

# Repositioning the Facilities in the National Certificate in Education (Technical) Awarding Institutions' Workshops for Future Nigeria: A Case Study of North Eastern Nigeria

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## ABSTRACT

*This study focuses on assessing the facilities in NCE Technical awarding institutions' workshops in the North Eastern part of Nigeria. A descriptive survey design is adopted. Two research questions are formulated to guide the study. A 35-item questionnaire is developed based on the NCCE standards, and was validated by three experts. Data are collected from 149 teachers randomly sampled in the six NCE Technical awarding institutions in the North Eastern part of Nigeria. Statistical Mean is employed to answer the research questions. Results reveal that teachers are aware of the inadequacy of facilities in NCE Technical awarding institutions' workshops. It therefore recommends among others that the private sector should be encouraged to initiate and participate in the provision of facilities, special intervention funds should be set aside by Government for procurement of workshop facilities to NCE Technical awarding institutions.*

**Keywords:** Facilities, NCE, Technical Awarding Institutions, Workshops

## INTRODUCTION

Technical Education in Nigeria has been training people to become craftsmen and technicians. Training qualifies them for jobs in both public and private sectors of the economy. Both sectors, according to Umar and Ma'aji (2010), require well-trained and competent technicians who can operate and maintain the available technical equipment. Therefore, there is a need for NCE awarding institutions to produce graduates that can perform competently in the class so that they can produce graduates that can perform competently in their chosen vocation without a need for pre-employment training. The National Policy on Education of the Federal Government of Nigeria (FGN, 2004) stated that the major goal of vocational institutions is to prepare students for successful employment in the labour market. This condition can be met through a well equipped workshop with relevant training facilities. School workshops normally offer opportunities for practical training of students in skill acquisition in their technical trade areas for future development of the key sectors of the economy in order to meet the basic needs of industrialization of a nation. Student's practical projects are an important part of the curriculum in any educational sector, but a supportive school environment is a fundamental requirement for the successful

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implementation of curriculum (Yaro 2014). This aspect of the curriculum can only be implemented where facilities in the workshop are adequate and relevant. Availability of appropriate facilities enhances student learning by allowing them to be involved in demonstrations, and practice will continue to build their skills. However, most of the technical colleges in Nigeria have been forced to perform below standard due to purported non availability, poor management or utter neglect of the required facilities in the workshops for effective training. It is evident that some of the workshops in the institutions are empty. Umar and Ma'aji (2010) maintain that these workshops were originally designed and built for small populations of students.

However, in recent times the students' population has increased tremendously, thereby over-stressing the available space and facilities. This pathetic situation needs to be reverted in order to meet the goals of technical and vocational education as enshrined in the National Policy on Education of Nigeria (FGN, 2004). According to the policy, the goals shall be to provide trained manpower in the applied sciences, technology and business particularly at craft (equivalent of high schools), advanced craft and technical levels; provide the technical knowledge and vocational skills necessary for agricultural, commercial and economic development; to give training and impart the necessary skills to individuals who shall be self reliant economically. The extent of the deterioration of educational structures such as physical plants, infrastructures and facilities, where these educational structures are available, the condition is amazing. In many schools, the non-availability of these facilities is more striking than their condition (Umar and Ma'aji, 2010). Considering the scenario above, the situation at the NCE Technical awarding institutions might not have been different. The researchers therefore took up the task to assess NCE Technical awarding institutions workshops in North Eastern Nigeria in order to ascertain the state of affairs and the level the goals of technical and vocational education which are synonymous to society needs are been met. The intention is to provide feedback on the position of facilities meeting the policy objectives to educational planners and policy makers, particularly the National Commission for Colleges of Education (NCCE). Based on the above, the following questions were raised to guide the study:

1. How adequate are the facilities in NCE awarding institutions workshops?
2. What are the strategies toward acquiring adequate facilities in NCE awarding institutions workshops?

## METHOD

This study employs a descriptive survey design. It is a design which employs question and interview to gauge the opinions, preferences, attitudes and perceptions of people about issues (Durkwa and Bassi, 2006). The study covered all the six States of the North Eastern Nigeria, comprising Adamawa, Bauchi, Borno, Taraba, Gombe and Yobe States. But the institutions that offer Technical Education Courses are only six (table 1). According to the obtained data, there are one hundred and forty nine Technical Educators in all the institutions; Thirteen from Adamawa State College of Education, Hong; forty from Federal College of Education (Technical), Gombe; fifty six from Federal College of Education (Technical),

Potiskum; sixteen from Abubakar Tatari Ali Polytechnic, Bauchi, eleven from College of Education, Azare and thirteen from Ramat Polytechnic, Borno.

