STRATEGIES FOR IMPROVING THE MANAGEMENT OF MOTOR VEHICLE MECHANIC IN TECHNICAL COLLEGES IN NIGER STATE.

BY

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CERTIFICATION

I, Ugwu Abednego Oguguawith matriculation no:2014/1/53902TI an undergraduate of the department of Industrial and Technology Education certify that the work embodied in this project is original and has not been submitted in part or full for any other diploma or degree of this or any other University

Name.

Signature

APPROVAL PAGE

This project has been read and approved as meeting the requirements for the award of B. Tech Degree in Industrial and Technology Education of the department of Industrial and Technology Education, school of technology education, school of technology education federal university of technology, minna.

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DEDICATION

This project is dedicated to Almighty God and my family

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ABSTRACT

This study was designed to study the strategies for improving the management of motor vehicle mechanic in technical colleges in Niger State. Three research questions and three hypotheses were formulated to guide the study. A descriptive survey research design was employed for the study. The study was carried out in seven technical colleges of Niger state egGovernment Technical Collage, Minna, Federal Science And Technical Collage Shiroro, GovernmentTechnical Collage, New Bussa, Government Technical Collage Eyagibida, Government Technical College Kontagora, SuleimanBarau Science And Technical College Suleja, MamanKotangora Technical Collage Pandogari. A total of 46 respondents comprising of 25 motor vehicle mechanic teachers and 21 administrators In the seven technical colleges of Niger state were used as population for the study. A structured questionnaire Developed by the researcher was used to collect data for the study. The instrument was validated by three lecturers from the department of industrial and technology education. Mean and standard deviation were the statistical tools used for answering research questions, while t-test statistics was used to test the null hypotheses formulated for the study. The findings of the study among other revealed that: That teachers should make sure that proper inspection of all motor vehicle equipment are carried out regularly. The findings also revealed that most of the technical colleges lack skilled and qualified teachers on the management of motor vehicle mechanic workshop. The findings revealed that there is need for re-training of motor vehicle mechanic workshop teachers for them to be well skilled in managing the workshop and proper orientation should be given to students on how to make use of the motor vehicle mechanic workshop. Based on the findings, it was recommended that strategies should be put in place by government in proving a seminar for both technical colleges and automobile personnel, the government should also look at the laces in technical colleges and ensure that those materials and facilities needed to be manage are well focused upon so that they can last longer. It was also recommended that the government of Niger state should make sure they give teachers the necessary benefits for the effectiveness of this management practices. And there is need for government to set up a group of team in supervising the workshops in technical colleges so that the management practices are made to be part of those in the workshop.

CHAPTER ONE

Introduction

1.0 Background of the study

Technical colleges are regarded as the principal vocational institutions in Nigeria. They give full vocational training intended to prepare students for entry into the various occupations (Okoro, 2013). According to Abdulkadir (2011) the responsibilities of technical college education in Nigeria include: provision of full time or part-time courses of instruction and training in technology, applied science and commerce, in such other field of applied learning, relevant to the needs of the development of Nigeria in the areas of industrial, commercial and vocational agriculture, professional studies in engineering and other technologies and perform such other functions as in the opinion of the society as may serve to promote the objectives of the technical colleges.

The federal republic of Nigeria in the National Policy on Education (2013) made the production of craftsmen, artisans and other sub-professional skilled personnel the responsibility of technical college education and maintained that trainees completing technical college programmes shall have three options: Secured employment either at the end of the whole course or after completing one or more modules of employable skill, Set up their own business and become self-employed and be able to employ others and Pursue further education in advance – craft/technical programme and in post-secondary (tertiary) technical institutions such as science and technical colleges, polytechnics or colleges of education (technical) and universities. However, the attainment of these goals is largely dependent on the effective workshop facilities management practices.

Technical colleges are mainly established for the training of students to acquired practical skills, knowledge attitude and management. However, the major goals of technical college education is to produced efficient and relevant craftsmen and women that will promote and

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industrial development in the area of maintenance, goods production and general services/ management.

Workshop facilities management practices refer to various strategies or techniques of managing a workshop. The major concern of good workshop management is the identification and judicious utilization of available resources to achieve the objective of helping the learners to learn and to encourage them to want to learn (Ogwo&Oranu, 2016). In essence, workshop management has to do with the process of bringing out the best from the workshop personnel so as to achieve the set goals and objectives of practical lesson. Effective workshop management in teaching-learning situation refers to the ability to maintain harmony and order in the workshop (Lofafa&Polongana, 2011). They further explained that it shows how teacher can prevent misbehavior by carefully organizing the tools, machines, engines, consumable items, establishing clear rules and regulation that are needed for effective acquisition of practical skills in the workshop. Considering the importance of workshop facilities in the provision of effective instruction there is need to assess the management of the available workshop facilities in technical colleges with a view to ascertain whether the workshop management practices adopted in the planning, storing and maintenance of workshop facilities affect the students performances in the technical colleges of Niger State.

Hence assessment according to UNESCO (2012) is the systematic process of generating data about traits, performances, projects, activities e.t.c. for the purpose of making evaluative judgments. Therefore, assessment in the context of this study is a systematic process of generating data about effective management of workshop facilities for the purpose of making evaluative judgments.

Technical colleges are mainly established for the training of students to acquired practical skills, knowledge and attitude. However, the major goals of technical college education is to

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produced efficient and relevant craftsmen and women that will promote and industrial development in the area of maintenance, goods production and general services (Abdulkadir, 2011). The goal of technical college education is develop saleable skills in youths in order to make them useful to themselves, society and also become labor assets in the industries.

Incidentally, these technical colleges appear not fulfilling these objectives as noted by Enemali (2014) who lamented technical colleges are haphazardly managed, they lack the ability to equip students with the requisite skills, knowledge and attitude.

1.1Statement of Problem.

Technical colleges are mainly established for the training of students to acquired practical skills, knowledge attitude and management. However, the major goals of technical college education is to produced efficient and relevant craftsmen and women that will promote and industrial development in the area of maintenance, goods production and general services/ management. According to Abdulkadir, (2011) opined that the goal of technical college education is develop saleable skills in youths in order to make them useful to themselves, society and also become labor assets in the industries.

Incidentally, these technical colleges appear not fulfilling these objectives as noted by Enemali (2014) who lamented technical colleges are haphazardly managed, they lack the ability to equip students with the requisite skills, knowledge management skills and attitude needed for gainful employment. Also commenting on the performance of technical colleges in the area of skill development and workshop facilities, Gana (1989) stressed that some of the available facilities have been grounded and overstretched. It is probable that the facilities management practices adopted by the teachers may be responsible for this management of skills is needed to improvement the operation of motor vehicle in technical colleges in Niger state. Looking at the technical colleges in niger state have completely fall off the management path and therefore student in line of MVM find it hard to cope with management skills in the application to mechanic. Therefore, the problem of this study is to provide strategies for improving the management of motor vehicle mechanic in technical colleges in Niger state due to lack of facilities management practices and lack of basic responsible for this management of skills that is needed to improvement the operation of motor vehicle in technical colleges.

