Managerial Skills Required of Teachers for Effective Technical Workshop Management in Technology Education Programmes in Rivers State

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Abstract: The study investigated managerial skills required for effective management of technical college workshops in technology education programme in Rivers State. The study adopted the survey research design. The population was one hundred and twenty-nine (129) technical teachers of the various Government Technical Colleges in Rivers State. Data were collected with the use of a sixteen (16) item questionnaire titled "Skills for Effective Workshop Management in Technical Colleges (SEWMTC) developed by the researchers after review of relevant literature. The mean and standard deviation were used in answering the research questions while the Z-test statistics was used to test the null hypotheses at 0.05 level of significance. The study findings were that managerial skills such as Planning skills, Organising Skills and Coordinating Skills were required for effective management of technical college workshop in technology education programmes. It was therefore recommended that workshops and seminars should be organised for technical college teachers to enable them possess the required managerial skills to help in the management of technical workshops in technology education programme.

Keywords: Management, Managerial Skills, Technical Workshop, Technology Education Programme

Introduction

Management as explained by Lawrence (2014) refers to guiding human and physical resources into dynamic organizational units which attain their objectives to the satisfaction of those served within a high degree of moral and sense of attainment on the part of those rendering services. Managerial skill as a term is used to describe the process of ensuring that workshop lessons run smoothly despite disruptive behaviour by students (Mario, 2013). The term also implied the prevention of disruptive behaviour by students during instructional process. According to Moskowitz and Hayman (2012) in 1981 the US National Educational Association reported that 36% of teachers said they would probably not go into teaching if they had to decide again. A major reason was negative student attitudes and discipline. For Murphy, Bajestani, Ferguson (2015), management skill is crucial because it supports the proper execution of curriculum development, developing best teaching practices, and putting them into action. Managerial skill can be explained as the actions and directions that teachers use to create a successful learning environment; indeed, having a positive impact on students achieving given learning requirements and goals (Soheili & Alizadeh, 2014). According to Okeke & Oranu (2006) proper planning and management of the human, material and physical resources and layouts are serious responsibilities if the goals, philosophy and scopes of the study are to be achieved.

The teacher of technology is a vocational and technical worker who has acquired professional training in teaching with skills in the use of tools and machines to produce varied items of constructions including electrical technology for those in the workshop (Amenger, 2013). Therefore from the above, management can be viewed as the supervising, controlling and coordinating of activities to attain optimum results of project objectives by the vocational and technical teacher. The teachers are the major key players in the management of vocational and technical workshops in any setting.

Technical workshop management in specialized schools as indicated by Umar (2010) is the inclusion of staff in arranging, sorting out, planning, assessing and controlling the preparation offices and understudies to teach and learning aptitudes in different occupations in meeting with the specialized training goals. Generally, there are hardware for getting abilities and keep up consumable materials to be bought, disseminated for commonsense used and kept all together and understudies to be sorted out and given word related heading. Each occupation has its special workshop, yet all the occupation could at present offer basic

needs, issues and answers for the issues and issues emerging from the point of view workshops. At the point when a workshop is perfect brilliant, with apparatuses and machines situated in their proper spots, will give a noteworthy hope to encourage guideline and viability in learning. Prominently, a preparation put like the school workshop animates and draws in new intrigued and fit students in light of the fact that the offices and the settings are great, engaging and hence understudies will jump at the chance to be related to the program. According to Oranu (2001) the management of a school workshop ought to be worried about arranging, planning and game plan of the physical offices keeping in mind the end goal to draw in consideration of curious students and government speculation. Elom (2009) brought up that one of the targets of workshop management in specialized universities is to decide how the offices could be ensured, kept in great working condition for compelling utility and viable guideline and the person in an electrical workshop should take an interest to secure manipulative abilities using these offices. Umar (2010) in his comment revealed that the management of electrical workshops in specialized universities of Nigeria is exceptionally poor. Umah-Mac (2003) worrying on the issues of successful management of instructional materials in electrical workshops of most specialized schools in Nigeria expressed that there have been general protestations about the electrical gear imported by the legislature in the mid-1980s as being totally thumped depressed of utilization for absence of upkeep, poor stockpiling or oldness. Agbulu and Oliatan (2002) prompted that hardware and machines for preparing understudies in specialized workshops should be in great working condition constantly. Hence, the more workshop offices will be required keeping in mind the end goal to adapt to the populace blast. The additionally for understudies to get the required abilities, workshop management procedures by technology instructors to enhance their educating is likewise required. In other words, teachers should be able to plan, organize, coordinate schedule and encourage growth and creativity in teaching and learning.