**Table 1:** List of Colleges of Education Offering Technical Education Programme in the North Eastern Nigeria

S/N	Colleges of Education/NCE Awarding Institutions	No of Educators
1.	Adamawa State College of Education, Hong	13
2.	Federal College of Education (Technical), Gombe	40
3.	Federal College of Education (Technical), Potiskum	56
4.	Abubakar Tatari Ali Polytechnic, Bauchi	16
5.	College of Education, Azare	11
6.	Ramat Polytechnic, Borno	13
	Total	149

*Source:* Data from individual Institution

The researcher used all the Technical Educators in the institutions to avoid committing type I error. A 35-item structured questionnaire was used for data collection. It was developed based on the existing NCCE standards on workshops. Two different response categories were used based on a four point rating scale, they are: Very adequate (4); adequate (3); Inadequate (2); Very inadequate (1); used in research question one, and strongly agree (4); Agree (3); Disagree (2); strongly disagree (1); used in research question two. The instrument was subjected to face validation by three experts, comprising of a staff member from NCCE. Their suggestions were used to refine the questionnaire to its present form. Data collected was analyzed using the Statistical Package for Social Sciences (SPSS), mean for answering the research questions. Items with mean values of 2.50 and above were considered adequate/agreed while items with mean values of 2.49 and below were considered inadequate/disagreed.

## RESULTS AND DISCUSSION

The mean responses of teachers as shown on table 2 indicates that only 9 items, i.e. items 1, 2, 3, 5, 9, 16, 17, 18 and 23 were identified as adequate based on the criterion mean of 2.50. This indicates that only 39% of facilities are adequate, 61% are inadequate. The analysis on table 3 reveals that ten items were agreed upon as relevant strategies toward acquiring adequate facilities in NCE awarding Institutions' workshops with mean of items ranging from 2.70 to 3.55. Items 32 and 35; however, disagreed with mean score of 2.46 and 2.32 respectively. The analysis revealed that 83% of the items suggested as strategies toward acquiring adequate facilities were seen by respondents as relevant, while 17% of the items were irrelevant. The findings indicated that majority of the NCE awarding Institutions' workshops did not have adequate facilities. Table 2 reveals that library facilities, location of lavatories at one end of the workshop, locker space for each student, racks and boxes for storage of tools, first aid facilities and standard work benches were inadequate. This is in line with the work of Abdullahi (2003) that every training school faces the problem of providing and maintaining suitable workshop and appropriate facilities for technical and

vocational training programs. These findings were also supported by Moja (2000) that the problems of Technical and Vocational Education (TVE) in Nigeria are made worse by the poor condition/inadequacy of training facilities. Adequate workshop facilities are necessary for any quality learning to take place. Facilities aid the instructors to communicate more effectively and the learners to learn more interestingly, meaningfully and permanently.

Inadequate supply of standard work benches, first aid facilities and other teaching aids meant to enhance greater understanding and appreciation of the learning experiences as revealed on table 2 is likely to have a negative effect on skill acquisition by students passing through the program. Yaro (2010) in support of the findings notes that the development of useful skills can be reinforced by the appropriate selection and use of learning facilities and resources. These facilities comprises of workshop structures, working materials, teaching materials, workshop tools and equipment. In the same vein, Yaro (2010), warned that where equipment and tools are not functional or adequately provided, technical training programs will suffer and will lead to the production of highly unskilled personnel who are unemployable and unproductive. Therefore, inadequate workshop facilities in NCE awarding Institutions' programs deterred skill acquisition. Only a few workshop facilities in the NCE awarding Institutions' are adequate according to the findings.

With reference to strategies toward acquiring adequate facilities in NCE awarding Institutions' workshops, findings on table 3 reveals that the private sector should be encouraged to initiate and participate in the provision of facilities, linkages between schools and the private sector should be strengthened and that there should be alliance between schools and interest groups. This result is in consonance with observation made by Prew (2009) that financing of institutions in Nigeria is becoming prohibitive and a heavy burden for government to bear alone. Prew urges that proprietors should explore other sources of funds to enable them generate enough funds to adequately equip institutions for effective teaching and learning. Yaro (2013) stresses the need for diversifying the sources of financing technical education and advised that foreign assistance should be sought by the federal, State and local governments where possible for rehabilitation of technical workshops in our schools.

