and self employment.
5. Federal and state ministries of education should build technical skills centers for exchange of skills and ideas on good professional practice.
6. Appropriate evaluation and grading schemes should be put in place to adequately reward levels of competences exhibited by participating trainees. The reward could be in form of scholarship for trainees and enhance salary for automobile teachers in automobile mechanics training programme.

References

Igwe, N., Ikenwa, M. O. & Jwasshaka, S. K. (2017). Competences in On-Board Diagnostic actuators for effective teaching of petrol engine maintenance in Technical Colleges in Nigeria. *Journal of Computer Engineering*, 19(2), 11-15.

Industrial Training Fund (ITF) (2017). *Skills gap analysis in six priority sectors in Nigeria economy.* Jos: Industrial Training Fund.

Isaac, E. (2015). Technology and modern automobile industry- challenges and opportunities for roadside mechanics in Ghana. *International Journal of Scientific Research and Innovative Technology,* 2 (6), 58-63.

Madugu, A. (2019). *78% of Nigerian youths are unemployed.* Retrieved 28th December, 2020 from www.informationnigeria.com

National Automotive Design and Development Council (NADDC) (2017). *Auto-technicians skill-gap analysis*. Abuja: NADDC publication.

National Bureau of Statistics (NBS)(2020). Nigeria's High Rate of Unemployment'. Retrieved 29 October, 2020 from www.nbclive.com

National Board for Technical Education (NBTE) (2020). *Newly developed and reviewed curricula and occupational standards for Nigerian skills qualification.* Kaduna: NBTE.

National Directorate of Employment (NDE)(2020). *Occupational analysis and specifications.* Abuja: NDE publication.

Nyapson, C. G.(2015). Skill improvement needs of self-employed technical college motor vehicle mechanic graduates in Plateau State. Unpublished Masters degree thesis Department of Industrial Technical Education (Mechanical Technology), University of Nigeria, Nsukka.

Peter, A. Chris, D. & Misiel, P. (2016). *Training manual on occupational skills development short course for Motor Vehicle Mechanics*. Guinea: Waigani Skills Development Project.

Okolie, N. (2019). *Nigeria's grim unemployment statistics.* Retrieved 28th December, 2020 from www.informationnigeria.com.

Udogu, K.C. (2015). Emerging technology skills required by technical college graduates of Motor Vehicle Mechanic's work (MVMW) in establishing automobile enterprises in Anambra and Enugu states of Nigeria. Unpublished Masters

Uzoagulu, A.E. (2011). *Practical Guide to Writing Research Project Reports in Tertiary Institutions.* Enugu: John Jacobs Classic Publishers Ltd, p. 65 – 69.