



MEASURES FOR INCREASING PRACTICAL SKILLS ACQUISITION IN PRIVATE TECHNICAL COLLEGES: A CASE STUDY OF FOLK TECHNICAL COLLEGE, IKWO, EBONYI STATE

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Abstract: *This study was designed to ascertain the measures to increase technical college students' acquisition of practical skills in private technical colleges using Folk Technical College, Ikwo as a case study. The instrument used for data collection was 42 items questionnaire. The respondents were 61 final year students and 30 technical teachers. Three research questions guided the study. The study revealed that adequate libraries, hostels and staff quarters should be provided. The respondents also agreed that field trips and visitation to industries should be carried out to enable them grasp practical skills more competently. Other factors accepted by respondents that would ensure practical skills acquisition among others include strict observation of workshop safety rules, encouraging students to undertake practical assignments by themselves, giving students enough time to carry out their assignments and teaching practical skills through demonstration method by teachers. The study among others recommended that highly qualified teachers should be employed to effectively teach the students in the Technical colleges.*

Introduction

This is the period in human history that well meaning countries should ensure that the youths engage in skills acquisition activities that will make them self-reliant or employable in recognized skills based institutions. Effective measures to enable youths acquire these practical skills should be a concern of government, technical and vocational institutions and private partners. Daramola (2013) opined that a viable and dynamic educational system should be based upon the development of mental and manipulative skills in such a combination that students can perform better in specific and broad occupation situations. Along this thought, the nation is now



engaged in the enormous task of changing and expanding her educational system to meet the new requirement demanded today and future world that is characterized by technological and scientific trends and expansions. The nation, Nigeria therefore has realized that the colonial masters' educational system that hinged on production of clerks can no longer solve the social and economic needs of her citizens.

Samuel and Kissi (2013) observed that the people with requisite scientific and technical skills that can create wealth and help a country to attain economic prosperity should be trained through technical education. Technical education exposes the learner to skills acquisition that could be transformed to economic benefits. The Federal Government of Nigeria (2013) in the national policy on education stated that technical and vocational education gives it's recipients opportunity to acquire practical skills as well as some basic scientific knowledge. When youths acquire skills and scientific knowledge, they can engage in meaningful work in the world of paid employment in self-reliance or employed in recognized institutions. To this end, Mbionwu (2008) noted that when youths are given adequate training in skills through vocational technical education, they can be self-employed and become active partners in both community and national development. Employment requirements in this technological age have changed significantly. This view was supported by Attah (2008) who noted that employment requirement in most establishments are changing every day due to technological impact on the society. Consequently the educational system has a big task to equip learners with requisite skills. To offer this form of education requires both government and private partners to collaborate to make the technical and vocational education meaningful especially through adequate funding

Many factors always contribute to acquisition of practical skills. Faga (2005) pointed out that tools and equipment needed for teaching and learning of skills are not adequately provided which is hindrance to skills acquisition in technical education. Daramola (2013) also posited that the hindrances to skills acquisition by technical students which include attitude of individual students to practical work, lack of fund, lack of tools and equipment and others. Consequently these students fail to acquire the required skills before graduation in private technical colleges. It is necessary to ascertain the efforts required to increase practical skills acquisition.

Folk technical college, Ikwo is a private technical college established in 1984. The departments in the college include: science, mechanical, electrical, agriculture, home economics, arts and culture and general education. The departments of electrical mechanical, agriculture and home economics offer technical/vocational subjects.



Statement of the Problem

The establishment and administration of technical and vocational education is capital intensive. Onwuchekwa (2013) noted that technical education in Nigeria faces a number of problems such as; inadequate fund, supply and utilization of tools and equipment which have hindered it's implementation and development. Many of the technical schools cannot properly train their students in practical skills due to lack of equipment, tools and materials needed for the training. The private partners may therefore offer meaningful help to government in helping them bear the burden of provision of teaching materials and other facilities. It is based on this premise that the study was set out to ascertain the measures for increasing practical skills acquired in private technical colleges using folk technical college as a case study.