1.2Purpose of the Study

The purpose of this study is to identify the strategies for improving the management of motor vehicle mechanic in technical colleges in Niger state. Specifically the study sought to determine:

- 1. The current practices in the management of motor vehicle mechanic workshop in technical colleges
- 2. The problems associated with the management of motor vehicle mechanics workshop in technical college
- 3. The strategy for improving the management of motor vehicle mechanic workshop in technical college

1.3 Scope of the Study

This study is limited to the strategies for improving the management of motor vehicle mechanic in technical colleges in Niger state. Therefore this study will cover the various aspect of management of motor vehicle management in technical colleges in Niger state

1.4 Significance of the Study

The findings of this study, if implemented will be of immense benefit to the motor vehiclemechanics technology students in the technical colleges. The environmental factor that will be identified in this study will assist Ministry of Education in planning and locating technical institution.

It will also provide the students with the competences needed to practices after graduation. In addition, the curriculum planner will benefit from the findings, when reviewing the current curriculum. Technical teachers in the technical colleges will benefit from the findings of this study while imparting knowledge on students, it will also provide the basis on which the teachers will plan their lesson and teach the students the right type of skill needed for productive work in the world of work. Administrative strategy to be identified in this study will hopefully enlightened the policy maker in the ministry and technical colleges principal on a wide range of managerial skills required of them.

Finally, the society will hopefully benefit from the findings of this study. The implementation of the curriculum, so design with the incorporation of the practical skills and management of motor vehicle mechanic, will produce a pool of mechanics craftsmen who will be enterprising and productive in the society. Invariably, this will help to reduce the rate unemployment in this country and its associated social evil.

1.5Research Questions

In this study, answer to the following research questions will be sought:

- 1. What are current practices in the management of motor vehicle mechanic workshop in technical colleges?
- 2. What are theproblems associated with the management of motor vehicle mechanics workshop in technical college?
- 3. The strategy for improving the management of motor vehicle mechanic workshop in technical college?

1.6Hypotheses

The following null hypotheses were formulated, which were tested at 0.05 level of significance.

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HO₁: There is no significant difference between the mean responses of teacher and administrators, on the current practices in the management of motor vehicle mechanic workshop in technical colleges.

HO₂: There is no significant difference between the mean responses of teacher and administrator, on the problems associated with the management of motor vehicle mechanics workshop in technical college.

HO₃There is no significant difference between the mean responses of teacher and administrator, on the strategy for improving the management of motor vehicle mechanic workshop in technical college.

CHAPTER TWO

2.0

REVIEW OF RELATED LITERATURE

The literature related to this study will be reviewed under the following subheadings

- 1. Historical background of motor vehicle mechanic in technical colleges
- 2. Maintenance and maintenance practices of Motor Vehicle Mechanic (MVM) Workshop equipment and facilities in technical colleges.
- Challenges to effective management practice in Motor Vehicle Mechanic (MVM) Workshops in technical colleges.
- Strategies to effect in the improvement in the management of motor vehicle mechanic (MVM) in technicalcolleges
- 5. . Summary of review of related literature.

2.5 Historical Background of Motor Vehicle Mechanic in Technical Colleges

Vocational education refers to any programme, which provides training for a particularoccupation, business or profession. It is a type of education that offers skilled or semi-skilledtraining in different trades and occupation. It equips learners with sealable organizational skillthat prepares them for both employment and assumption of a place in the society. Doyin, (2014). Technical education is somehow limited in scope compared to vocational education

However a country like Nigeria warrants an emphasis on technical education even though itsmeaning can conveniently be assumed under vocational education, technical education specifically refers to a form of training for engineering, manufacturing and industrial occupation. Aruku, (2011). noted that one who has gone through technical education is expected to be acknowledgeable assistant to the professional.

Vocational and Technical education is a comprehensive term referring to the education process when it involves, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills and knowledge relating to occupations in various sectors of economic and social life. The broad educational goals of vocational and technical education distinguish it from vocational "training" which is directed to developing the particular skills and related knowledge required by a specific occupation or group of occupations.Aruku, (2011).

Motor Vehicle Mechanic (MVM) work is one of the Technical Vocational Education (TVE) programs which involves the acquisition of scientific knowledge in design, selection of materials, construction, operation and maintenance of motor vehicles. According to Doyin (2014) MVM is a vocational education program, which is aimed at preparing one for a specific occupation. Vocational programs are generally designed to prepare individuals for a gainful employment as semi-skilled or skilled worker or technicians or sub-professional in recognized occupation and in new emerging occupations or to prepare individual for enrolment in advanced technical education program Okoro, (2016). Motor vehicle mechanics work at technical college level consists of three components/subjects grouping as follows: Service station mechanics work, Engine maintenance and refurbishing, and Auto electricity. The program of MVM work in Nigeria technical colleges is designed to produce competent motor vehicle craftsmen for Nigeria technical and industrial development Abdulkadir, &Olaitan,(2011). Therefore, teachers teaching MVM at technical college level must acquire the right skills to impart to the learners in order for them to acquire the right skills for gainful employment.

The introduction of western education into Nigeria in the early 1840s brought a new emphasis as far as objectives for educating the young ones are concerned. The sort of training given by the missionary schools produced clerks for government departments and trading companies 'interpreters for missionaries, pupil teachers for the emerging school system and letter writers forthe communities. Ability to read and write was emphasized as the curriculum in school. This literary was the main focus of the missionaries. The colonial government which hardly partook in educational provision in those days when western education began had no option but to allow missionaries continue with whatever practice the deemed fit.Eniayeju, (2013). They in fact actively supported the missionaries to institution literary training. Interest in schooling gradually grew as it offered occupational opportunities to the youth, ability to read and write mattered to the missionaries, and primary schools then largely concentrated on achieving this objective. Literary educationcontinued at secondary school level. The first set of secondary schools established in Nigeria was grammar schools. They offered training in language literature and arts. Science, technical and vocational education thus made a late entry into the secondary school curriculumDaso, (2012).

As a follow up to the establishment of the protectorate of southern Nigeria in the twentieth century, an education law promulgated and led to the setting up of an education department in the area in 1903. The education law did not only regulate primary and secondary education in the area but decreed that schools should provide instruction in branches of industrial work. Igweh, (2009). Government went ahead to also provide training. At the tam of the twentieth century, government departments had started to face staffing problems, workers with technical and vocational skills were in short supply in both public and private sectors. The colonial regime then found that it was necessary to train its own workers to be able to carry out required assignments.Lawal, (2013).

