HAZARD MANAGEMENT PRACTICES AND ACCIDENT PREVENTION IN TECHNICAL COLLEGES IN AKWA IBOM STATE

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ABSTRACT

The study determined the influence of hazard management practices on accident prevention in technical colleges in Akwa Ibom State. Two research questions and two null hypotheses guided the study. The ex-post facto design was used and the population of the study was 114 respondents, comprising 48 technical teachers and 66 workshop assistant from all the seven technical colleges in Akwa Ibom State. A sample of 86 respondents was selected through simple random sampling technique. The researcher developed instrument captioned, "Hazard Management Practices and Accident Prevention Questionnaire were used for Data Collection. The instrument was face validated by three experts and had an internal consistency reliability index of 0.88, obtained by using Cronbach Alpha Formula. Mean and independent t-test were used for data analysis. Findings of the study revealed that the use of personal protective equipment and the provision of safe working environment were found to influence accident prevention in Technical colleges in Akwa Ibom State. Besides, it was also found that there was generally no significant difference between the mean responses of technical teachers and workshop assistants on the extent to which the use of personal protective equipment and the provision of safe working environment influence accident prevention in Technical Colleges in Akwa Ibom State. It was recommended that Akwa Ibom State Ministry of Education and State Technical Schools Board should supply adequate number of personal protective equipment as well as modern tool storage facilities to all technical colleges in State.

Key word: Hazard Management Practices, Accident Prevention, Personal Protective Equipment, Safe Working Environment, Technical Colleges.

Introduction

Technical Education is an aspect of education meant to equip individuals with intellectual, manipulative and affective work competencies that would make them self-reliant and useful members of the society. The Federal Republic of Nigeria (2013) defined Technical Education as a comprehensive term referring to those aspects of the educational process involving in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life. Kazeem (2006) maintained that the primary purpose of Technical Education is to prepare persons for gainful employment in a recognized occupation. Technical Education is a workshop-based form of education. To fully actualize the purposes of

Technical Education, the school workshop must be well equipped and conducive for practical training. It must also be free from hazards and other cases associated with accidents.

A hazard is any source of potential danger, harm or adverse health effect on something or someone under certain conditions at work. According to the Health and Safety at Work Act (2015), a hazard is something which has the potential to harm the health, safety and welfare of people at work. Basically, a hazard can cause harm to individuals, adverse health effects as well as property or equipment losses to organizations (Canadian Centre for Organizational Health and Safety, 2016). Workplace hazards can come from a wide range of sources. Examples include substances, materials, processes and practices that have the ability to cause harm or adverse health effect to a person under certain conditions. Ebong and Ekpoudom (2016) enumerated some of the workshop hazards to include. Physical hazards, chemical hazards biological hazards, mechanical hazards, electrical hazards, ergonomical hazards and psychological hazards among others. Caitlin (2015) listed other examples of potential hazards that might be found in a workplace to include: noise, unguarded power driven machinery, hazardous substances, slippery surfaces, storage of materials at height, unsafe working environment, procedures and practices and stressful working conditions. Since the school workshop is similar to the industrial workshop in many ways, the need for hazard management becomes very pertinent.

Hazard management in the school workshops involves taking some essential steps towards forestalling accidents and risks to students and workshop personnel. These steps include: identification, assessment, control and review of any foreseeable hazard. The purpose of hazard management is to ensure the safety of workers when handling tools and machines as well as when engaging in other work processes and procedures in the workshop. Workshop hazards are numerous but can be avoided with adequate knowledge and application of hazard management practices. Catlin (2015) listed some hazard management strategies in the workshop to include the use of protective equipment, provision of safe working environment, proper tools/equipment operation and maintenance strategies, proper tools storage system and safety training and instructions.

Personal protective equipment (PPE) is anything that is used to protect the human body from the risk of hazards. They are those equipment or deviceswhich the workshop user has to use in order to prevent harm or danger. According to Ebong and Ekpoudom (2010), personal protective equipment is used to protect a person's eyes, ears, head, extremities, respiratory system and other parts of the body. Michael (2011) stated that various kinds of personal protective equipment are available for use in the school workshops. These include eye and face protection devices such as goggles and face shields, hand protection devices such as gloves, body protection devices such as overalls, foot protection devices such as boots and head protective devices such as helmets.

