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# Technology Education

In a

# Democratic Nigeria.



NIGERIAN ASSOCIATION OF TEACHERS OF TECHNOLOGY

# **TECHNOLOGY EDUCATION IN A DEMOCRATIC NIGERIA**

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**NIGERIAN ASSOCIATION OF TEACHERS OF TECHNOLOGY**

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## MECHANISMS FOR IMPROVING THE FUNDING OF VOCATIONAL CENTRES AND TECHNICAL COLLEGES IN A SUSTAINABLE DEMOCRACY.

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### Abstract

*This study was designed to identify Mechanisms for Improving the Funding of Vocational Centres and Technical Colleges in Niger State. Three research questions and ~~hypotheses~~ were formulated to guide the study. A 30-item questionnaire was developed and used to collect data from respondents consisting of 98 teachers and 29 Administrators of Vocational/technical Colleges in seven Educational Zones of Niger State. The data was analysed using frequency count and mean. The study revealed that both the Administrators and Teachers shared similar views towards the majority of the items. It was therefore recommended among others that multinational National co-operations, Business Organisation and Communities should be involved in funding Vocational and technical Colleges, that 5% of fund realised from Value Added Tax (VAT) be used for financing of Vocational and Technical Colleges, that as a matter of urgency de-merger of Technical Education from Science and general Education is necessary.*

### INTRODUCTION

The Education of the citizens is no doubt the fundamental responsibility of the government. But, today, it is extremely difficult for the government alone to meet the financial requirements of education at all levels due to the high increase rate of students enrolment beyond the projected figures coupled with the escalated cost of educational materials. Education is nonetheless the fundamental interest of the public and family, hence it is a 'Sine qua non' for the maintenance of equal opportunity in a country like Nigeria. To be particular, the National Policy on Education defined Technical Education as the aspect of Education which leads to the acquisition of practical and applied skills as well as basic scientific knowledge. Government went further to state that, it recognises the importance of Technical and Commercial Education and the need to relate its programme to the requirement of

commerce and industry. It was emphasised that formulae for collaboration and joint responsibility will be designed for share cost burden between the public and private sectors such as already being carried out in schemes like Industrial Training Fund (ITF).

In Nigeria, Federal Government was mainly responsible for financing technical institutions in the 1970s. The report of panel on alternative resources for financing education in Nigeria (1981) shows that 50.5% of funding to technical education should be borne by Federal Government while 49.5% by state government (Adesina, 1988).

The National policy on Education (Revised, 1981) put the federal and state governments in fore front of financing Vocational and Technical Education programme, the federal government solicited and encouraged the participation of local communities, individuals and other organisations on the financing of education (FRN, 1981). To backup government commitment, allocations of N400.20 million and N736.649 million were made by the federal and state governments respectively toward technical education during the 4th National Development Plan period 1981-1985 (Olatun, 1986).

However, despite these favourable policy provisions on Technical education, inadequate funding has continued to be a major problem facing technical education. Atsumbe, (1997) maintained that due to inadequate funding, normal workshop practice which forms 60% of the technical college curriculum is fast disappearing on vocational/technical colleges time tables. It is therefore glaring that technical education under the present system of education is facing a serious financial crisis. A solution must be found otherwise all previous efforts will become wasted. To this end, this study was designed to determine other ways to be employed to improve the funding of vocational centres and technical colleges.

### RESEARCH QUESTIONS

1. What are the factors responsible for poor funding of vocational centres and technical colleges?



2. What are the funding needs of vocational centres and technical colleges?
3. What are other alternative approaches to consistent funding of vocational centres and technical colleges?

### METHODOLOGY

The questionnaire was the sole instrument used for the collection of data. Itemised questions were used for answering the research questions. The population for the study comprised of all the vocational and technical administrators (Directors, Principals, Vice-principals) and vocational/technical teachers, teaching in vocational centres and technical colleges in Niger state. A sample of 29 administrators of vocational/technical colleges and 98 vocational/technical teachers that completed and returned the questionnaires in the seven educational zones of the state were used for the study.

### METHODS OF DATA ANALYSIS

The mean was used to answer the research questions to determine the level of Agree or Disagree to each of the questionnaire item. Nominal value to the four point scale were assigned: Strongly Agree (SA) = 4, Agree (A) = 3, Disagree (DA) = 2, Strongly Disagree (SD) = 1.

Any items that attracted up to 2.5 and above were considered agree and below 2.5 as disagree.

### RESEARCH QUESTION 1

What are the factors responsible for poor funding of vocational centres and technical colleges?

Certain statements relating to the factors responsible for poor funding of vocational/technical colleges were stated in the questionnaire to which the respondents were to express their assessment of the extent to which the factors contributes to poor funding of vocational/technical education. Table 1 shows the responses of both administrator and the teachers.

PART 3

1998-1999

Table 1: Responses of the Administrators and Teachers on the factors responsible

for Poor Funding of Vocational/Technical Colleges

Statements	X1	X2	X3	Remarks
1. Government attitude to technical education through provision of much of its services.	2.24	2.27	2.25	Agree
2. Vocational and Technical education has poor image before Nigerians.	2.09	1.88	1.98	Agree
3. Merge of technical education and science education in ministries and schools.	2.06	2.06	2.06	Agree
4. Government sole financing of Technical education in Nigeria.	2.16	2.02	2.09	Agree
5. Poor financial accountability and mismanagement by administrators.	2.06	2.06	2.06	Agree
6. Attitudes of early managers towards education.	2.06	2.06	2.06	Agree

Key:

- X1 = Number of Administrators
- X2 = Number of Teachers
- X3 = Mean of Administrators
- X4 = Mean of Teachers
- X5 = Average Mean of Administrators and Teachers

Table 1 revealed that the two groups of respondents combined agreed with item 1 & 6 with a mean ranging between (2.58 - 3.26) while teachers disagreed with item 4 with a mean score of 2.09.