Planning for vocational/technical workshop as management skill is important to the future, direction and success of the programme. This calls for understanding of what is involved in planning process such as the management role of planning in decision making, improved planning capabilities at all levels of operation and more adequate resources to support the total endeavour. Consequently, in electrical/electronic workshop, teachers are involved in supply with specification and how to use the facilities for effective teaching. The National Policy on Education (2013:7) specified that success of any system of education is hinged on proper planning. Therefore, teachers should have good knowledge about planning of materials and tools to be used in laboratories. Such plans include; procurement of tools, equipment and materials that would be needed for developing course outline unit lessons, methods to be used for the lessons, time required and number of students to be scheduled in the workshop at a time. Skills involved in planning the vocational/technical workshop were outlined by (Phipps 1980 as cited in Mgbeahurike, 2001:33) to involve the following:

- Stating realizable objectives in terms of internal environment constraints and future trends;
- Revising the objectives periodically;
- Developing work objectives in measurable terms
- Develop budgetary allocations;
- State objectives in measurable terms
- Employ management by objectives, which involves the ability to; set objectives, develop action plan, define and divide into steps all activities of the plan, decide on who is responsible for each activity;
- Determine resources for the work or project
- Provide work schedule;
- Conduct periodic review of vocational/technical activities
- Establish control systems for monitoring activities
- Develop a schedule for appraising vocational/technical activities

It is therefore observed that specification of objectives guides planning activities and planning directs all other management functions like electrical works.

Analysis of profit and loss statements, cash flows operating and capital budget of vocational/technical (cited in Mgbeahurike, 2001:50). Planning is therefore a fundamental process for achieving other management principles. Teachers of vocational/technical subjects/course should inculcate the habit and significance for planning.

Organizing vocational/technical workshops, Olaitan (2001:50) suggested the following as guide to management;

- Organize the specific objectives for the workshop management.

- Revise the objectives periodically
- Organize programme plan for the duration of the programme
- Organize the activities to be carried out for the achievement of the programme objectives;
- Budget the management for the implementation of the programme
- Organize the purchase of material resources to be involved
- Organize tools and machines for the programme
- Specify the type of project outcomes expected;
- Organize the appropriate technique for the knowledge of the result and improvement required.

In essence, in vocational/technical should emphasize that workshop should be organized in order that tools, machines, materials, supplies, and tasks are handled by efficient staff. This will enhance in developing in each student an insight and understanding the need for management of facilities.

Coordination is the unification, integration, synchronization of the efforts of group members so as to provide unity of action in the pursuit of common goals. It is a hidden force which binds all the other functions of management. According to Mooney and Relay (2015) "coordination is orderly arrangement of group efforts to provide unity of action in the pursuit of common goals". According to Charles Worth "coordination is the integration of several parts into an orderly whole to achieve the purpose of understanding". Co-ordination is an integral element or ingredient of all he managerial functions as discussed below according to Mooney and Relay (2010).

- a) Co-ordination through Planning- Planning facilities coordination by integrating the various plans through mutual discussion, exchange of ideas e.g. coordination between finance budget and purchases budget and purchases budgets.
- b) Co-ordination through Organizing: Mooney considers coordination as the very essence of organizing. In fact when a manager groups and assigns various activities to subordinates, and when he creates departments' coordination uppermost in his mind.
- c) Co-ordination through Staffing: A manager should bear in mind that the right no of personnel in various positions with right type of education and skills and taken which will ensure right men on the right job.
- d) Coordination through Directing: The purpose of giving orders, instructions and guidance to the subordinates is served only when there is a harmony between superior and subordinates.
- e) Co-ordination through Controlling: Manager ensures that there should be coordination between actual performance and standard performance to achieve organizational goals.

