



Enhancing Skill Acquisition Through Production/Service Work in Technical Colleges in North Central Nigeria

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ABSTRACT

Skill acquisition is a critical component of any vocational or technical training programme. When this component is missing or falls below expectation, it tends to defeat the objectives of the programme. In Nigeria, many skill-oriented training schools experience great challenges in trying to provide for the necessary facilities required for effective technical training of those enrolled in its programmes because of paucity of funds. The result, often times, is that students graduate from programmes without adequate employability skills for meaningful productive/service work after leaving school. In realization of this predicament, the Federal Government of Nigeria directed all technical colleges to introduce Production/Service Work (PSW) into its curriculum. This is done in the event that there is shortfall in the supply of training facilities in schools by their proprietors, the schools could receive jobs from within or outside the schools which could provide students the opportunity to acquire hands-on experience which could equip them with requisite skills for post-graduation work. As plausible as this innovation may appear to be, many schools in the North Central Nigeria are yet to implement the innovation in their schools or even when they do, they are not viable and do not seem to meet the objectives set out for the programme. The present study, therefore, investigated the benefits of PSW as a means of enhancing skill acquisition in technical colleges. This is done with a view to creating greater awareness amongst school administrators and technical teachers towards giving the innovation the emphasis it deserves.

Keywords: Production/Service work, skill acquisition, enhancing & employability skills, north central Nigeria, School heads, technical teachers

INTRODUCTION

All over the world, technology has been identified as a medium for transforming the social and economic fortunes of people. Much as technology is rooted on the principles and theories of science, it is essentially the application of those principles and theories to solve human problems (Ovowi, 2006). The knowledge of technology therefore, must be based on the acquisition of practical skills on the part of those who choose to enroll in its programmes.

At all levels of technology training, emphasis should be laid on the acquisition of practical skills through engaging trainees in practical work which engenders competent performance in the place of work. In this regard, the implementation of all technological curricula must make provision for a conducive learning environment as well as facilities which would enable recipients to acquire hands-on experience in activities that are similar to that which they are expected to find after leaving the training environment (Olaitan, 2000).

The Federal Government of Nigeria (FGN, 2004) in the National Policy on Education (NPE) has made provision for any of its citizens who desire to pursue a career in technical education to transfer from the conventional secondary school education after Junior Secondary School Education (JSE) to a technical college. Here, the training is of three years duration. During this period, it is expected that the students would have acquired adequate practical skills that could enable them serve in the middle level manpower needs of the nation either as paid employees or self employed (Osuala, 1998).

However, over the years, it has been observed that because of perennial short-fall in the supply of training facilities, many schools are often not in position to provide adequate practical training in school workshops/laboratories to their trainees. The resultant affect is that some trainees graduate from the schools without requisite skills needed for performance in places of work (Agu, 2011). In realization of this shortfall, the FGN (2004) recommended the introduction of Production/Service Work (PSW) in all technical colleges as a way of creating opportunities for students to acquire practical experiences while working on jobs brought from within and outside the school.

Nwafor (2000) described production/service work as an activity where goods or services are produced or serviced. They are commercially organized and managed by a structured group of students from different classes. The unit uses examination work, inter-disciplinary approach and project work. Agu (2004), further describes production/service work as a kind of school industry where students produce goods and services under the guidance of competent instructors for the purpose of obtaining remuneration and acquiring practical skills, work attitudes and habits.

As good as this innovation appears to be, one problem that keeps manifesting in many schools is that proprietors or teachers are either not aware of this provision or do not clearly see the benefits of the innovation in their schools. Consequently, many technical colleges do not run the programme in pari-passu with the curriculum and even when they do; it is carried out with much laxity. The intent of this study, therefore, was to determine how PSW can enhance skill acquisition in technical colleges in north central states of Nigeria. Findings from this study should provide an awakening among proprietors and teachers towards working to realize the objectives of the programme. In order to realize this objective, one research question was asked and one hypothesis was formulated to guide the study, respectively.