Jones (2004) contended that the work area assessment is required to determine the potential hazard and select the appropriate personal protective equipment for adequate protection. This implies that accident prevention could be effective if students are properly trained on: the use of appropriate personal protective equipment for their jobs; when the equipment must be worn; how to wear, adjust, maintain the equipment and the limitations of these equipment.

Akpan and Michael (2012) investigated on personal protective equipment: the missing link in skill training in Technical Colleges in Akwa Ibom State. The outcome of the study indicated that students' use of personal protective equipment had significant relationship with their effective skill acquisition. The researcher recommended that all technical colleges in Akwa

Ibom State need to provide the students with the necessary personal protective equipment during all practical classes to facilitate their effective skill acquisition.

The working environment in the school workshop or laboratory must be safe for the students and workshop personnel. Mehallis (1990) posited that the working environment in the school laboratory refers to the general physical condition of the school workshop. This covers the nature and state of the building in terms of ventilation, lighting and acoustic control, the general organization of the workshop, the arrangement of tools and equipment in the workshop, availability of conveniences and safety devices as well as the state of housekeeping in the workshop. The working environment in this context refers to the physical facilities of school shop which has remarkable significance in accidents prevention. These physical facilities which constitute the working environment in the workshop include building, equipment, safety devices and shop keeping. Akpan (2008) pointed out that the working environment in the school workshop has remarkable significance on accident prevention. Akpan added that poor lighting, unattractive painting, poor ventilation, slippery floors, unguarded machinery and poor electrical connections are some of the working environmental factors that can cause accidents in the school workshop.

According to Ebong (2009), safe working environment in the electrical shop could be entrenched by ensuring that:

i. All electrical wiring should be inspected and tested periodically by a competent person;
ii. Sockets should not be overloaded. Proper multi-socket adaptors should be used where necessary and the total rating of the equipment attached should not exceed the maximum value for the socket.
iii. Equipment should be isolated from the mains before maintenance is carried out;
iv. All single phase main sockets should be provided with three pins representing live, neutral and earth terminal.
v. Dirt and refuse should be removed from floors and benches daily or more often as need arises;
vi. Spillages should be wiped up immediately and floors cleared or washed where appropriate regularly;
vii. Tools and materials should be arranged in an orderly fashion; and
viii. Aisles and gang ways should be clearly marked and kept clean and free of obstructions.

It is worthy of note that effective application of hazard management strategies in technical college workshops leads to accidentprevention. Accident prevention, therefore, refers to the degree to which the occurrence of accidents in the school workshop is reduced or minimized to the barest minimum. It is the degree to which the application of hazard management practices is effective in reducing or minimizing the occurrence of accidents in school workshops. Accident prevention implies higher level of safety in school workshops.

Michael and Udoudo (2012) reported that accidents are very common in Technical Colleges workshops in Akwa Ibom State. This position is shared by Edem (2010) and Otuo (2013) in their separate studies that there is a high rate of accidents in Technical Colleges in Akwa Ibom State. Olateju (2005) equally contended that accidents often occur in Vocational and Technical Education workshops. He listed accidents commonly reported in Technical Education workshops to include electric shock, cuts from sharp objects, eye injury, burns of various degrees, fall from heights, slips and fire incidences. It is observed that the high rate of accidents in Technical College workshops in Akwa Ibom State could be due to non-application of hazard management practices in the workshops.

It is pertinent to note that accidents interfere with lessons, decimate human power and material resources; thus, disorganizing the workshop activities. From the economic viewpoint, accidents are costly events which seriously hinder production. Often, machinery and equipment involved in an accident are damaged resulting in high costs of replacement or improvisation. Several scholars such as Ogwo and Oranu (2006) and Ebong and Ekpoudom (2016) have suggested that effective application of correct hazard management practices in school workshops can drastically reduce workshop accidents to the barest minimum. In view of the devastating effects of workshop accidents, there is need for a study to determine the influence of hazard management practices on accident prevention in Technical College workshops in Akwa Ibom State.

Statement of the Problem

Technical and Vocational Education programmes involve practical training in workshops, which call for the use of tools, equipment, machines and materials. The training is expected to take place in a workshop that is free of hazards. Practical activities in Technical College workshops such as welding, drilling, battery charging, spraying, forging and wood working expose trainers to possible health and safety hazards. As a result, accidents do occur causing injuries to technical teachers, workshop assistants and students. These hazards turn the workshop from a work friendly environment to an unfriendly and hazards environment.