From the above discussion, we can very much affirm that coordination is the very much essence of management. It is required in each and every function and at each and every stage and therefore it cannot be separated. Effective and efficient implementation of the coordinating function in the organization needs the following according to Mooney & Relay (2015).

- It needs professional, competent leadership, a democratic style that leads to trust, open communication, and ease of information flow.
- It needs a constant definition and communication of mission and objectives that are understood by all the managers.
- It needs an open, two-way channel of communication.
- It involves a sharing atmosphere as well as commonly agreed on direction. Because effective coordinating function requires cooperation and communication, the meeting technique is still the most effective format for assuring the interrelationships among the various job responsibilities.

Olaitan (2001:82) further suggested the following as a guide to coordination:

- Assemble tools and materials and arrange them into various sections for grouping assignment.
- Analyses the various components of a project work to be carried out in the laboratory.
- Supervise students work in groups in the workshop.
- Synchronizing security, arrangement and other activities in the workshop.
- Identify, analyze and addressing problems emanating from students activities in the laboratory.
- Ensuring that only approved procedures and practices are followed.
- Making sure that different tools and machines are harmoniously used in the workshop.

• Making sure that efforts of individual students are unified.

Managerial responsibilities of coordinating vocational programmes involve providing instruction and guiding the use of all resources to enhance the objective, supervise the use of the materials and also ensure the maintenance of all machines. He further stressed that good coordination must facilitate the making of sound decision, promote individual and group understanding as well as acceptance of common goals. Furthermore, Nneji (2000:50) enumerated the characteristics of a workshop coordinator as individual who:

- Supervises all the activities in the laboratory
- Ensures that appropriate material are used for the right job or project
- Materials good relationship with the workshop users
- Facilitates smooth running of units to achieve control
- Creates conducive environment and safety of materials and people
- Provide a safe and healthful environment in which to work
- Ensure maximum productivity and minimum wastage of materials.
- Provide security for the instruction and supplies that are essential to the workshop.

Vocational/technical teachers need similar competencies as administrators. They need to know how to convince, motivate, and criticize without antagonizing. They should be current in innovations in modern tools and machines and to understand the implications of such changes. They should also adopt habits and attitudes towards changes in education.

Statement of the Problem

Experience from research has indicated that many beginning teachers have difficulty effectively managing the workshop and the equipment in the technology workshops were not well managed to achieve the desired aims and objectives of the programme. Many of the students observed were not showing the desired enthusiasm expected of them in construction especially using electronic components. It can infer from these observation that students graduating from vocational and technology programmes with low skills will find it difficult to adjust to the changing technological advancements in their field. The retraining of these graduates may be very expensive on the part of the individual or the government. If the vocational and technology teachers are effectively retrained through management skills, identified by the study, it may have a prolonged positive effect on quality of vocational and technical students as well as the effective utilization of workshops in technical colleges. It may also help to reduce the cost of the retraining of vocational and technology education teachers and workers in the management of tools and machines at their respective places of work. Though, some of these observations were caused according to Atsumbe (2002) due to inadequate funding, normal workshop practice which forms 60 percent, a standard set by National Board for Technical Education (NBTE) of the technical college curriculum is fast disappearing on vocational/technical colleges' time tables. Puyate (2002) the present state of vocational education facilities are very poor, there is no planned means of maintenance of the already broken down equipment or means of purchasing new ones, there is little or no concern on the part of government, teachers, and students for the improvement of the present state of facilities, this pathetic situation needs to be reverted in order to meet the goal and objectives of technical and vocational education as enshrined in the national policy on education of Nigeria.

University Management who survive and considerably flourish amid difficult time must have the capacity to look past the present, to conquer the imperatives of traditions, to see the institution from another point of view, and to do business in an unexpected way.