Purpose of the Study

The main purpose of the study was to ascertain the measures to be employed for increasing practical skills acquisition of students in private technical colleges using the folk technical college as a case study. Specifically, the research sought to:

1. Ascertain the institutional measures that could be employed to increase the level of skills acquisition of students in Folk Technical College.
2. Determine the external measures that could be used to increase the skills acquired by students.
3. Ascertain safety utilization factors that could be employed in increasing the level of skills acquired by students.

Research Questions

The following research questions were answered by the research.

- (1) What are the institutional measures that could be utilized to increase the level of skills acquired by students?
- (2) What are the external measures that could be employed to increase the level of skill acquired by students in private technical colleges?
- (3) What are the safety factors that could be employed to increase the level of skills acquisition of students in private technical colleges?



Methodology

To effectively carryout the research, a descriptive survey design was employed. A total of 61 students and 30 teachers were utilized. The population was 91 and there was no sampling since the numbers of respondents were manageable. The research instrument used to collect data from the respondents was a questionnaire titled, measures for increasing practical skills acquisition questionnaire (MFIPSAQ). Two technology and vocational education experts from the department of technology and vocational education, Faculty of Education, Ebonyi State University face validated the research instrument. The questionnaire was personally administered to respondents. The researcher also collected the completed questionnaires and this ensured 100% return. In the instrument analyses, any item with the mean above 2.50 was considered significant and agreed, while any mean score below 2.50 was not significant and was treated as disagreed or rejected opinion.

Results

The data collected was analyzed and presented in tables 1-3 according to the arrangement of the research questions.

Research question 1: What are the institutional measures that should be utilized to increase practical skills acquisition of technical college students?

Table 1: Mean Responses of Respondents on the Institutional measures for Increasing the Acquisition of Practical Skills acquisition of Technical College Students.

S/N	Questionnaire item	Students \bar{x}_1	Teachers \bar{x}_2	$\frac{\bar{x}_1 + \bar{x}_2}{2}$	Decision
1.	There should be qualified technical teachers	2.87	2.52	2.69	Agreed
2.	Technical teachers should be encouraged to join professional associations	3.40	3.11	3.25	Agreed
3.	Teachers should be granted opportunities to attend workshops or seminars	2.78	2.67	2.72	Agreed
4.	Instructional improvisation should be encouraged among technical teachers	2.72	2.80		Agreed
5.	Staff quarters should be provided for teachers	2.74	2.75	2.77	Agreed
6.	Adequate time for practical should be allotted in school time table	2.71	2.82	2.76	Agreed
7.	Workshop technician should be highly qualified.	2.89	2.78	2.83	Agreed
8.	Teachers should partake in industrial work-experience scheme from time to time	2.64	2.72	2.68	Agreed
9.	Workshops should be sufficiently equipped	2.76	2.70	2.73	Agreed



10.	Students should be provided with hostels				Agreed
11.	Adequate libraries should be provided	2.60	2.88	2.74	Agreed
12.	e-library should be provided	2.91	2.73	2.82	Agreed
13.	Generators should be provided	2.89	2.92	2.90	Agreed
14.	Water should be provided in such environment	2.85	2.73	2.79	Agreed
15.	Students admission should be based on merit	2.91	2.91	2.91	Agreed
16.	Teachers should be given incentives	2.89	2.93	2.91	Agreed
17.	Teachers should organize field trips for students.	2.97	2.59	2.74	Agreed

Table one above showed that the mean responses of teachers and students to the items were above cut-off point of 2.50. This implies that there should be qualified teachers, teachers quarters, teachers should join professional bodies, workshop and seminars should be organized for teachers, adequate time should be allotted to practical skills teaching. It also implied that workshop technicians need to be posted to various departments, students should partake in industrial work experience scheme, workshops should be sufficiently equipped, adequate libraries should be provided and e-library should also be provided by school authorities. The rest of the items in table 1 were accepted by the respondents as important provisions to be made for increased practical skills acquisition.