Accident occurrence could also lead to equipment damage, waste of materials and time; thereby frustrating training plans in the workshops from coming to fulfillment at the record time. The injury sustained could result in pain and suffering to the victims or could cause permanent disability, loss of job to technical teacher and workshop assistants.

Studies have shown that there is a high rate of accident in the Technical Colleges in Akwa Ibom State. Most of the reported accidents are largely attributed to non-application of correct hazard management practices. The problem of the study, therefore, is to answer the question: How do hazard management practices influence accident prevention in Technical College in Akwa Ibom State?

Purpose of the Study

The main purpose of the study was to determine the hazard management practices and accident prevention in technical colleges in Akwa Ibom State. Specifically, the Study sought to determined:

i. The extent to which the use of protective devices influence accident prevention in Technical Colleges in Akwa Ibom State;
ii. The extent to which provision of safe working environment influences accident prevention in Technical Colleges in Akwa Ibom State.

Research Questions

The following research questions guided the study:

i. To what extent does the use of protective devices influence accident prevention in Technical Colleges in Akwa Ibom State?
ii. To what extent does provision of safe working environment influence accident prevention in Technical Colleges in Akwa Ibom State?

Research Hypotheses

The following hypotheses were formulated and tested at .05 level of significance

Ho_1: There is no significant difference between the mean responses of technical teachers and workshop assistants on the extent to which the use of protective devices influence accident prevention in Technical Colleges in Akwa Ibom State.

Ho2: There is no significant difference between the mean responses of technical teachers and workshop assistants on the extent to which the provision of safe working environment influence accident prevention in Technical Colleges in Akwa Ibom State.

Research Method

Design of the Study

The study used ex-post facto research design. This design involves the investigation of possible cause and effect relationship by observing existing conditions or state of affairs and searching back in time for possible causal factors. The independent variables were studied in retrospect for their possible relationship to and effects on the dependent variable.

Population of the Study

The population of the study consisted of 114 respondents comprising 48 Technical teachers and 66 workshop assistants from all the seven Technical Colleges in Akwa Ibom State.

Sample and Sampling Technique

The sample size for this study was 86 respondents, made up 36 technical teachers and 50 workshop assistants from the seven Technical Colleges in Akwa Ibom State. The sample was selected using simple random sampling technique.

Instrumentation

The researchers' developed instrument entitled, "Hazard Management Practices and Accident Prevention Questionnaire was used for data collection. The instrument was divided into two sections, A and B. Section A contained two items on demographic data of the respondents, while section B was sub-divided into two parts on the influence of the two hazard management practices (use of protective devices and safe working environment) on accident prevention in Technical Colleges in Akwa Ibom State. Each of the two parts contained a total of 20 items which were structured on a five-point likert scale as follows: Very Great Extents (VGE) – 5 points; Great Extent (GE) – 4 points; Moderate Extent (ME) – 3 points; Little Extent (LE) – 2 points; and very Little Extent (VLE) – 1 point.

Validation of the Instrument

The instrument was subjected to face validation by three experts, two from the department of Vocational Education and one from the Department of Educational Foundation, Guidance and Counseling, all in the University of Uyo. The validate inputs were used in modifying the questionnaire items.

Reliability of the Instrument

In order to determine the internal consistency of the instrument, the validated instrument was administered on 12 workshop assistants and 10 technical teachers from GTE Ewet, GTC

Abak and MTC Oron who were not used in the main study. The data obtained were subjected to Cronbach Alpha reliability analysis and a reliabilityco-efficient of 0.88 was obtained.

Method of Data Analysis

The mean was used for answering the research questions while the null hypotheses were tested with the independent t-statistics at .05 probability level.

Decision Rule: For answering the research questions, the extent of influence was determined based on the real limits of the values assigned to the response options as shown below:

Response options	**Values**	**Real Limit**
Very Great Extent (VGE)	5	4.50 – 5.00
Great Extent (GE)	4	3.50 – 4.49
Moderate Extent (ME)	3	2.50 – 3.49
Little Extent (LE)	2	1.50 – 2.49
Very Little Extent (VLE)	1	1.00 – 1.49

For testing the null hypotheses, when the observed p-value is less than or equal to .05 ($P \leq 0.5$), the null hypotheses was rejected. However, when the p-value exceeds the alpha level of .05, i.e. ($P > .05$), the null hypotheses was retained.