Purpose of the Study

The study investigated the managerial skills required by teachers for management of Technical Workshops in Technical Colleges in Rivers State. Specifically, the study sought to identify the:

- 1. Planning skills required by teachers for effective management of Technical Workshops in Technical Colleges in Rivers State.
- 2. Organizing skills required by teachers for effective management of Technical Workshops in Technical Colleges in Rivers State.
- 3. Coordinating Skills required by teachers for effective management of Technical Workshops in Technical Colleges in Rivers State.

Research Questions

The following questions were posed which guided the study.

- 1. What are the planning skills required by teachers for effective management of technical college workshop operations in a depressed economy in Rivers State?
- 2. What are the organizing skills required by teachers for effective management of technical college workshop operations in a depressed economy in Rivers State?
- **3.** What are the organizing skills required by teachers for effective management of technical college workshop operations in a depressed economy in Rivers State?

Hypothesis

The following null hypotheses were formulated and a tested at 0.05 level of significance

There is no significant difference between the opinions of well experienced and less experience technical teachers on managerial skills required by teachers for management of technical Workshops in Technical Colleges in Rivers State.

Methodology

The study adopted the descriptive survey design. Cohen, Manion and Morrison (2009) said that survey research is concerned with condition or relationship that exist; practices that prevails, beliefs, point of views, or attitudes that are held processes that are going on, effects that are being felt, or trends that are developing. This design is therefore suitable for this study because it enables the researcher to elicit information from the entire population on the issues under investigation. The study was carried out in Rivers State; the population for this study consists of one hundred and twenty-nine (129) respondents which comprise of all the one hundred and twenty nine vocational/technical teachers in four (4) Government Technical Colleges in Rivers State. The numbers of teachers of the various technical colleges are as follows: Government Technical College, Ahoada 23 teaching GTC Eleogu 10 teachers, GTC Port Harcourt 90 teachers, and GTC Tombia 6 teachers. (Rivers State Senior Secondary Schools' Board Management, 2017). The researchers considered the population to be of manageable size; hence the entire population were used for the study without sampling.

A questionnaire instrument titled "Skills for Effective Workshop Management in Technical Colleges (SEWMTC) developed by the researchers after review of relevant literature. The instrument was structured on a 5-point rating scale of Strongly Agree (SA-5), Agree (A-4), Undecided (U-3), Disagree (D-2) and Strongly Disagree (SD-1). The questionnaire was in two sections of the same question items. The first section sought the personal data of the respondents while the second section was subdivided into three subsections, was designed to elicit data from the response on skills required for effective management of technical college workshop operations.

The instrument was validated by two experts in the Department of Vocational and Technology Education, Rivers State University. The reliability of the instrument was determined through the test-retest method for a measure of its stability. Simple random sampling techniques were used to draw 27 teachers for the reliability test from different Government Technical Colleges in Akwa-Ibom State. Copies of the instrument were administered to the teachers and after an interval of one week; the same instrument was re-administered to the same group to respond to as usual. The initial and the retest scores of the group were correlated separately for each section of the instrument as well as for the entire instrument using Pearson Product Moment Correlation Coefficient. The reliability coefficient of 0.81 was obtained for the instrument.

The questionnaires were administered by the researcher through personal contact and with the help of four assistants. The respondents were given days to study and respond to the questionnaire. A return visit was made by the researcher and the assistants to collect the completed questionnaire after one week of the management. A total of 129 copies of the instrument were retrieved which was used for analysis of the study.

Mean and standard deviation was used to answer the research questions while z-test was used to test the hypotheses at 0.05 level of significance. Any item with mean value of 3.00 and above was accepted while mean value less than 3.00 was rejected. On testing

the hypotheses, the decision rule was that if the calculated value of z (zcal) is less than the critical value of z (zcrit), the hypothesis was accepted otherwise reject.

Results and Discussion

1. What are the planning skills required by teachers for effective management of technical college workshop operations in a depressed economy in Rivers State?