Research questions 2: What are the external measures for increasing practice skills acquisition of students?

Table 2: Mean Responses of Respondents on External measures for Increasing the Practical Skills of Technical College Students

S/N	Questionnaire item	Students \bar{X}_1	Teachers \bar{X}_2	$\frac{\bar{X}_1 + \bar{X}_2}{2}$	Decision
18.	Technical college courses should be accredited	2.60	2.78	2.69	Agreed
19.	Communities should be encouraged to participate in financing the school	3.15	2.89	3.02	Agreed
20.	Industries should accept students on field trips	2.60	2.71	2.65	Agreed
21.	Industries should contribute in funding the schools	2.63	2.73	2.68	Agreed
22.	The school should be provided with adequate fund for purchase of instructional facilities	2.65	2.70	2.67	Agreed
23.	Current tools should be provided	2.92	2.87	2.89	Agreed
24.	Alumni association should contribute in funding the school projects	2.67	2.69	2.68	Agreed
25.	Water should be provided in the school	3.00	2.91	2.95	Agreed
26.	Reliable source of electricity should be provided	2.83	2.96	2.89	Agreed

Table 2 above showed that respondents favourably rated all the items as being necessary in enabling students to acquire practical skills in the school. All the items scored above 2.50 cut-off point.

Research question 3: What are the safety measures for increasing practical skills acquisition of technical college students?



Table 3: Mean Responses of Students and Teachers on the Safety measures Increasing Practical Skills acquisition of Students

S/N	Questionnaire item	Students \bar{X}_1	Teachers \bar{X}_2	$\frac{\bar{X}_1 + \bar{X}_2}{2}$	Decision
27.	Workshop rules should be taught to students	3.13	2.92	3.02	Agreed
28.	Safety rules should be boldly displayed in workshops	3.11	3.12	3.11	Agreed
29.	Students should be encouraged to do their practical assignments by themselves	2.91	3.10	3.01	Agreed
30.	Enough time should be given students to carryout practical work in the workshop	3.12	3.31	3.15	Agreed
31.	Tools should be cleared after usage	2.91	3.11	3.01	Agreed
32.	Tools should be safely kept	3.00	2.90	2.95	Agreed
33.	Instructional manuals should always be consulted before embarking on new jobs	3.20	3.11	3.15	Agreed
34.	Teachers should whenever necessary carry out demonstration for students to watch	3.96	2.90	3.43	Agreed
35.	New skills to be learnt should first be demonstrated by the teacher	2.54	2.59	2.46	Agreed
36.	Students should be encouraged to participate in teacher's demonstration	2.79	2.86	2.82	Agreed
37.	Workshop clothing should be worn in the workshops	2.69	2.72	2.71	Agreed
38.	Loose clothing should be discouraged in the workshop	2.81	2.72	2.76	
39.	First aid box should be maintained in the workshop	2.70	2.63	2.66	
40.	Students should be discouraged from playing in the workshop	2.77	2.62	2.69	
41.	Smoking should be prohibited in the workshop	2.78	2.63	2.71	
42.	Students should be meant to replace any tool they damage	2.30	2.13	2.21	Disagree

Out of the 16 items in table 3, only item 42 scored below the cut off point of 2.50. The rest of the 15 items were favourably rated by respondents. These favourably rated items are necessary safety measures that could increase students' practical skills acquisition in the college.

Major findings of the Study

The following major findings were made by the study.

1. Institutional measures that should be employed to increase students' acquisition of practical skills include engaging qualified teachers, allotting enough practical period in the time table and equipping the workshops sufficiently.
2. The following external measures should be utilized to increase students practical skills acquisition; accreditation of technical college courses by requisite body, community participation in funding the



school, going on field trips to industries, provision of current practical tools, Alumni Association contribution to fund the school, provision of water and reliable sources of electricity.

