Provision of Facilities for Effective Implementation of School-Based Technical and Vocational Education in Delta State: The Planning Imperative

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Abstract: **The main thrust of this study was to examine the provision of facilities for effective implementation of school-based technical and vocational education in Delta State, the planning imperative.One research question and one hypothesis guided the study. The census sampling technique was used. The sample of the study consists of 292 respondents, which comprised 12 administrators and 280 instructors in the sixtechnical and vocational institutions in the state. A researcher- structured questionnaire was used to elicit information from the respondents. The instrument which was structured according to the modified four-point Likert scale was validated and had a reliability coefficient of 0.80 got using Cronbach Alpha method. The research questionwas answered using mean and standard deviation, while the null hypothesis was tested at 0.05 level of significance using the z-test statistics. The study revealed thatgovernment involvement in technical planning for the construction of school building, provision of furniture and fittings are some of the ways of planning the provision of facilities. The study recommended among other things that government should ensure that workshops in the technical and vocational schools are equipped with required facilities. Government also needs to synergize with technical educational planners for the provision of appropriate facilities.**

I. INTRODUCTION

The importance of education in inculcating into the learner the knowledge, skills and values that will enable an individual to understand how the society operates in order to make significant contributions to the society cannot be over emphasized. Technical and vocational education in particular is designed to develop among learners occupational competence and skills to enable them to earn a living. Technical and vocational education provides opportunities for students to acquire general education and technical and vocational skills that individuals require to succeed in life. Odu (2005) defined technical and vocational education as the type of education that aims at developing and raising the skills and abilities of learners to improve their understanding and competencies on their respective line of work. Technical and vocational education therefore creates a platform for learners to acquire useful skills, which is very vital for wealth creation, economic growth, and sustainable social development. Vocational education can be identified as a programme that brings the skills and technical content of other disciplines, and practical skill requirement of the work environment to prepare the younger generation to do well in the place of work. Achieving its overall goal requires logical execution. The principles of vocational education are the standard rules or guidelines which when adhered to, will lead to goal attainment in the provision of vocational education.

Technical and vocational programmes read outside the school system are known as non-formal educational programmes. These programmes include open apprenticeship scheme establishment by the government, NGOs and, the off- and on- the job training offered by the industrial firms and the private apprenticeship scheme. The central focus of technical and vocational education is to develop skills in the individual, which will make him, functional, self-reliant and contribute immensely to the growth of the society. Technical and vocational skills can be impacted through technical and vocational schools (school-based) apprenticeship schemes and skill acquisition centres and various combination of active job training.

Technical and vocational education programmes are provided in different forms in Delta state. There are six government-owned technical and vocational institutions and government craft development center and local government industrial unit in the 25 Local Government Areas in Delta State: the polytechnic, and Delta State College of Education. The non-formal technical and vocational programmes in Delta state include government open apprenticeship scheme, the skill acquisition programmes, the private apprenticeship scheme and the on and off-the-job technical training offered by industrial establishment (Ebunu & Igbozuruike, 2017). Subjects offered at the pre-technical and vocational level include woodwork, local craft, electronics, metal work, mechanical, business studies and home economics whereas the senior secondary offers subjects such as metal work, technical drawing, electronics, woodwork, auto-mechanic, and music. Some scholars believe that these institutions have contributed significantlyin the past in terms of supplying manpower needs of Delta State in particular and Nigeria in general, however, some of the institutions do not have functional instructional facilities and competent instructors to provide quality instructions in these schools (Igbozuruike et al., 2018).

The success of technical and vocational education is dependent on the quality of planning to achieve the desired

results. Planning is a necessary process for achieving any goal in life. In other words, when it is considered and acted on, set valid goals can be realized. Suraj (2016) conceived planning as a process of preparing for a goal-oriented action through the most advantageous means. In the field of education, planning is aimed at transformation of the educational enterprise. This is because it is a tool used in analyzing the problems involved in education change, which compels the educational planners to search for the socio-economic and political factors necessary for the successful attainment of the highlighted objectives.