Research Question

In what ways can Production/Service Work enhance skill acquisition in technical colleges in North Central States of Nigeria?

Hypothesis

The following hypothesis was formulated and tested at 0.05 level of significance.

H₀: There is no significant difference in the mean responses of school heads and technical teachers regarding the ways production/service work can enhance skill acquisition in technical colleges in North Central Nigeria.

METHODOLOGY

Descriptive survey was used in this study to illicit the opinions of stake-holders (school heads and technical teachers) with regards to the benefits of production/ service work in technical colleges. From the record made available to the researcher in the schools, the total population was 461 (395 technical teachers and 66 heads). Out of this population a purposive sample of 206 (consisting of 176 teachers and 30 school heads) was drawn and used in the study. A self-structured questionnaire having 18 items was designed using a five point likert scale of strongly agree, agree, undecided, disagree and strongly disagree. Prior to its administration, the instrument was subjected to face validation among three experts in the Department of Vocational Technical Education at the University of Nigeria, Nsukka. The internal consistency of the instrument was established using Cronbach Alpha reliability test and this yielded 0.92 reliability coefficient.

Data was collected on the spot through administering the instrument by a research assistant appointed by the researcher in each of the states under investigation. The research assistants had earlier been briefed by the researcher on the objectives of the study and the modality of administering the questionnaire.

Mean, standard deviations were used to answer the research question while t-test was employed to test the null hypothesis at 0.05 level of significance.

RESULTS AND DISCUSSION

Table 1: Mean and Standard Deviation on the Ways that PSW can Enhance Skill Acquisition in Technical Colleges (N=206).

S/N	Ways that PSW can enhance skill acquisition	\bar{X}	SD	Decision
1.	Providing additional funds that could be used to procure materials and equipment for regular training of student in the school workshop	4.73	0.53	Agree
2.	Creating a feeling of belonging amongst staff through joint participation in production/service activities	4.32	0.64	Agree
3.	Enabling students to acquire practical skills, technical knowledge and attitudes necessary for industrial activities	4.59	0.55	Agree
4.	Enabling students to cultivate the spirit of team work in production/service activities	4.33	0.63	Agree
5.	Encouraging community participation in the training of students	3.93	0.93	Agree
6.	Enabling staff to broaden their technical knowledge and practical skills through modern techniques of production/service	4.53	0.55	Agree
7.	Boosting the image of technical colleges through the provision of efficient service and quality product to the general public	4.41	0.66	Agree
8.	Enhancing healthy relationship between people in the surrounding communities and the collage	3.94	0.84	Agree
9.	Enabling the community to identify areas where they can invest in the training needs of the collage	4.11	0.84	Agree
10.	Arousing interest in the staff and students towards production/service activities	4.35	0.67	Agree
11.	Providing student with entrepreneurial skills necessary for self-employment	4.44	0.75	Agree
12.	Providing real work environment for production of makeable goods and service	4.23	0.76	Agree
13.	Enabling students to acquire relevant work ethics	4.24	0.71	Agree
14.	Providing positive motivation to both staff and students through a structured system of incentives	4.32	0.75	Agree
15.	Enhancing speed and accuracy in production through students involvement in production/service activities	4.22	0.71	Agree
16.	Giving student unique opportunity to experience a variety of roles required in a work environment	4.28	0.64	Agree
17.	Providing effective management of human and material resources	4.49	0.72	Agree
18.	Equipping students with good public relation skills though regular interaction with clients	4.19	0.78	Agree
	Grand	4.31	0.70	Agree

Table 1 shows that respondents subscribed to the view that PSW is an ideal source of providing additional funds for the procurement of training materials and equipment for regular training of students in the school workshops/laboratory; it enables trainees to acquire practical skills technical knowledge and attitudes required in industrial set-up; it allows staff of the college to broaden their technical knowledge and practical skills through modern techniques of production and service. Based on the principle of real limit applied in the statistical analysis of this study, the grand mean of 4.31 shows that all the items were rated high, meaning that PSW is considered as a necessary innovation for the enhancement of skill

acquisition in technical colleges. The grand standard deviation of 0.57 also shows that the respondents do not differ far from each other in their opinion with regards to the relevance of PSW in enhancing skill acquisition in technical colleges.