On the international perspective, various mechanisms to fund vocational education and training in South Africa are being developed, including the Medium Term Expenditure Frameworks (MTEFs), special purpose funding, program based funding and public-private partnership funding. Some of these strategies are in line with findings of this study. Industries are supposed to be partners in progress to technical colleges as products from such institutions are employed by it, the findings shows that industries should be sought through cooperation to assist schools. This is very important because by so doing, students on graduation are fully prepared to take appointment in the industry. Emphasizing the same point, although using a university as a case study, Yaro (2013) maintains that training tomorrow's leaders requires a collaborative effort between industry and the university. Higher education must build collaborative partnerships, improve all forms of scholarship and provide opportunities for students to contribute to the common good.

**Table 2: Facilities required in the Workshops based on NCCE Standards**

S/No	Item	Mean
1	Workshops for at least 20 students in departmental areas	2.66
2	Electricity from national grid	2.60
3	A classroom or improvised space for teaching of at least 30 students	2.84
4	Library facilities for 1/3 of its readers	2.01
5	Office space for 2 staff located in the workshop	2.06
6	Location of at least one lavatories at one end of the workshop	1.68
7	Space (2.4m by 1.2m) for exhibits in the workshop	2.41
8	Space for planning and drawing for at least 10 students	2.30
9	Floor space available per student in activity areas for 20 students	2.79
10	Locker space for 20 students in each workshop	2.24
11	A store with racks and boxes for storage of tools in each workshop	2.53
12	Two quantities of first aid facilities in each workshop	2.68
13	4 cylinders of fire extinguishers in each workshop	2.77
14	16 quantities of standard work benches	2.45
15	Platforms (2.4m by 1.2m) for materials and finished projects	2.44
16	Standard outside entrance doors with double openings	2.86
17	Sizes and location of windows	2.69
18	15 quantities of discharge lamps for artificial lighting	2.57
19	Special drive ways leading to doors providing access for deliveries.	2.34
20	One accessible bulletin board	2.30
21	Service connections and 15 units of electrical outlets.	2.57
22	A single pipe line gas outlet facilities.	2.17
23	Ceiling fans or A/Cs for ventilating systems in the workshop.	2.51

**Table 3: Strategies toward acquiring adequate facilities in NCE awarding Institutions' Workshops**

S/No	Item	Mean
24	Private sector should be encouraged to initiate and participate in provision of facilities.	3.04
25	Linkages between schools and private sector should be strengthened.	3.22
26	There should be alliance between schools and interest groups.	3.19
27	Industries should be sought through cooperation to assist schools.	3.05
28	Government should solicit support from NGOs for assistance.	3.26
29	Community based organizations (CBOs) should be sought for help.	2.50
30	10% of Education Tax Fund (ETF) should be used for procurement of workshop facilities.	3.31
31	5% of money realized from value added tax (VAT) should be utilized for workshop facilities.	3.00
32	Provost/Rectors should embark on perennial writing to concerned authorities.	2.10
33	Workshop should be used profitably for private jobs during weekends and public holidays.	2.64
34	Improvisation should be embarked upon by the school authorities.	2.70
35	45% of the Internally Generated Revenue should be used for workshop facilities	3.45

## CONCLUSION AND RECOMMENDATIONS

The desire to produce competent graduates of NCE awarding Institutions can be achieved when the facilities in the workshops are relevant and adequate for the programs as demanded

by the curriculum. This study has shown that facilities in NCE awarding Institutions' workshops are inadequate and identified some relevant strategies toward acquiring adequate facilities in technical college workshops. Hence, the call for immediate implementation of these strategies in order to meet the goals of technical and vocational education as usually identified in the National Policy on Education of every Nation. Based on the above revelations from the findings of this study, the following recommendations are necessary in order to reposition the facilities in NCE awarding institutions workshops for efficiency:

- i The private sector should be encouraged to initiate and participate in the provision of facilities
- ii Linkages between schools and the private sectors should be strengthened to ensure the appropriate interface with the world of work. This could be achieved through constant invitation of private sectors to participate in school programs leading to proper understanding and integration.
- iii Industries should be sought as partners in progress to assist in provision of facilities. This could be achieved through interactions as NCE technical awarding institutions provide teachers and personnel to industry with a pool of potential employees.
- iv Non Governmental Organizations (NGOs) should be sought as partners in progress to assist in the provision of facilities.
- v Special intervention funds from the TET Fund should be sought for procurement of workshop facilities to NCE technical awarding institutions
- vi A specific percentage of Income tax generated annually by Government should be utilized for the provision of workshop facilities to NCE awarding Institutions.

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