The further development of technical and vocational education continued when the foreign mission conference of North America took an action by setting up a commission to study the educational needs and resources of African countries. The result of that study was contained in the Phelps-Stokes report of 1992. The result identified the need to set clear objectives for

education in Africa. These objectives, the report advised, should adapt education to community needs.Mbala, (2009). Agriculture education was recommended for rural communities and industrial or technical education for urban areas. It further recommended that the activities of government, missionaries and traders in education should be streamlined and that technical and vocational training should be introduced at higher level.Ogundu, (2019).

According to Okala, (2015) stated that one of the major development in the middle and late 1980s was the establishment of specialist tertiary institutions in the areas of technology and agriculture. The country can now boast of not only having facilities of engineering and technology as well as business science in the conventional university but also, specialist institutions like university of Agriculture and Technology. There are in addition to polytechnics and colleges of technology. A few colleges of Technical education also provide teacher training while many of the conventional colleges of technical education have departments of technical education. A major problem in this area is that most of the entrants into these specialist institutions are secondary school products rather than graduates of technical and vocational institutions. The problems that Nigeria has had to battle with right from her colonial days may well account for the little progress recorded so far in the area of technological development. MAET (2011)

2.6 Maintenance and Maintenance Practices of Motor Vehicle Mechanic Workshop Equipment and Facilities in Technical Colleges.

Facilities at Technical Colleges

Maintenance is the actions necessary for retaining or restoring a piece of equipment, machine, or system to the specified working condition to achieve its maximum useful life. Microsoft Encarta (2015) defines maintenance as continuing repair work that is work that is done

routinely to keep a machine, building, or a piece of equipment in great condition and working order. Past and current maintenance practices in both the private and government sector would intimate that maintenance is the activities connected with equipment repair after it is broken.

This would intimate that maintenance ought to be moves made to keep a gadget or part fromfalling flat or to repair ordinary supplies degradation experienced with the operation of thegadget to keep it in working condition. Tragically, information acquired in numerous studiesover the previous decade shows that most private and government offices don't exhaust the vital assets to keep up supplies in fitting working request. Rather, they hold up for equipment failure to happen and afterward take whatever activities are important to repair or replace the equipment.Rais, (2014). Nothing keeps going forever and all equipment are connected with it some predefined future or operational life. For example, equipment may be intended to work at full plan load for 5,000 hours and may be intended to experience 15,000 begins and stop cycles.The need for maintenance is predicated on real or impending failure ideally, maintenance performed to keep equipment and systems running proficiently for at least the lifespan of the components. All things considered, the commonsense operation of a part is time-based capacity.

There are numerous hypotheses on why components fail in this region; most recognize that poor operation and maintenance regularly assumes critical part. It is likewise for the most part concurred that remarkable upkeep works on including preventive and prescient components can amplify this period. The destroy period is portrayed by a quick expanding disappointment rate with time. By and large this period incorporates the typical dissemination of configuration life disappointments.Nssuka, (2014) The design life of most equipment requires periodic maintenance. Belts need adjustment, alignment needs to be maintained, and proper lubrication on rotating equipment is required, and so on. In some cases, certain components need replacement, to ensure the main piece of equipment last for its design life. Anytime we fail to perform maintenance activities intended by the equipment's designer, we shorten the operating life of the equipment Nssuka, (2014). But what options do we have? Over the last 30 years, different approaches to how maintenance can be performed to ensure equipment reaches or exceeds its design life have been developed This includes preventive maintenance, predictive maintenance and corrective maintenance.

Preventive maintenance repairs performed on a general timetable to minimize component degradation and augment the life of equipment. Preventive maintenance is performed after situated measure of passed calendar time or machine run time, paying little heed to whether the repair is required. While more cost effective than reactive maintenance, preventive maintenance still requires significant human assets and new parts inventories. It might be a day by day maintenance (cleaning, assessment, oiling and re-tightening), intended to hold the solid state of equipment and avoid failure through the anticipation of weakening, intermittent review or gear condition finding, to quantify crumbling. It involves understanding and keeping up all the physical components of assembling machine components, equipment and system with the goal that they reliably perform at all levels needed of them. Such support is typically planned by accommodating checking investigations and exceptional working techniques.

While Corrective maintenance is when an equipment is taken down for maintenance of few worn out parts, the opportunity can be utilized to change or maintain other parts which are wearing out even though they have yet to fail. This maintenance strategy is for non-monitored components.

2.7 Challenges to Effective Management Practice in Motor Vehicle Mechanic Workshops in Technical Colleges.

Motor Vehicle Mechanic (MVM) work is one of the Technical Vocational Education (TVE) programs which involves the acquisition of scientific knowledge in design, selection of materials, construction, operation and maintenance of motor vehicles. According to Doyin (2014) MVM is a vocational education program, which is aimed at preparing one for a specific occupation. Vocational programs are generally designed to prepare individuals for a gainful employment as semi-skilled or skilled worker or technicians or sub-professional in recognized occupation and in new emerging occupations or to prepare individual for enrolment in advanced technical education program Nssuka, (2014). Motor vehicle mechanics work at technical college level consists of three components/subjects grouping as follows: Service station mechanics work, Engine maintenance and refurbishing, and Auto electricity. The programme of MVM work in Nigeria technical and industrial development (Aruku, 2017). Therefore, teachers teaching MVM at technical college level must acquire the right skills to impart to the learners in order for them to acquire the right skills for gainful employment.

However, the objective of MVM work is to enable graduates to test, diagnose, service and repair any fault relating to conventional motor vehicle main assembly units and system to the manufacturers specification NBTE, (2015). MAET (2011) stressed that motor vehicle mechanic students need the following attributes: an interest in mechanical/electronic system in motor vehicle, good problem solving ability, good vision, hearing and sense of smell, manual dexterity and mechanical aptitude, ability to communicate well in English, physical fitness and strength, ability to drive a range of vehicles, ability to read technical diagrams and illustration, have concern for safety and responsible work attitude; and in keeping up to date

with technology. According to (Abdulkadir&Olaitan 2011) teachers teaching MVM work should equip the technical students with necessary theoretical knowledge and practical skills that will enable them secure paid employment, be able to set up their workshops and be selfemployed and even employ others. It necessarily follows that teachers who actually implement the curriculum of technical colleges ought to be well prepared.

Nevertheless, challenges to effective management practice in Motor Vehicle Mechanic Workshops in technical colleges is one the major problem facing technical colleges The teachers or knowledge facilitator of MVM program in the schools should be retrained periodically in to improve their performance and knowledge especially to make the students acquire the needed skills during teaching and learning session. The training and retraining of MVM teachers in the technical colleges is as vital as training of the industrial worker. The training should be a continuous process as this is one of the foundation problem of MVM in technical colleges.(Abdulkadir&Olaitan 2011)

Equipment challenges in Technical colleges is one of the cruise challenges being faced by technical colleges so therefore technical colleges must provide its workers with the quickest possible methods at its disposal to be able to function effectively on the job. The training and retraining of teachers should provide them with skills and change of attitude to work, thereby improving their efficiency and productivity. Abdulkadir and Olaitan (2011), defined training and retraining as those activities which are designed to improve performance on the job, the employee is presently doing or being hired to do. Training can also be visualized as the acquisition of knowledge, skills techniques, attitudes and experiences which enable an individual to make effective contribution to the combined effort of a team in the service delivery.