Table 1: Mean Scores of Respondents on the Planning Skills Required by Teachers for Effective Management of Technical
College Operations ($N_1 = 43$; $N_2 = 86$)

| S/N | Item Statement | Well I | Experien | ced | Less E | Experien | ced Technical |
|-----|---|----------------|----------|----------|----------------|-----------------|---------------|
| | | Techn | ical Tea | chers | Teach | ers | |
| | The following are planning skills needed | X ₁ | SD_1 | Remark | \mathbf{X}_2 | SD ₂ | Remark |
| | for workshop management | | | | | | |
| 1 | Develop work objectives in measurable terms. | 3.64 | .761 | Accepted | 4.07 | .743 | Accepted |
| 2 | Review objectives periodically | 4.27 | .622 | Accepted | 4.41 | .663 | Accepted |
| 3 | State procedures for accomplishing specify tasks | 4.08 | .633 | Accepted | 3.52 | .614 | Accepted |
| 4 | Identifying resources for accomplishing work for project. | 3.93 | .851 | Accepted | 3.65 | .592 | Accepted |
| 5 | Prepare budgetary allocations | 3.53 | .580 | Accepted | 4.08 | .880 | Accepted |
| 6 | Provide work schedule | 4.33 | .772 | Accepted | 3.81 | .863 | Accepted |
| | Grand Mean | 3.96 | .704 | Accepted | 3.92 | .724 | Accepted |

Source: Researcher's Result; 2017N1=Well Experienced Teachers; N2= Less Experienced Teachers

The result in Table 1 shows the response of the respondents group (well Experience and Less Experience Technical Teachers) and their level of decision on a particular item. Item 1 to 6 was unanimously accepted by both respondents as planning skills needed by teachers for workshop management with a mean value of 3.50 and above. Also, the levels of acceptance of these skills were shown in the average mean of 3.96 and 3.92 for both well experienced and less experienced technical teachers respectively.

2. What are the organizing skills required by teachers for effective management of technical college workshop operations in a depressed economy in Rivers State?

| Table 2: Mean Scores of Respondents on the Organizing Skills Required by Teachers for Effective Management of |
|---|
| Technical College Operations $(N_1 = 43; N_2 = 86)$ |

| S/N | Item Statement | Well E | xperienc | ed | Less Experienced Technical Teachers | | | |
|-----|--|----------------|-----------------|----------|--|-----------------|----------|--|
| | | Techni | cal Teac | hers | | | | |
| | The following are organizing skills needed for | X ₁ | SD ₁ | Remark | X ₂ | SD ₂ | Remark | |
| | workshop management | | | | | | | |
| 7 | Arrange the workshop resources to achieve | 3.18 | .682 | Accepted | 4.41 | .833 | Accepted | |
| | project objectives. | | | | | | | |
| 8 | Specify project plan for the work. | 3.79 | .543 | Accepted | 3.61 | .674 | Accepted | |
| 9 | Arrange activities in order of accomplishment. | 4.27 | .452 | Accepted | 3.66 | .714 | Accepted | |
| 10 | Arrange the material resources in order of | 4.13 | .731 | Accepted | 4.11 | 1.173 | Accepted | |
| | utilization. | | | | | | | |
| 11 | Assign tools/machine to various works when | 3.31 | 1.30 | Accepted | 3.63 | .672 | Accepted | |
| | needed. | | 1 | | | | | |
| 12 | Specify specific tools for specific work | 3.16 | .712 | Accepted | 3.72 | 1.382 | Accepted | |
| | Grand Mean | 3.64 | .743 | Accepted | 3.86 | .913 | Accepted | |

Source: *Researcher's Result; 2017*N₁=Well Experienced Teachers; N₂= Less Experienced Teachers

The result in Table 2 shows the response of the respondents group (well Experience and Less Experience Technical Teachers) and their level of decision on a particular item. Item 7 to 12 was unanimously accepted by both respondents as organizing skills needed by teachers for workshop management with a mean value which ranges between 3.16 to 4.27 for the well experienced technical teachers and 3.61 to 4.41 for less experienced technical teachers. Finally, the average mean 3.64 and 3.86 were obtain which shows that all the listed item are organizing skills needed for management of technical college workshop in a depressed economy in Rivers State.