Results

The result of the study obtained from the research question are presented in Tables 1 and 2

Research Question 1

To what extent does the use of protective devices influence accident prevention in technical colleges in Akwa Ibom State?

Table 1: Extent of Influence of Use of Protective Devices on Accident Prevention in Technical Colleges in Akwa Ibom State (N = 86)

S/N	**Influence of Safe Working Environment**	$\bar{X}$	**Remarks**
1.	Placing fire extinguishers at conspicuous locations in the workshop reduces the rate of accident.	3.54	GE
2.	Ensuring that students learn how to operate fire extinguishers in the workshop prevent accident.	2.97	ME
3.	Ensuring that the floors of the workshop are always kept tidy prevent accident.	3.05	ME
4.	Ensuring that students keep the gangway free from obstruction prevents accident.	2.78	ME
5.	Ensuring that students work in well-ventilated workshops reduces the rate of accident.	2.99	ME
6.	Providing adequate illumination in the workshops reduces the rate of accident.	2.80	ME

7.	Ensuring that equipment are earthed in the proper way reduces the rate of accident.	2.97	ME
8.	Ensuring that all electrical appliances are switched off when not in use reduces accident.	3.58	ME
9.	Ensuring that tools and ancillary equipment are returned to their proper locations immediately after use reduces accident.	2.37	LE
10	Proper placing of safety posters in the workshop reduces the rate of accident.	2.45	LE
	Cluster Mean	**2.95**	**ME**

Source: Field Survey, 2017.

Table 1 shows the mean responses on six out of the 10 listed items fell within the range of 2.50 and 3.49 while the mean responses on four items fell within the range of 1.50 and 2.49. These indicate that the six listed items influence accident prevention in Technical Colleges in Akwa Ibom State to a moderate extent while the four items influence accident prevention to a little extent. Table 1 further revealed that the cluster mean for all the items is 2.75 which indicates that generally all the listed items influence accident prevention in Technical Colleges in Akwa Ibom State at a moderate extent.

Research Question 2

To what extent does providing safe working environment influence accident prevention in Technical Colleges in Akwa Ibom State?

Table 2: Extent of influence of providing safe working environment on accident prevention in Technical Colleges in Akwa Ibom State (N = 86)

S/N	Influence of Use of Protective Devices	$\overline{X}$	Remarks
1.	Students use of overalls during practical lesson reduces accidents.	2.90	ME
2.	Students are not allowed to use jewelries in order to prevent accidents.	2.95	ME
3.	Using hand gloves to protect our hands in the workshop prevent accidents.	3.05	ME
4.	Students roll their long sleeves above elbows when operating machines in order to prevent accident.	2.98	ME
5	Not putting on ties in the workshop reduces accident.	3.01	ME
6.	Using safety shoes for the job being done prevent accident.	2.43	LE
7.	Using proper respirators for the job being done prevent accident.	2.48	LE
8.	Using proper face shields for the job being done prevent accident	2.40	LE
9.	Using safety helmets when they are in need prevent accident	3.01	ME

10.	Using earmuffs when practical work requires loud sound prevent accident.	2.31	LE
	Cluster Mean	2.75	ME

Source: Field Survey, 2017.

Table 2 shows, the mean responses on one out of the ten listed items fall within the range of 3.50 and 4.49, seven items have mean responses that fall within the range of 2.50 and 3.49 while two items have mean responses that fall within the range of 1.50 and 2.49. These indicate that one item influence accident prevention in Technical Colleges in Akwa Ibom State to a great extent, seven items influences accident prevention to a moderate extent while two items influence accident prevention to a little extent. Table 2 further revealed that the cluster mean for all the items is 2.95 which indicates that generally all the listed items influence accident prevention in Technical Colleges in Akwa Ibom State at a moderate extent.

Research Hypotheses 1

There is no significant difference between the mean responses of technical teachers and workshop assistants on the extent to which the use of protective devices influence accident prevention in Technical Colleges in Akwa Ibom State.