The ever changing role of the teachers, especially MVM teachers, demands professional teachers not only in name but also in training and status in the society. Ogundu, (2012) stated that teachers must be provided with and have access to the necessary technological equipment training and resources that will result in enriched students learning. The teachers in training therefore, need quite a good number of infrastructure and educational facilities like machines, tools, equipment and books. Teachers need to be provided with good recreational facilities for their physical mental and social developmental growth. The Federal Republic of Nigeria (FRN, 2013) acknowledges that no education system can be better than the teachers who operate it. So to get good quality technology education teachers, the personnel operating it must be well trained to be able to impart same to the students

2.8 Strategies to Effect in the Improvement in the Management of Motor Vehicle Mechanic in Technical Colleges.

Professional Teacher or Qualify Knowledge Facilitator:Motor Vehicle Mechanic (MVM) work is one of the Technical Vocational Education (TVE) programs which involves the acquisition of scientific knowledge in design, selection of materials, construction, operation and maintenance of motor vehicles, teachers in these sector must be proper trained and having good knowledge about the MVM. The teachers' quality is a strong predictor of student's quality. More so, that it is widely acknowledged that no educational system can rise above the quality of its teachers''. There is therefore great doubt as to the adequacy of MVM teachers, in terms of quality, now handling the subject in our various technical colleges Abdulkadir and Olaitan (2011). The committees of the Federal Republic of Nigeria (FRN, 2014) observed that the present crops of teachers teaching MVM in the technical colleges are grossly incompetent and incapable of imparting knowledge and skills efficiently and effectively to the learners. Some recent studies carried out in the area of teacher quality for the technical colleges and secondary schools in some states of the federation indicate

negative disposition. There is need for a diversified instructional material such as models, equipment by motor vehicle mechanics teachers. Teachers need to revisit their attitudes with a view to imbibing the improvisational models and equipment that will aim at improving teaching and learning of motor vehicle mechanics work and consequently lead to the good performance of students in the area of skill acquisition and school examinations. In other words, teachers needs to shown the tradition of chalks, chalk boards, and outdated text books and improvised, embraced and incorporate the improvisational materials in teaching and learning of motor vehicle mechanics work at technical college level.Rais, (2014)

Equipment and Infrastructures : Equipment challenges in Technical colleges is one of the major challenges being faced by technical colleges so therefore technical colleges must provide its workers with the quickest possible methods at its disposal to be able to function effectively on the job. The training and retraining of teachers should provide them with skills and change of attitude to work, thereby improving their efficiency and productivity more due to advancement in technology update or upgrade in MVM equipment should be provide for soon flow and effective knowledge facilitation. motor vehicle mechanics work should equip technical students with necessary theoretical knowledge and practical skills that will enable them secure paid employment, be able to set up their workshops and be self-employed and even employ others. Teaching and learning through which these objectives ought to be achieved have witnessed a lot of criticisms because students are not learning enough. Their performances in school examinations have continued to decline. Similarly their performances in industries where they are employed have also been poor. Several factors have been identified for these poor performances. Some of these factors according to Ngember (1996) include

1. The inability of technical teachers to improvise and to embrace the use of improvised materials for teaching and learning of technical courses.

- 2. The use of improvisational material has not been institutionalized in some of our technical colleges. The teaming population of students in our schools and the scarcity of real instructional materials such as tools, models and equipment.
- 3. Technical teachers who are charged with the responsibility of improvising these instructional materials to meet the need and interest of the students are found wanting, simply because they have not been motivated by the concerned authorities to do so.

Performance Management (PM) is the process of ensuring that a set of activities and outputs meets an organization's goals in an effective and efficient manner. Performance management can focus on the performance of an organization, a department, an employee, or the processes in place to manage particular tasks.Performance management standards are generally organized and disseminated by senior leadership at an organization and by task owners, it can include specifying tasks and outcomes of a job, providing timely feedback and coaching, comparing employee's actual performance and behaviors with desired performance and behaviors, instituting rewards, etc.It is necessary to outline the role of each individual in the organization in terms of functions and responsibilities to ensure that performance management is successful. However, applying performance management in MVM is must important as it help to speed the performance of the skills and effective management of MVM.

2.9 Summary of Review of Related Literature

Chapter two is dedicated to strategies for improving the management of motor vehicle mechanic in technical colleges in Niger state which give detail in examining and reviewing various related literatures. The organization of the review of the literature begins with a thorough discussion on the historical background of vocational and technical education in Nigeria. Vocational and Technicaleducation started in Nigeria before the coming of western education, which was known as traditional education. Traditional education in Nigeria as with the rest of Africa includes the acquisition of vocational and physical skill along with the intellectual development of young ones. Wayridge, (2011). Vocational and technical education was later introduced into school curriculum between 1842 and 1884, and since then, have being making its way up in the educational system till date.

MVM workshop equipment and facilities is very important in technical colleges as it helps student in becoming practically and they also acquire the necessary practical skills needed due to adequate tools, equipment and facilities in the school workshop. A situation where a technical college has a substandard MVM workshop, the students will have less or no practical skill because there will be no materials, tool and equipment to carry out the practical's and when these students are compared with students from a school with a standard automobile workshop, it usually create a gap in terms of performance skills exhibited betweenthe group with standard workshop and those with substandard workshop.Lawal,(2013).

Maintenance and maintenance practices on MVM workshop equipment and facilities plays a very vital role in technical colleges as maintenance is the actions necessary for retaining or restoring a piece of equipment, machine or system and facility to the specified operable condition to achieve its maximum useful life. This would imply that maintenance should be actions taken to prevent a device or component from failing or to repair normal equipment degradation experienced with the operation of the device to keep it in proper working order.

The need for effective maintenance practice on automobile workshop equipment and facilities in technical colleges is of great importance because MVMprogramme is designed to provide craftsmen and master craftsmen with the competence to carry out preventive maintenance, general repair, and overhauling of various automobile units and components.

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These MVM craftsmen and master craftsmen according to Okoro (2016) should among others be able to inspect, diagnose problems, repair and service mechanical, electrical and electronic systems and components of automobile vehicles such as cars, buses and trucks. These goals can only be achieved in Nigeria when there is effective maintenance practice on MVM workshop tools, equipment and facilities at vocational and technical colleges.

The challenges of effective maintenance practice on MVM workshop equipment and facilities militates the major problem most technical colleges face in Nigeria. Maintenance of workshop tools and equipment are very important to the successful implementation of any type of TVE program motor vehicle mechanic in technical colleges.