3. Safety measures that should be employed to increase students practical skills acquisition include; strict observation of workshop rules, carrying out practical work by students themselves, keeping tools safe, safe demonstration skills for students and not insisting that students should pay for tools they damaged during practical work

Discussion of Findings

The problems militating against successful practical skills acquisition in technical colleges today are many and varied. This study clearly shows that a lot need to be done to ensure increased practical skills acquisition by technical college students. In this study the respondents agreed that adequately qualified teachers should be posted to teach the students. Also technical education should be funded and teachers should be exposed to workshops and seminars from time to time; functional libraries including e-libraries; electricity; water and functional workshops should be provided.

The finding of the study that qualified technical teachers are needed is in consonance with the opinion of Nneji (2005) who found out that some of the problems facing technical and vocational education programme include; scarcity of qualified teachers, inadequate teacher education programme for training technical and vocational teachers and lack of teaching and learning facilities. These factors normally affect practical skills acquisition adversely.

The study also found that technical and vocational teachers in the college should be given the opportunity to attend workshops and seminars and that they should be encouraged to participate in professional association to expose them more to practical skills acquisition procedures. These findings are congruent with those of Dada (2012) who posited that technical and vocational students should be provided with required practical skills and knowledge needed in the world of work. Faga(2005) earlier observed that technical and vocational education students in order to teach others well should be adequately trained to function effectively as a teacher through seminars and workshops. Teachers could greatly improve their prowess in skills and requisite knowledge in their various occupations they undertake to teach or exercise in the world of paid employment.



The study also revealed that students while undertaking assigned practical work should be allowed to work by themselves. Tools and equipment after work should be kept clean and students should keenly participate while the teacher is demonstrating a skill that students ought to learn. Workshop rules such as avoidance of loose clothing and being conversant with general workshop rules are very imperative. Daramola (2013) pointed out that for students to acquire the required theoretical and practical skills needed they should participate in the practical skills demonstration, they should follow workshop rules and regulations.

From the major findings of the study, a number of imperative educational implications could be noted. Such educational implications that emerged include respondents' strong views that technical and vocational instructors should be accommodated in the school staff quarters, funding of technical and vocational education adequately. Industries should contribute to fund technical education and that Alumni associations should equally encourage technical and vocational education through fund contributions. Therefore, government, industries, curriculum planners, non-governmental organizations should provide essential facilities to ensure that practical skills and knowledge are acquired in private technical colleges. When the students are well trained, they can competently contribute to fulfilling occupational requirements by being gainfully employed by recognized institutions or be self-reliant in the occupations they have been trained in the technical and vocational college.

Conclusion

Acquisition of practical skills in the technical colleges is the basic goal of Government and private investors in this type of educational enterprise. Skills acquisition by students is of paramount importance in getting worth while employment in recognized institutions or being self-reliant on graduation. When students are exposed to practical skills training they can properly fit into the world of work. In the study, it has been found that students need a myriad of factors to enable them successfully acquire the requisite practical skills. Relevant tools and equipment, libraries and good workshops are of paramount importance. When the interested industries and Alumni associations assist private technical and vocational institutions, they can achieve their mandates of skills training better. The private technical and vocational proprietors should in live with the findings of this study endeavour to provide the requisite facilities that would enable students easily acquire practical skills that would enable them become competent to effectively get rewarding employment or be self-reliant and reduce unemployment rate and youth insurgencies.



Recommendations

Based on the findings of the study, the following recommendations have been made to enable technical college students successfully acquire practical skills:

1. Highly qualified technical instructors should be employed to effectively teach the students
2. Practical skills teaching through effective demonstration by teachers should be emphasized
3. Students should be encouraged to carry out practical assignment given to them by themselves to enable them learn by doing
4. Private technical colleges should be properly funded by the proprietors and aided by industries and Alumni associations
5. Teachers should be encouraged to attend workshops and seminars to update their pedagogical and skills experiences
6. The National Board for Technical Education should endeavour to accredit courses in private technical colleges.

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