Table3: t-test Analysis of the Mean Responses of Technical Teachers and Workshop Assistants on the Extent to which the Use of Protective Devices Influence Accident Prevention in Technical Colleges in Akwa Ibom State (n_1=36; n_2=50)

S/N	Influence of Use of Protective Devices	$\overline{X}_1$	$\overline{X}_2$	t-cal	p.	Decision
1.	Students use of overalls during practical lesson reduces accidents	2.56	3.14	-1.91	0.00	S
2.	Students are not allowed to use jewelries in order to prevent accidents.	2.94	2.96	-0.12	0.91	NS
3.	Using hand gloves to protect our hands in the workshop prevent accidents	3.00	3.08	-0.59	0.55	NS
4.	Students roll their long sleeves above elbows when operating machines in order to prevent accident.	3.08	2.90	1.09	0.27	NS
5.	Not putting on ties in the workshop reduces accident	3.06	2.98	0.57	0.07	NS
6.	Using safety shoes for the job being done prevent accident.	2.89	2.78	0.61	0.54	NS
7.	Using proper respirators for the job being done prevent accident.	2.64	2.54	0.70	0.48	NS
8.	Using proper face shields for the job being done prevent accident.	2.86	2.92	-0.47	0.64	NS
9.	Using safety helmets when they are in need prevent accident.	3.06	2.98	0.48	0.63	NS
10.	Using earmuffs when practical work requires loud sound prevent accident.	3.22	2.86	1.72	0.09	NS
	Cluster Mean	2.93	2.91	0.25	0.80	NS

Df = 84; S = Significant; NS = Not Significant at 0.05 level of significance.
n_1 = Technical teachers; n_2 = Workshop assistants.

$\overline{X}_1$ = Technical Teachers, $\overline{X}_2$ = Workshop Assistant.
Source: Field Survey, 2017.

The data in Table 3 show the result of the t-test analyses for the differences between the mean responses of Technical teachers and workshop assistants on the extent to which safety instructions influence accident prevention in Technical Colleges in Akwa Ibom State. As Table 3 reveals, the observed level of significance for nine out of the 10 items are greater than the stipulated probability level of 0.05. This implies that there is no significant difference between the opinions of Technical teachers and workshop assistants on the nine listed items, except onitem No. 1 only. Data in Table3 also reveals that based on the cluster mean, the observed level of significance is 0.80 which is greater than 0.05. On this basis, the null hypotheses is retained signifying that there is no significant difference between the mean responses of Technical teachers and workshop assistants on the extent to which safety instructions influence accident prevention in Technical Colleges in Akwa Ibom State.

Research Hypotheses 2

There is no significant difference between the mean responses of technical teachers and workshop assistants on the extent to which the provision of safe working environment influence accident prevention in Technical Colleges in Akwa Ibom State.

Table 4: t-test Analysis of the Mean Responses of Technical Teachers and Workshop Assistants on the Extent to which the Provision of Safe Working Environment Influence Accident Prevention in Technical Colleges in Akwa Ibom State (n_1=36; n_2=50)

S/N	Influence of Safe Working Environment	$\overline{X}_1$	$\overline{X}_2$	t-cal	P.	Decision
1.	Placing fire extinguishers at conspicuous locations in the workshop reduces the rate of accident.	292	3.00	-0.63	0.53	NS
2.	Ensuring that students learn how to operate fire extinguishers in the workshop prevent accident.	3.00	3.08	-0.59	0.55	NS
3.	Ensuring that the floors of the workshop are always kept tidy prevent accident.	2.77	2.78	-.014	0.99	NS
4.	Ensuring that students keep the gangway free from obstruction prevents accident.	3.06	2.94	0.73	0.47	NS
5.	Ensuring that students work in well-ventilated workshops reduces the rate of accident.	2.64	2.92	-1.86	0.07	NS
6.	Providing adequate illumination in the workshops reduces the rate of accident.	2.81	3.08	-1.71	0.09	NS
7.	Ensuring that equipment are earthed in the proper way reduces the rate of accident.	2.78	2.88	-0.68	0.49	NS
8.	Ensuring that all electrical appliances are switched off when not in use reduces accident.	3.81	3.42	2.34	0.02	NS
9.	Ensuring that tools and ancillary equipment	3.56	3.24	1.84	0.07	NS

	are returned to their proper locations immediately after use reduces accident.					
10.	Proper placing of safety posters in the workshop reduces the rate of accident.	2.94	2.96	-0.12	0.91	NS
	Cluster Mean	3.03	3.03	-0.03	0.97	NS