CHAPTER THREE

METHODOLOGY

3.0 Introduction

This chapter deals with the Research Design, Area of the Study, Population, Sample, and Instrument for Data Collection, Validation of the Instrument, Administration of the Instrument and Method of data analysis and Decision Rule.

3.1 Design of the Study

The study adopted a descriptive survey design for collecting required data for this study. Descriptive research is used to describe characteristics of a <u>population</u> or phenomenon being studied. It does not answer questions about how/when/why the characteristics occurred. Rather it addresses the "what" question (what are the characteristics of the population or situation being studied?) (Patricia, et al. 2013) Descriptive survey research is a research method involving the use of questionnaire and / or statistic surveys to gather data about people, their thought and behaviors regarding a specific phenomenon, (Rangarajan, et at. 2013).

3.2 Area of the study

This study will be carried in technical colleges in Niger State Minna, in Niger State. This study will covered all the technical colleges in Niger State. Looking at Minna metropolis which comprises of the seven technical colleges, which are;

- 1. Government Technical College, Minna
- 2. Federal Science and Technical College, Shiroro
- 3. Government Technical College, New Bussa
- 4. Government Technical College, Eyagibida
- 5. Government Technical College, Kontagora

- 6. Suleiman Barau Science and Technical College Suleja
- 7. Manman Kontagora Technical College Pandogari

Therefore all the findings of this study will cut across the entire technical colleges list above for the purpose of data collection on the strategies for improving the management of motor vehicle mechanic in technical colleges in Niger State.

3.3 Population of the study

The targeted population of this study comprised 25 MVN teachers and 21 administrators in all Niger State. Therefore, the total population for the study will consist of 46 respondents.

3.4 Sample and sampling techniques

Since the total collection for the study is not too large the entire population was used for the study from the Technical College

3.5 Instrument for data collection

The instrument to be used for data collection is a well designed questionnaire developed by the researcher for the purpose of this study. The questionnaire contains two parts. Part A solicit for the personal data of the respondents while part B solicit for information on the strategies for improving the management of motor vehicle mechanic in technical colleges in Niger State. This part (part B) will be sub-divided into four sections.

Section A consists of 10 items which deals with causes of lack of improvement in the management of motor vehicle mechanic in technical colleges in Niger State

Section B consists of 8 items which deal with the effect of strategy improvement in the management of motor vehicle mechanic in technical colleges in Niger State

Section C consists of 10 items which deals with the possible ways in which management of motor vehicle mechanic in technical colleges in Niger State can be improved.

3.6 Validation of the instrument

The instrument/questionnaire for this study will be content validated by two lecturers from the Department of Industrial and Technology Education of Federal University of Technology Minna, this will be done in other to evaluate the relevant item containing in the instrument before the final copy will produced.

3.7 Administration of the instrument

The researcher administered the instrument through person contacts with the respondents and with the help of three research assistants in the study area. The field workers will be given copies of the data collection tool containing the instruction on how to fill the instrument. The instrument were distributed and collected back by the researcher and the research assistance.

3.8. Method of data collection

The researcher administered the questionnaire to the respondents consisting of teachers and administrators, the whole copies will be collected by the researcher on the same day after administering the questionnaire simultaneously.

3.8.2 Method of data analysis

The data collected by the researcher were analyzed using mean, standard deviation and t-test. Mean and standard deviation will be use for items for the research questions while t-test will use to test the hypotheses formulated for the study.

The mean score of 2.50 and above on a four point rating scale were used as a cut-off point test. Mean and standard deviation was used for item wise research questions while t-test was used to test the hypotheses formulated for the study. Any items that attract up to 2.50

strongly agreed and agreed and above were considered agree and any below 2.49 as disagree and strongly disagreed. Hypotheses are accepted where t-calculated is less that t-table valve and were rejected where they are equal or greater than t-table valve.

The questionnaire items were rated as follows.

Strongly Agree (SA) 4.0 = 3.5 - 4.0

Agree (A) 3.0 = 2.5-3.49

Disagree (D) 2 = 1.5 - 2.49

Strongly disagree (SD) 1 = 1.0...1.49.

The above point scale of rating, is use to determine and to analyzed the out come of research question, to noted the level of response from the respondents (neither the respondents is Strongly agreed, Agree, Disagree or Strongly disagree with the items specified) when the questionnaire are administered, this is to enable proper analysis of the response that the respondents responses to during data collection.

CHAPTER FOUR

PRESENTATION AND DATA ANALYSIS

This chapter deals with the presentation and analysis of data with respect to the research questions formulated for this study, the result of this data analysis for the research questions are presented first, followed by those of the hypotheses tested for the study.

Research Question 1

What is the current practices in the management of motor vehicle mechanics workshop in technical colleges in Niger State?

Table 4.1.1: mean response on the current practices in the management of motor
vehicle mechanics workshop in technical colleges. N1=25, N2=21

S/N	ITEMS	$\overline{\mathbf{X}_1}$	$\ddot{\mathbf{X}}_2$	Xt	Remark
l	Appropriate maintenance record	3.3	2.8	3.1	Agreed
	are kept for all equipment				
	Appropriate maintenance strategy	2.9	2.9	2.9	Agreed
	are adopted as at when due				
	Inspection of all motor vehicle equipment	3.8	3.0	3.4	Agreed
	are carried out regularly				
	Proper orientation of student by the				
	management on motor vehicle managemen	t 3.2	3.8	3.5	Agreed
	Use of the right tool for the right job	3.3	2.9	3.1	Agreed
	Tools and equipment are serviced regularly	2.9	2.8	2.9	Agreed
	Tools and equipment are handled	2.4	2.9	2.7	Agreed
	with great care				
	Tools and equipment used are cleaned	3.1	2.9	3.0	Agreed
	and kept in their racks after use				
	Maintenance officer are informed	1.9	2.1	2.0	Agreed
	whenever a fault occurs				
	Routine maintenance techniques	2.7	2.5	2.6	Agreed
	are practiced				

KEY: $\overline{X_1}$ = average mean responses of MVM teacher in technical colleges, $\overline{X_2}$ = average mean responses of administrators in technical colleges, N₁= number of MVM teachers in MVM in technical colleges, N₂= number of administrators in technical colleges.

Table 4.1.1 reviews that the respondents agreed with item 1,2,3,4,5,6,7,8,9 and 10 with a mean score above 2.50 respectively. means that item 1,2,3,4,5,6,7,8,9 and 10 agreed to the

current practices in the management of motor vehicle mechanic workshop in technical colleges in Niger State.

Research Question 2:

4

What are the problems associated with the management of motor vehicle mechanic workshop in technical colleges in Niger State?