3. What are the coordinating skills required by teachers for effective management of technical college workshop operations in a depressed economy in Rivers State?

| Tab | le 3 | : Mear | Scores of | f Respondents | on the | e Coordinating | g Skills | Required | by | Teachers | for | Effective | Managemer | nt of |
|-----|--|--------|-----------|---------------|--------|----------------|----------|----------|----|----------|-----|-----------|-----------|-------|
| | Technical College Operations ($N_1 = 43$; $N_2 = 86$) | | | | | | | | | | | | | |
| | | | | | | | | | | | | | | |

| S/N | Item Statement | Well E | xperier | iced | Less E | xperienc | ed Technical |
|-----|--|----------------|---------------------------|----------|----------------|-----------------|--------------|
| | | Techni | Technical Teachers | | | ers | |
| | The following are coordinating skills needed for | X ₁ | SD ₁ | Remark | X ₂ | SD ₂ | Remark |
| | workshop management | | | | | | |
| 13 | Provide instruction to students. | 3.67 | .42 | Accepted | 4.13 | .44 | Accepted |
| 14 | Ensuring the use of available resources. | 3.71 | .65 | Accepted | 3.62 | .70 | Accepted |
| 15 | Analyse and interpret group activities. | 4.22 | .47 | Accepted | 3.96 | 1.01 | Accepted |
| 16 | Supervise student's workshop activities. | 4.09 | .49 | Accepted | 3.61 | .49 | Accepted |
| 17 | Identify and analyse problems. | 3.60 | .47 | Accepted | 3.80 | .74 | Accepted |
| 18 | Ensure that approved procedures are followed. | 4.10 | .52 | Accepted | 3.63 | .53 | Accepted |
| | Grand Mean | | | | | | |
| | | 3.90 | .50 | Accepted | 3.79 | .65 | Accepted |

Source: Researcher's Result; 2017N₁=Well Experienced Teachers; N₂= Less Experienced Teachers

The result in Table 3 shows the response of the respondents group (well Experience and Less Experience Technical Teachers) and their level of decision on a particular item. Item 13 to 18 was accepted by well experienced and less experienced technical teachers as coordinating skills required by teachers for effective management of technical college workshops in a depressed economy in Rivers State with a mean value of 3.50 and above. Also, the levels of acceptance of these skills were shown in the average mean of 3.90 and 3.79 for both well experienced and less experienced technical teachers respectively.

Hypothesis

There is no significant difference between the opinions of well experienced and less experience technical teachers on managerial skills required by teachers for management of technical Workshops in Technical Colleges in Rivers State.

| Table 4: z-Test Analysis on Planning Skill Required for Workshop Management | | | | | | | | | |
|---|-------------|-------------|-----------|-----|------|-------|----------|--|--|
| Group | Ν | X | SD | df | Zcal | Zcrit | Remark | | |
| Well Experience Technical Teachers | 43 | 3.96 | 0.70 | | | | | | |
| | | | | 127 | 1.30 | 1.96 | Accepted | | |
| Less Experience Technical Teachers | 86 | 3.92 | 0.72 | | | | | | |
| e Researcher's Field Result 2017 Acce | ept H0 if Z | cal < Zerit | else Reie | ect | | | | | |

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The null hypothesis is accepted since the Zcal (1.30) is less than the Zcrit (1.960). This implies that there is no significant difference between the opinions of well experienced and less experience technical teachers on the planning skills required for effective management of technical college operations in a depressed economy in Rivers State.