Educational planning also deals with proper preparation and subsequently evaluating the decisions taken aimed at achieving specific set of goals in education. Ukaigwe and Igbozuruike (2019) defined educational planning as a continuous process of obtaining and analyzing facts from empirical base of providing information for decision makers on how best the educational system is to accomplish its goals and how best to achieve cost effectiveness of educational programmes. In other words, educational planning is the method for obtaining educational statistics which when analyzed reveals the true position of the educational system so that necessary steps can be taken to correct any anomaly. As the result of the growing complexity and sophistication of planning and implementation process as well as the increasing cases of poor plan implementations which is being interpreted as due mainly to lack of understanding of the technique and spirit of the plans by the implementators, it is being suggested that planners, should take part in implementation. There are, however, situations where this is possible but in situations where planners cannot take part in the implementation of plans, it is necessary for them to check the states of the implementation through evaluation of the ongoing projects.

Availability of functional instructional facilities is a necessary condition for ensuring proper implementation of technical and vocational education plan. Agabi (2004) defined school facilities as everything that makes up the school environment. School facilities are the hardware through which the content of school curricula is transmitted into the learner. Facilities may also be referred to as school plant (Kpee, 2013),explaining that facilities play crucial role in the teaching and learning process. These facilities include duster, chalkboard, whiteboard, marker, laboratories, classrooms, staff offices, computers, toilets, halls, libraries, generators, hostels, perimeter fences, road networks and many others.

There can be no meaningful academic activities when basic instructional facilities are lacking or dilapidated in nature or absent in technical and vocational schools. It is a basic requirement for the success of any educational programme. It is of no value for teaching and learning to take place in a technical workshop without the relevant tools and machines to bring it to bear. This is the situation faced in many of our technical and vocational institutions. This could be why many of the graduates from technical schools come out to be "half baked" technicians. Lackney (2017,148) posited "that an effective school facility is responsible to the changing programmes of educational delivery should provide a physical environment that is comfortable, safe, secure, accessible, well illuminated, well ventilated and aesthetically pleasing." Such situation arouses students' interest in learning. The wistful conditions of most technical and vocational schools are quite unpleasant despite the allocation budgeted for their innovation by different administrations and these make one wonder and want to verify whether what is on ground in these schools meet the desired school facilities requirement specifications. Abdulkarim (as cited in Uko, 2015) remarked that there should be continuous increase of educational facilities and equipment, because the existing ones are often overstretched, poorly maintained and cannot foster desirable and harmonious problem-solving qualities. Despite the fact that technical and vocational schools are meant to train people to have appropriate skills to become useful citizens, such training must take place in an acceptable condition that people are not put into danger. Good facilities and maintenance become an important requirement that technical and vocational schools must need to operate.

The provision and maintenance of facilities are keys to effective teaching and learning in the schools. Supporting this view, Adesina (as cited in Abraham, 2013) remarked that the quality of education students receive in schools is dependent on the provision or non-provision of educational facilities, utilization and maintenance of the facilities and the entire climate of the school environment. Maintaining the existing ones is paramount. Enaohwo (2017) opined that maintenance is vital for keeping facilities in the best working conditions so they can be used effectively in the teaching and learning process. He further maintained that facilities maintenance assist schools spend less today, than spending in the future. "Adequate provision of school facilities does not only foster effective teaching and learning, but also enhances the aesthetic and splendour of the school – a necessity for enabling atmosphere that directly and indirectly boosts students' avidity and ultimately promote learning" (Igbozuruike, Opene& Usman, 2018).

The continuous absence of vital equipment and maintenance of the existing once is bound to have grave consequences on the quality of graduates of the technical and vocational colleges as well as the technological advancement of the nation. The study of Suraj (2016) revealed that the school environment lack the necessary equipment for the implementation of technical and vocational education. He further revealed that even the available equipment is different from the one used in real work situations. This finding has serious implications for effective implementation of technical and vocational education programmes.