Df = 84; S = Significant; NS = Not Significant at 0.05 level of significance.
n_1 = Technical teachers; n_2 = Workshop assistants.
$\overline{X}_1$ = Technical Teachers, $\overline{X}_2$ = Workshop Assistant.
Source: Field Survey, 2017

The result of the t-test analysis for the differences between the mean responses of Technical teachers and workshop assistants on the extent to which the provision of safe working environment influence accident prevention in Technical Colleges in Akwa Ibom State is presented in Table 4. Data in Table 4 reveal that each of the observed levels of significance for all the 10 items is greater than 0.05. This implies that the value of t-cal for each of the ten items is not significant at 0.05 level of probability that there was no significant difference between the opinions of Technical teachers and workshop assistants on each of the items in the cluster. Table 4 further reveals that based on the cluster mean, the level of significance is 0.97 which is greater than 0.05. On these bases, the null hypothesis is retained,implying that there is no significant difference between the mean responses of Technical teachers and workshop assistants in the extent to which the provision of safe working environment influences accident prevention in Technical Colleges in Akwa Ibom State.

Findings of the Study

Findings of the study are as follows:

1. Six items relating to the use of personal protective devices were found to influence accident prevention in Technical Colleges in Akwa Ibom State to a moderate extent while four items influence accident prevention to a little extent. Besides, there was generally no significant difference between the mean responses of Technical teachers and workshop assistants on the extent to which the use of personal protective equipment influence accident prevention in Technical Colleges in Akwa Ibom State.
2. One item relating to the provision of safe working environment was found to influence accident prevention in Technical Colleges in Akwa Ibom State to a great extent.Seven items influence accident prevention to a moderate extent while two items influence accident prevention to a little extent. Also, there was no significant difference between the mean responses of Technical teachers and workshop assistants on the extent to which the provision of safe working environment influence accident prevention in Technical Colleges in Akwa Ibom State.

Discussion of Finding

Findings of the study revealed that using protective devices greatly reduce the rate of accidents in the school workshop. This finding is in line with that of Akpan and Michael (2012) who found that there is a positive relationship between the correct use of personal protective equipment and students' skill acquisition in general laboratory work in Technical Colleges in Akwa Ibom State. This implies that there is a positive relationship between the correct use of personal protective equipment and accident prevention in Technical College workshops in Akwa

Ibom State which lead to students' skill acquisition in their various subjects/courses. The findings of the study also support the assertion of Michael (2011) that the use of personal protective equipment is one of the ways an individual is protected in the workshop. It also supports the views of Ebong and Ekpoudom (2016) who found out that personal protective equipment is used to protect a person's eyes, face, and ears, head extremities, respiratory system and other parts of the body. Hence, failure to use personal protective devices is a leading cause of accidents. This implies that the use of personal protective equipment leads to accident prevention.

Results of data analysis indicated that provision of safe working environment influences accident prevention in Technical Colleges in Akwa Ibom State. In support of the findings of the study, Akpan (2008) pointed out that the achievement of accident prevention in Technical College workshops is a function of safe working environment provided in the workshop. The author stressed that without a safe working environment, the school workshop becomes a hazardous environment instead of a worker-friendly environment. It also supports the views of Ebong (2009) who noted that safe working environment in the school workshop could be achieved by ensuring that:

1. Spillages are wiped up immediately and floors should be cleared or washed regularly;
2. Tools and materials should be arranged on orderly fashion; and
3. Aisles and gang ways should be clearly marked and kept clean and free of obstructions.

Conclusions

Based on the findings of the study, it is concluded that effective application of correct hazard management practices such as use of protective devices and provision of safe working environment could lead to accident prevention in Technical College workshops in Akwa Ibom State. Accident free environment can enhance the rate of practical activities in the school workshops and promote productivity.

Recommendations

Based on the findings of the study, the following recommendations are made:

1. The Akwa Ibom State Ministry of Education and State Technical School Board should supply adequate number of personal protective equipment to all Technical Colleges in Akwa Ibom State.
2. Technical teachers and workshop assistants should ensure that the workshop environments are keep neat and tidy before any practical work is conducted with the students.
3. The Akwa Ibom State Ministry of Education and State Technical Schools Boards should direct principals, technical teachers and workshop assistants in Technical Colleges to enforce the use of personal protective equipment by all students during practicalsin order to prevent accidents in the technical workshops.

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