Discussion of Findings

Results in Table1 revealed certain planning skills required by technical teachers in the effective management of technical workshops operations in technology education programme in Rivers State. These skills as accepted by the respondents are: ability to develop work objectives, reviewing objectives periodically, prepare budgetary allocations, provides work schedule etc. This result is in corroboration with Mgbeahurike (2001) who submitted that planning is a fundamental process for achieving other management principles such as analysis of profit and loss statements; prepare budgetary allocations, cash flows operating and capital budget of vocational/technical. Teachers of vocational/technical subjects/course should inculcate the habit and significance for planning. The findings of this study also agrees to that of the National Policy on Education (2013:7) as specified that success of any system of education is hinged on proper planning. Therefore, teachers should have good knowledge about planning of materials and tools to be used in laboratories. Such plans include; procurement of tools, equipment and materials that would be needed for developing course outline unit lessons, developing work objectives, provide work schedule, methods to be used for the lessons, time required and number of students to be scheduled in the workshop at a time.

Table 2 revealed that organizing skills required by technical college workshop management helps in the arrangement of material resources in order of utilization, specifying the type of project to be carried out, arrangement of workshop resources to achieve objectives. To buttress this finding, Olaitan (2001) categorically stated that in realizing the goals of a technical workshop, the arrangement of the resources and integrating them into production process require organizing skills that the vocational/technical teacher should possess. These skills according to Olaitan (2001) include organize the specific objectives for the workshop management, revise the objectives periodically, organize programme plan for the duration of the programme, arrangement of material resources in order of utilization, specifying the type of project to be carried out, arrangement of workshop resources to achieve objectives, organize the purchase of material resources to be involved, organize tools and machines for the programme and specify the type of project outcomes expected. In essence, organizing skills emphasize that workshop should be organized in order that tools, machines, materials, supplies, and tasks are handled by efficient staff. This will enhance in developing in each student an insight and understanding the need for management of facilities in a depressed economy in Rivers State.

Results in Table 3 revealed certain coordinating skills required by technical teachers in the effective management of technical workshops operations in a depressed economy in Rivers State. These skills as accepted by the respondents are: ability to supervise students' technical activities in the workshop, interpret and analyse group technical students' activities in the workshop, to provide instruction for students etc. This result is in agreement with Mooney and Relay (2015) who opined that coordination skills in volves identify, analyze and addressing problems emanating from students activities in the laboratory, ensuring that only approved procedures and practices are followed, analyses the various components of a project work to be carried out in the laboratory and supervise students work in groups in the workshop. Also, the findings of this study corroborates with Nneji (2000:50) as asserted that coordination activities in the workshop involves the supervision of all activities in the laboratory, ensures that appropriate material are used for the right job or project, maintaining good relationship with the workshop users, facilitates smooth running of units to achieve control, interpret and analyse group technical students' activities in the workshop, creates conducive environment and safety of materials and people, to provide instruction for students, provide a safe and healthful environment in which to work and to ensure that maximum productivity and minimum wastage of materials are observed.

Conclusion

Conclusively, the managerial skills that are needed in the management of technical workshops in Technical Colleges in Rivers State cannot be overemphasized. This is because, for technical college to achieve its objectives and goals, the workshop must be functional and effective. Every functional workshop must be managed and maintain which is the core crux of a specialized skills like planning, organizing and coordinating. Hence, the lack of these management skills in technical college workshops in Rivers State will put the objectives of technical college in jeopardy and students cannot acquire practical skills as embedded in the college curriculum.

Educational Implications of the Study

Based on the findings of this study, there is the need for technical college teachers in Rivers State to be informed, armed and expose to skills needed for workshop management. It will help create awareness and consciousness for every workshop/laboratory teachers, managers, supervisors, instructors, and administrators in their respective task for a better workshop condition and

management in our technical colleges and the university workshop and laboratory. It will also be beneficial to industrial workers and serve as good resource materials for any person that is interested in technology and industrial development in Nigeria.

Recommendations

Base on the findings of this study, the following recommendations were made:

• Workshops and seminars should be organised for Technical college teachers to enable them possess the required managerial skills to help in the management of technical workshops in technology education programme.

Suggestions for Further Studies

The researcher suggests the following for further studies

1. The researcher suggested that further study should be done on the effectiveness of managerial skills in management of nontechnical college workshops in Secondary Schools in Rivers State.

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