Table 2: t-test on the Difference between the Mean Scores of School Heads and Technical Teachers on Ways that PSW can Enhance Skill Acquisition in Technical Colleges

S/N	Variable	No.	Mean	SD	t-cal	t-critical	Remark
1.	School Heads	30	4.36	0.67	0.49	1.96	Accept Ho
2.	Technical teachers	176	4.28	0.73			

From the result of the hypothesis tested as shown on table 2, it is obvious that t-cal (0.49) is less than the t-critical of 1.96. Therefore, by the decision rule that applies to t-test, the hypothesis of no significant difference in the mean response scores of school heads and technical teachers is not rejected. This implies that school heads and technical teachers share the same opinion that PSW can enhance skill acquisition in technical colleges.

DISCUSSION OF FINDINGS

The findings of this study have revealed amongst others that Production/Service Work is considered to be relevant in enhancing skill acquisition in technical colleges. Among the reasons advanced are that PSW leads to the generation of additional funds which could be used to augment the procurement of tools equipment and even consumable materials to sustain training of students in school workshops/laboratories. Consistency in training would enable students acquire relevant practical skills, technical knowledge and attitudes required of industrial/ commercial workers. It also provides a replica of real work environments for students to be engaged in the production of goods and services which could better equip them with hands-on experience necessary for post-graduation work. It could also lead to the cultivation of healthy attitudes of both staff and students towards learning through a structured system of incentives. Consequently, it can enhance learning through the use of several senses during the process of producing goods and services.

The above findings are in agreement with those of Bello (1988) and Umo-Otong (1988) who both postulated that PSW is relevant in generating funds for the school in support of its main training programmes. Similarly, Obalomi (1999) Observed that PSW can help students to inculcate relevant attitudes, develop good character and afford them the opportunity to acquire relevant practical skills, technical knowledge and work habits required of a competent and successful worker. Various research studies, including that of Crosby and Petrosko (1990); Pancel, (1993) and Golman (2006) have shown that work ethics, social intelligence (ability to interact freely and function harmoniously among colleagues and good workmanship are often considered essential attributes for work success and promotes better employability of graduates.

The finding in respect of no significant difference between technical teachers and school heads did not come as a surprise going by the guidelines of the National Board on Technical Education (1992) which stipulates that heads of technical colleges should be appointed from amongst experienced and qualified technical teachers. This implies that those presently in such positions were once technical teachers themselves and should, therefore, reason along the same line with the teachers in their perception of the objectives of the programme in technical colleges. These would reduce conflict of interest between the two groups which very often is a challenge to successful implementation of the innovation in technical colleges.

CONCLUSION

Production/Service Work is considered an essential component of the technical college programme reflecting on the numerous benefits which schools stand to derive as revealed by this study. Deliberate effort should, therefore, be made towards integrating the innovation into the technical college curriculum

for sustainable training of its students. This would minimize the situation whereby students graduate with inadequate employability skills and hence are neither employable nor self-employed in the world of work.

RECOMMENDATIONS

- i. Federal and state governments through its relevant agencies should mount up workshops and seminars to educate teachers and school administrators on the need to incorporate PSW into technical college curriculum.
- ii. Government through its agencies should encourage the establishment and operation of PSW in technical colleges by taking the lead to patronize its products and services.
- iii. Yearly inter-school exhibitions (a sort of school trade fair) should be held at both state and federal levels to promote the activities of PSW in technical colleges.

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