In a similar study by Ebete (2016), it was found that technical and vocational schools were not adequately provided with enough classroom blocks, workshops and instructional

materials. The study further revealed that the conditions of the existing facilities are poor. This finding is in agreement with the empirical study by Oguvbu and Akpatu (as cited in Adiele, 2008) on "the factors affecting the attainment of the objectives of Technical school Education in Nigeria". Oghuvbu and Akpotu study revealed among others that inadequate instructional facilities; poor school plant and poor equipment affected the attainment of the objectives of technical school education. These findings implied that both planners and implementers of technical and vocational education programme have not given adequate attention to the provision of equipment. There can be no meaningful academic activities when basic instructional facilities are lacking or dilapidated in nature and in near absent in technical and vocational schools. It is a basic requirement for the success of any educational programme.

Statement of the Problem

There seem to be increasing concern among stakeholders that the current education system in Nigeria is no-longer producing the desired values in recent graduates. The growing dissatisfactions appear to be driven by lack of practical skills and knowledge among many school leavers. This can be appreciated when one considers the high rate of graduate unemployment, which has been blamed by many on defective and theory-fraught education system that lacks practical skills relevance. Certainly, the neglect of technical and vocational has neither benefited Nigeria nor Delta State in particular, yet the government appear to have continued to pay lip-service towards revitalizing technical and vocational schools. The deteriorating state of most technical and vocational institutions in the state is decreasing the contribution of technical and vocational activities to national development. Some of the technical and vocational colleges do not have important instructional equipment and facilities that instructors require to facilitate activity-driven learning. These have not only led to educational wastages but have made it somewhat difficult for technical and vocational institutions to produce high caliber of technical and semi-skilled manpower required for national development. Could it be that the ways of providing instructional facilities for technical and vocational instructions are flawed? The researcher is bordered about these issues, and therefore sought to determine how facilities are provided for effective implementation in Delta State, Nigeria.

Aim and Objectives of the study

The aim of the study was to examine planning the provision of facilities for effective implementation of school-based technical and vocational education in Delta State. Specifically, the objective of the study is to:

1. Determine the ways of planning for the provision of facilities for effective implementation of school-based technical and vocational education in Delta State.

Research Question

1. What are the ways for planning the provision of facilities for effective implementation of school-based technical and vocational education in Delta state?

Hypothesis

1. There is no significant difference between the mean scores of the opinion of administrators and instructors on the ways for planning the provision of facilities for effective implementation of school-based technical and vocational education in Delta state.

II. METHODOLOGY

The study design of the study was descriptive. The population of the study is all the six technical and vocational institutions in Delta state. There were 292 respondents, comprising 12 administrators, and 280 instructors teaching in the six technical and vocational institutions in Delta state. The census sampling technique was used. The instrument used to generate data was a self-structured 5-item questionnaire titled 'Provision of Facilities for Implementation of School-Based Technical and vocational Education Questionnaire (PFISTVEQ)'. It was divided into two sections, namely, Section A and Section B. Section A contained items seeking data on demographic variables of the respondents, while section B contained items assessing the two variables investigated in this study. The instrument was validated by experts and Cronbach Alpha was used to ascertain the internal consistency giving the reliability index of 0.80. The modified four-point Likert-type rating scale of Strongly Agree (4 points), Agree (3 points), Disagree (2 points) and Strongly Disagree (1 point) was used to code responses. Items that scored $x \geq 2.50$ criterion mean were accepted whereas those below the criterion meanwere rejected.The research questionwas answered using mean and standard, while the hypothesis was tested at 0.05 level of significance using the z-test.

III. DATA ANALYSIS AND RESULTS

Research Question: What are the ways for planning the provision of facilities for effective implementation of school-based technical and vocational education in Delta State?