Table 4.1.2 Mean responses of the respondents on the problems associated with the management of motor vehicle mechanics workshop in technical colleges. $N_1=25$, $N_2=21$

S/N	ITEMS	X 1	X ₂	Xt	Remark
1	Lack of management personnel	3.3	2.9	3.1	Agreed
2	Lack of proper orientation of management	2.9	2.7	2.8	Agreed
	Skills in technical colleges				
3	Drifting in profession in terms of motor vehicle	2.6	2.8	2.7	Agreed
	mechanic in technical colleges due to low or				
	insufficient payment				
Lack o	of skills and qualified teachers on 2.5	3.0	2.8		Agreed
the ma	nagement of motor vehicle				
in tech	hnical colleges				
5	Wear and tears in the existing tools and	2.8	2.7	2.8	Agreed
	equipment without replacement				
6	Space available for exhibition in the	2.9	2.8	2.9	Agreed
	school workshop				
7	Adequate storage space for tools and	1.8	2.0	1.9	Agreed
	equipment				
8	Tools and equipment challenges in	3.1	2.8	3.0	Agreed
	technical colleges workshop				

KEY: \overline{X}_{1} = average mean responses of MVM teacher in technical colleges, \overline{X}_{2} = average mean responses of administrators in technical colleges, N₁= number of MVM teachers in MVM in technical colleges, N₂= number of administrators in technical colleges.

Table 4.1.2 shows that both respondents agreed on the problems associated with the management of motor vehicle mechanics workshop in technical colleges, item 1,2,3,4,5,6,8,9.

Research Question 3

What are the strategies for improving the management of motor vehicle mechanics workshop in technical colleges?

Table 4.1.3 Mean responses of the respondents on the strategies for improving the
management of motor vehicle mechanics workshop in technical colleges. N1= 25, N2=21

S/N	ITEMS	X 1	X ₂	Xt	Remark
1	Employing of qualify personnel in the management	3.8	3.5	3.7	Agreed
	of MVM workshop in technical colleges				
2	Provision of protective equipment e.g hand	3.8	3.5	3.7	Agreed
	gloves/paddling to reduce frictional				
	effects of forceful griping				
3	Proper orientation of students on the basis of	3.6	3.4	3.5	Agreed
	management of MVM workshop in technical				
	Colleges.				
4	Use of safety google for welding	4.0	3.7	3.9	Agreed
5	Drifting of profession should be put into	3.2	3.3	3.3	Agreed
	consideration specially in technical colleges				
6	Approved protective wears are worn by technician	3.6	3.1	3.4	Agreed
7	Facilities for the training of MVM students' in	3.5	3.6	3.6	Agreed
	workshop should be made available in various				
	technical colleges				
8	Relevant training regarding MVM should be	3.7	3.6	3.7	Agreed
	put in place in MVM workshop to enhance the				
	future of MVM in technical colleges				
9	Vision and mission of MVM should be enforcing	3.5	3.0	3.3	Agreed
	in technical colleges workshop				
10	Regular evaluations of vision and mission of	3.4	2.8	3.1	Agreed
	management skills in technical colleges regarding				
	MVM workshop should be reviewed to ensure not				
	drifting from its objective				

KEY: \overline{X}_1 = average mean responses of MVM teacher in technical colleges, \overline{X}_2 = average mean responses of administrators in technical colleges, N₁= number of MVM teachers in MVM in technical colleges, N₂= number of administrators in technical colleges.

Table 4.1.3 shows that both respondents agreed on the strategies for improving the management of MVM workshop in technical colleges, item 1,2,3,4,5,6,7,8,9 and 10 as reflected by their own mean score greater than 2.50 respectively.

Testing of Hypotheses

4.1.4 Hypotheses 1:

There will be no significant difference in the mean response of teachers and students on the current

practices in the management of motor vehicle mechanic workshop in technical colleges.

Table 4.1.4: t-test analysis of the response of teachers and administrators in technical colleges on the current practices in the management of motor vehicle mechanic workshop in technical colleges in Niger State.

S/N	ITEMS	SD_1	SD ₂	t-test	Remark
1	Appropriate maintenance record	0.46	0.99	3.41	NA
	are kept for all equipment				
2	Appropriate maintenance strategy	0.64	0.84	0.00	А
	are adopted as at when due				
3	Inspection of all motor vehicle equipment	0.43	0.48	7.82	А
	are carried out regularly				
4	Proper orientation of student by the	0.38	042	-6.66	А
	management on motor vehicle management				
5	Use of the right tool for the right job	0.78	1.02	2.05	А
5	Tools and equipment are serviced regularly	0.86	0.87	0.50	А
7	Tools and equipment are handled	1.04	0.98	-2.11	А
	with great care				
8	Tools and equipment used are cleaned	1.00	1.07	0.85	А
	and kept in their racks after use				
9	Maintenance officer are informed	0.99	1.12	-0.85	А
	whenever a fault occurs				
10	Routine maintenance techniques	.98	0.91	0.90	А
	are practiced				

Key

SD1= Standard deviation of teachers in technical colleges
SD2= Standard deviation of administrators in technical colleges
A= Accepted
NA= Not Accepted
The result shown in table 4 above indicates the Comparism between the teachers and administrators in technical colleges. Data revealed that items 1, 2, 3,4,5,6,7,8,9 and10 has a calculated t-value less than the t-critical value of ± 1.66 .

4.1.5 Hypothesis 2

There will be no significant difference in the mean response of teachers and students on the problems associated with the management of motor vehicle mechanics workshop in technical colleges.

S/N	ITEMS	SD_1	SD_2	t-test	Remark
1	Lack of management personnel	0.74	0.96	2.16	А
2	Lack of proper orientation of management	0.93	0.94	0.93	А
	Skills in technical colleges				
3	Drifting in profession in terms of motor vehicle	0.91	1.04	-0.92	А
	mechanic in technical colleges due to low or				
	insufficient payment				
4	Lack of skills and qualified teachers on	1.08	1.01	-2.04	А
the ma	anagement of motor vehicle				
in tec	hnical colleges				
5	Wear and tears in the existing tools and	1.13	0.86	0.41	А
	equipment without replacement				
6	Space available for exhibition in the	1.01	0.92	0.44	А
	school workshop				
7	Adequate storage space for tools and	0.94	1.02	-0.90	А
	equipment				
8	Tools and equipment challenges in	0.91	1.10	1.35	А
	technical colleges workshop				

Table 4.1.5: t-test analysis of the respondents on the problems associated with the management of motor vehicle mechanic workshop in technical colleges in Niger State.

Key

 SD_1 = standard deviation of teachers in technical colleges

SD₂= standard deviation of administrators in technical colleges

A= accepted

NA= not accepted

The result shown in table 5 above indicates the Comparism between the teachers and students in technical colleges. Data revealed that item 1, 2, 3, 4, 5, 6, 7, 8, 9 ad 10 has a calculated t-value less than the t-critical value of ± 1.66 , hence the hypothesis for this items were upheld at 0.05 level of significance

4.1.6 Hypothesis 3

There will be no significant difference in the mean response of teachers and students on the strategy for improving the management of motor vehicle mechanic workshop in technical colleges.