Table 1: Mean and standard deviation of the responses on the extent of agreement on the ways for planning the provision of facilities for effective implementation of school-based technical and vocational education in Delta State

S/N	Questionnaire items	Administrators $\bar{X}$			Instructors $\bar{X}$		
			S.D	Rank order		S.D	Rank order
1.	Government involves technical planners in planning for construction of school building	2.96	0.81	2nd	2.50	0.80	2nd
2.	Government partner with technical planners in provision of furniture and fittings	2.99	0.83	1st	2.50	0.89	1st

3.	Government collaborates with educational planners in planning for provision of workshops	2.89	0.78	3rd	2.40	0.87	3rd
4.	Workshops in the technical and vocational schools are equipped according to the plan	2.49	0.99	5th	2.00	0.94	5th
5.	Equip technical and vocational institutions with facilities for effective implementation of the programme	2.88	0.76	4th	2.30	0.87	4th
	Aggregate mean	2.84			2.34		

In Table 1 above, respondents in administrators' categories agreed to the statements in items 1, 2, 3 and 5, with mean scores of 2.96, 2.99, 2.89 and 2.88 respectively, while item 4 with mean score of 2.49 was disagreed by the respondents. Similarly, the respondents in instructors' categories agreed to item 1 and 2, whereas items 3, 4 and 5 were disagreed given the low mean scores of 2.40, 2.00 and 2.30. The aggregate mean scores of 2.84 revealed that administrators agreed that the above statements are ways for planning the provision of facilities for effective implementation of school-based technical and vocational education. However, instructors disagreed on most of the above statements given the aggregate mean score of 2.34.

Resultof the test of hypothesis

H_0: There is no significant difference between the mean scores of the opinion of administrators and instructors on the ways for planning the provision of facilities for effective implementation of school-based technical and vocational education in Delta state.

Table 1: z-test analysis of the mean scores of administrators and instructors on the ways for planning the provision of facilities for effective implementation of school-based technical and vocational education

S/N	Respondents	N	$\overline{X}$	S.D	df	z-cal	z-crit	Sig level	Remark
1.	Administrators	12	2.84	0.83	290	2.04	1.96	0.05	Not significant (H_0 rejected)
2	Instructors	280	2.34	0.87					

Table 1 above shows that at 290 degrees of freedom and 0.05 significant level, the z-test analysis yielded z-cal value of 2.04. The z-cal is higher than the z-crit of 1.96, hence the null hypothesis is rejected.Therefore, there is a significant relationship between the opinions of administrators and instructors on the ways for planning the provision of the facilities.

IV. DISCUSSION OF FINDINGS

The ways for planning for the provision of facilities for effective implementation

The findings of the study show that administrators agreed that the items are the ways for planning for the provision of facilities in technical and vocational institutions (mean 2.84, whereas it was disagreed by instructors (2.34). This implies that administrators believed that these are the ways for planning for the provision of facilities for effective implementation of school-based technical and vocational education than the instructors. These findings disagreed with Suraj (2016), who revealed in his study that the school environment lack the necessary equipment for the implementation of school-based technical and vocational education. His study further revealed that even the available equipment is different from the once found in the occupation itself. The study of Ebete (2016), also revealed that technical and vocational schools were not adequately planned and provided with enough classroom blocks, workshops and instructional materials. These findings implied that planners and implementers were not fully involved or consulted in the planning. Thus, the adequate involvement and collaboration of these key actors will aid proper inputs that will ensure effective implementation. Tested hypothesis revealed that there is a difference in the mean scores of administrators and instructors on the ways of planning for the provision of facilities for effective implementation of school-based technical and vocational education. The hypothesis affirmed the perspective of the administrators and instructors' responses to the research question.

V. CONCLUSION

Based on the findings, the study concluded that government involvement of technical planners; educational planners and administrators are one of the ways for planning for the provision of facilities in technical and vocational institutions.

VI. RECOMMENDATIONS

Based on the findings, the following recommendations were made.

1. That government should ensure that workshops in the technical and vocational schools are equipped with appropriate facilities.
2. Governmnet need to collaborate with educational planners in the provision of facilities for technical and vocational schools in Delta State.

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