Niger state.						
S/N	ITEMS	SD_1	SD ₂	t-test	Remark	
1	Employing of qualify personnel in the management	0.44	0.50	2.88	NA	
	of MVM workshop in technical colleges					
2	Provision of protective equipment e.g hand	0.41	0.50	2.99	NA	
	gloves/paddling to reduce frictional					
	effects of forceful griping					
	Proper orientation of students on the basis of	0.50	0.49	1.74	NA	
	management of MVM workshop in technical					
	Colleges.					
	Use of safety google for welding	0.00	0.46	5.65	NA	
5	Drifting of profession should be put into	0.44	0.44	-0.98	NA	
	consideration specially in technical colleges					
	Approved protective wears are worn by technician	0.50	0.78	3.72	NA	
	Facilities for the training of MVM students' in	0.51	0.49	-0.86	NA	
	workshop should be made available in various					
	technical colleges					
	Relevant training regarding MVM should be	0.53	0.48	0.84	NA	
	put in place in MVM workshop to enhance the					
	future of MVM in technical colleges					
	Vision and mission of MVM should be enforcing	0.51	0.77	3.70	NA	
	in technical colleges workshop					
C	Regular evaluations of vision and mission of	0.51	1.01	3.87	NA	

Table 6: t-test Analysis on the Response of teachers and students on the strategy for improving the management of motor vehicle mechanic workshop in technical colleges Niger state.

management skills in technical colleges regarding MVM workshop should be reviewed to ensure not drifting from its objective

Key

 SD_1 = standard deviation of teachers in technical colleges SD_2 = standard deviation of administrator in technical colleges A = accepted NA = not accepted The result shown in table 6 above indicates the comparism between the teachers and administrators in technical colleges. Data revealed that item expect for item 1, 2, 3, 4,5 6, 7, 9 and 10 which has a t-calculated value above the t-critical value of ±1.66, thus the null hypothesis is for these items were not accepted.

Findings of the study

The following are the principle findings of the study, they are organized based on the research questions and hypothesis.

The findings related to the current practices in the management of motor vehicle mechanic

workshop in technical colleges:

- 1. Appropriate maintenance records are kept for all equipment
- 2. Appropriate maintenance strategies are adopted as at when due
- 3. Inspection of all motor vehicle equipment are carried out regularly
- 4. Proper orientation of students by the management on motor vehicle management
- 5. Use of the right tool for the right job
- 6. Tools and equipment are handled with great care
- 7. Tools and equipment are serviced regularly
- 8. Tools and equipment used are cleaned and kept in their racks after use
- 9. Maintenance officers are informed whenever a fault occurs
- 10. Routine maintenance techniques are practiced.

Findings related to the problems associated with the management of motor vehicle mechanics workshop in technical colleges:

- 1. Lack of management personnel
- 2. Lack of proper orientation of management skills in technical colleges
- Drifting in profession in terms of motor vehicle mechanic in technical colleges due to low or insufficient payment
- 4. Lack of skills and qualified teachers on the management of motor vehicle workshop in technical colleges
- 5. Wear and tears in the existing tools and equipment without replacement
- 6. Space available for exhibition in the school workshop
- 7. Tools and equipment challenges in technical colleges workshop.

Findings related to the strategies for improving the management of motor vehicle mechanics workshop in technical colleges:

- Employing of qualify personnel in the management of motor vehicle mechanic workshop in technical colleges.
- 2. Provision of protective equipment e.g hand gloves to reduce frictional effects of forceful griping.
- Proper orientation of students on the basics of management of motor vehicle mechanic in workshop in technical colleges
- 4. Use safety goggle for welding
- 5. Drifting of profession should be put into consideration specially in technical colleges
- 6. Approved protective wears are worn by technicians
- 7. Facilities for the training of motor vehicle mechanic students in workshop should be made available in various technical collages
- 8. Relevant training regarding motor vehicle mechanic should be put in place in the MVM workshop to enhance the future of MVM in technical colleges

- 9. Vision and mission of motor vehicle mechanic should be enforcing in technical colleges workshop
- 10. Regular evaluation of vision and mission of management skills in technical colleges regarding motor vehicle mechanic workshop should be review to ensure not drifting from its objective.

Discussion of the finding

The discussion of findings Are based on the research questions posed for the study and the hypothesis. The findings in table 1 related to research question 1 revealed that the respondents agreed with the majority of items as a process of improving the current practices in the management of MVM workshop in technical colleges. The findings revealed that teachers should make sure that proper inspection of all motor vehicle equipment are carried out regularly. One essential feature of quality management practice is the responsibility of the worker to make good use of the equipment available (Ahire, 1996).

It also revealed that regular Servicing of tools and equipment will tend to extend the life span of the equipment. The implication of the finding discovered that when a MVM workshop is well managed, it will improve the competency and management of the workshop in technical colleges.

The findings in table 2 related to research question 2 revealed that the respondents agreed with the majority of items on the problems associated with the management of MVM workshop in technical colleges. The findings revealed that most of the Technical colleges lack skilled and qualified teachers on the management of the MVM workshop and the lack of this skilled and qualified teachers can easily increase the management risk of the workshop. According to (Kauro, 1971) described the Japanese approach to quality control as a thought

revolution in management. Such revolution Needs to be adopted in technical colleges in Niger State to ensure that MVM workshops are Well managed.

The implication of the findings revealed that MVM workshops can be well managed if well skilled and qualified teachers are being employed.

The findings in table 3 related to research question 3 revealed that the respondents agreed with the majority of items on the strategies for improving the management of MVM workshop in technical colleges. The findings revealed that there is need for re-training of MVM workshop teachers for them to be well skilled in managing the workshop and also proper orientation should be given to students on how to make use of the MVM workshop. Harnessing new technologies into the vehicles have made modern automobiles an assemblage of a group of sophisticated technologies (Schwaller, 1993).

The implication of this findings revealed that when there are proper facilities for the training of MVM administrators in the workshop in various technical colleges, it will help to improve the management practices in the workshops.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter deals with summary, conclusion and recommendations based on the findings. Suggestions for further studies were also highlighted.

Summary of the Study

The study is on the strategies for improving the management of motor vehicle mechanic in technical colleges in Niger State. The chapter one of the study discuss a lot of issue concerning strategies for improving quality management of MVM workshop in the background of the study, the statement of the problem was well stated, which has to do with poor training among automobile personnel on the management of MVM workshop during and after practical work. The problem of utilization is being faced along the line in automobile workshops, which is as a result of the way the available educational resources are poorly managed, purpose of the study, significance of the study, the research questions and hypotheses were all formulated to guide the study.

The review of related literature looked at the historical background of motor vehicle mechanic in technical colleges, management of motor vehicle mechanic workshop in technical colleges, challenges to effective management practice of motor vehicle mechanic workshop in technical colleges and strategies in the effective improvement in the management practice of MVM workshop are the sub-headings that were discussed, and different views concerning the topic which was harmonized in a comprehensive literature review.

A survey research design was used, where a well-structured questionnaire was used as a source for opinions from respondents on the strategies for improving The management practice of MVM technical colleges. The targeted population for the study is 100 respondents which are 25 registered MVM teachers in technical colleges and 21 MVM administrator in technical colleges in Niger State. The instrument was validated by two lecturers from the department of industrial and technology education, school of science and technology education, federal university of technology Minna. The data collected was analyzed using mean standard deviation and t-test. A mean response of 2.50 was used as a cut-off point, t-test however was employed to test the null hypotheses at 0.05 level of significance.

Implication of the study

The findings of the study as far having implications on MVM in technical colleges of Niger state. MVM teacher, MVM administrators, automobile supervisors, automobile industries and the public at large. The findings of the study regarding the strategies for improving the management practice of MVM in technical colleges. The implication of this will help to provide a better training for motor vehicle teachers who want to acquire training skill in the workshop, it will also help to improve their awareness, and furthermore the implication will help them with the capacity to utilize propelled instruments and Hardware after they have been provides for use.

The implication of the findings also confirm that motor vehicle administrators will likewise profit from the research, after they have been conferred upon, they will know the names, capacities and serviceability of car segments while taking part in practical exercises and increase essential learning of working securely in a car designing environment. This will help the students during practical in the workshop to enhance their aptitudes in labour market. The findings will be an implication to automobile supervisors, they will properly carry a better supervision to ensure that the quality management practices are well impose so that there can be a good outcome in practical work, the implication will help them to suggest the need for automobile personnel to be train and re-train in new skills, so that they can have practical knowledge and management quality needed to meet educational and environmental standard. The findings of the study will implicate automobile industries in Nigeria, the industries would be able to send their personnel to seminars organized by the government and other private industries, because the need for quality management is very much vital, and also they can be sent for six or more months training in other industries. At the end they will be able to carry out food quality management practice in the workshop. The implication of the findings is on the society; they will make the vehicles workshop outside the school to see the need to update their expertise through preparing of their staff in other development commercial enterprises. They will likewise be spurred by this research to collaborate with specialized schools so they can obtain the abilities of car creation with the utilization of quality management practice of MVM workshop. And the workshop in technical colleges will be used to frequent management culture for safe use of their workshop.

Conclusion

Base on the analysis of the findings and considering the strategies for improving the management of MVM in technical colleges in Niger State, it is expected that there should be an improvement in quality management practices among MVM teacher and administrators. The findings of this study also inform the government about its role in promoting quality management in the workshop by providing the necessary Funds to change the old machines

and equipment. And also the need to further re-train MVM teachers for the need to have quality management skill and knowledge, so that the workshop can last longer.

Recommendations

The following recommendations were made for implementation;

1. Strategies should be put in place by government in proving a seminar for both technical colleges and automobile personnel, and discussion for the seminar should be the benefit of quality management needs of motor vehicle workshops in technical colleges.

2. The government should look at the laces in technical colleges and ensure that those materials and facilities needed to be manage Are well focused upon so that they can last longer.

3. The government of Niger state should make sure they give teachers the necessary benefits for the effectiveness of this management practices.

4. There is need for the government to set up a group of team in supervising the workshops in technical colleges so that the management practices are made to be part of those in the workshop.

Suggestions for further study

The following suggestions were made for further study

1. Necessary need of quality management practices and maintenance

2. Strategies to be adopted in improving the skills of motor vehicle teachers in the need to improve the competency in the workshop.

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QUESTIONNAIRE

FEDERAL UNIVERSITY OF TECHNOLOGY MINNA, SCHOOL OF SCIENCE AND TECHNOLOGY EDUCATION INDUSTRIAL AND TECHNOLOGY EDUCATION

The questionnaire for the strategies for improving the management of motor vehicle mechanic in technical colleges in Niger state.

INTRODUCTION: This checklist is just a sample of your opinion about the strategies for improving the management of motor vehicle mechanic in technical colleges in Niger state.Please complete this questionnaire and sincerely tick ($\sqrt{}$) the column that best represent your perception about each item concerning the above topic.

PART 1

Status.....Teacher () Student ()

A (four) 4-point scale is used to indicate your opinion, tick the word which describes your agreement as shown below:

SECTION A, B and C

STRONGLY AGREESA = 4 point

AGREE A = 3point

DISAGREE D = 2 point

STRONGLY DISAGREE SD= 1 point

PART 2

SECTION A

1. The current practices in the management of motor vehicle mechanic workshop in

technical colleges?

S/N	ITEMS	SA	Α	D	SD
1	Appropriate maintenance record are kept for all				
	equipment				
2	Appropriate maintenance strategy are adopted as at when				
	due				
3	Inspection of all motor vehicle equipment are carried out				
	regularly				
4	Proper orientation of student by the management on				
	motor vehicle management				
5	Use of the right tool for the right Job				
6	Tools and equipment are serviced regularly				
7	Tools and equipment are handled with great care				
8	Tools and equipment used are cleaned and kept in their				
	racks after use				
9	Maintenance officers are informed whenever a fault				
	occurs				
10	Routine maintenance techniques are practiced				

SECTION B

2. The problems associated with the management of motor vehicle mechanics workshop

in technical college?

S/N	ITEMS	SA	Α	D	SD
11	Lack of management personnel				
12	Lack of proper orientation of management skills in technical colleges				
13	Drifting in profession in terms of motor vehicle mechanic in technical colleges due to low or insufficient payment				
14	Lack of skills and qualified teachers on the management of motor vehicle in technical colleges				
15	Wear and tears in the existing tools and equipment without replacement				
16	Space available for exhibition in the school workshop				
17	Adequate storage space for tools and equipment				
18	Tools and equipment challenges in technical colleges workshop				

SECTION C

3. The strategy for improving the management of motor vehicle mechanic

workshop in technical college?

S/N	ITEMS	SA	Α	D	SD
19	Employing of qualify personnel in management of motor vehicle				
	mechanic workshop in technical colleges				
20	Provision of protective equipment e.g hand gloves/paddling to				
	reduce frictional effects of forceful griping				
21	Proper orientation of students on the basics of management of				
	motor vehicle mechanic in workshop in technical colleges				
22	Use safety goggle for welding				
23	Drifting of profession should be put into consideration specially in				
	technical colleges				
24	Approved protective wears are worn by technicians				
25	Facilities for the training of motor vehicle mechanic students in				
	workshop should be made available in various technical colleges				
26	Relevant training regarding motor vehicle mechanic should be put				
	in place in the MVM workshop to enhance the future of MVM in				
	technical colleges				
27	Vision and mission of motor vehicle mechanic should be				
	enforcing in technical colleges workshop.				
28	Regular evaluation of vision and mission of management skills in				
	technical colleges regarding motor vehicle mechanic workshop				
	should be review to ensure not drifting from it objective.				