RESEARCH QUESTION 2

What are the funding needs of vocational centres and technical colleges?

The administrators and teachers responses to the questionnaire dealing with the

funding needs of vocational centres and Technical Colleges are as outlined in Table 2. The information revealed that all items 1-12 with mean scores ranging from 3.25-3.62 are all-important funding needs. The two groups unanimously agreed with all the items with mean scores not less than 3.25.

**Table 2: Responses of Administrators and teachers on the Funding Needs**

of

**Vocational Centres and Technical Colleges.**

S/N	Items	X1	X2	Xt	Remark
1.	Payment of allowances to technical teachers and teacher trainees.		3.48	3.62	3.55 Agree
2.	Purchase of new equipment and tools.		3.48	3.55	3.52 Agree
3.	Regular supply of expendables (consumables)	3.41	3.34	3.38	Agree
4.	Funding of Students Industrial Work Experience Scheme (SIWES).		3.41	3.38	3.40 Agree
5.	Building of classrooms and workshops.		3.52	3.50	3.51 Agree
6.	Staff remuneration.		3.49	3.43	3.46 Agree
7.	Supply of stationeries.		3.10	3.39	3.25 Agree
8.	Building of staff quarters.		3.45	3.55	3.50 Agree
9.	Provision of security for vocational/technical equipment		3.55	3.68	3.62 Agree
10.	Provision of First Aid treatment in the workshop	3.44	3.39	3.42	Agree
11.	Regular maintenance of workshop facilities.	3.55	3.60	3.42	Agree
12.	Installation of Machinery and other workshop equipment.		3.48	3.49	3.48 Agree

Key:- N1 = Number of Administrators; N2 = Number of Teachers

X1 = Mean of Administrators; X2 = Mean of Teachers

X1 = Average Mean of Administrators and Teachers

### RESEARCH QUESTION 3

What are other alternative approaches to consistent funding of vocational centres and technical colleges? Statements relating to the alternative approaches to consistent Funding of Vocational Centres and Technical Colleges were stated in the questionnaire to which the respondents were to express how relevant the stated approaches are to consistent funding of Vocational Centres and Technical Colleges. Table 3 revealed that both Administrators and teachers agreed that items 2,3,6,7,8,9,10,11 and 12 are very good alternative approaches to the consistent funding of Vocational Centres and Technical Colleges. Both the administrators and teachers unanimously disagreed with items 3 and 5 with mean scores of 2.30 and 2.31 as alternative approaches to consistent funding of vocational centres and technical colleges.

**Table 3: Mean Scores of the Administrators and Teachers on alternative approaches to consistent funding of Vocational and Technical Colleges.**

S/N	Items	X1	X2	X1	Remark
1.	The Administration of technical education should be separated from science and general education.	2.79	3.12	2.96	Agree
2.	10% of the total money available for manpower development should be allocated to technical education.	3.21	3.26	3.24	Agree
3.	Students/PTA and the entire community should be made to pay for stolen or equipment burnt through bush burning.	2.14	2.45	2.30	Disagree
4.	The community should be involved in the provision of amenities such as classrooms, seats etc	3.00	2.96	2.98	Agree
5.	Religious institutions should be requested to set aside about 10% of the annual income for technical education.	2.10	2.51	2.31	Disagree

6	All technical/vocational instructors should imbibe the spirit of regular maintenance culture	3.31	3.43	3.37	Agree
7	Government should establish technical manpower productions trust fund with seed money of about 1 billion naira.	3.17	3.36	3.27	Agree
8	All Multi-National Corporations be required by law to contribute 5% of their pre-tax profit to an endowment fund for vocational and technical colleges.	3.10	3.16	3.13	Agree
9	5% of fund realised from "VAT" should be used for financing vocational/technical colleges.	3.28	3.26	3.27	Agree
10	International oil companies such as "SHELL", "CHEVRON" etc should be required to give loans and special scholarship to students and teachers of vocational/technical colleges as extend to other disciplines.	3.62	3.65	3.64	Agree
11	Responsibility of funding should be for the federal, state and local government.	3.03	3.20	3.12	Agree
12	Non-governmental and private voluntary organisations should be sought for help.	3.21	3.14	3.18	Agree

Key:-

N1 = Number of Administrators;      N2 = Number of Teachers

X1 = Mean of Administrators;      X2 = Mean of Teachers

Xt = Average Mean of Administrators and Teachers

## DISCUSSION

The result on table I showed that all items under the section were accepted at varying degrees of importance. A ranking of the factors based on their mean scores showed the suggestions for government to change its attitude towards technical education devoid of lip services. This study revealed that the poor image of technical and vocational education and merger of technical education are strong factors affecting the effective funding of technical education, this confirms the observation by Olaitan, (1992). Atsumbe, (1997); and Abdullahi, (1998), that stunted growth of technical education is as a result of it being managed by those who have little or no understanding of the peculiar funding requirements of technical education. Consequently funds made for vocational and technical education are directed into areas which appeals to them. The study further revealed that government sole financing of technical education in Nigeria is a contributory factor, hence alternative sources are necessary. According to Olaitan, (1992) the government which has been

the sole financier of technical education now has very limited resources as a result of the global economic depression. People would rather invest in liberal education rather than technical education, as Nigeria society regards technical education as a form of education meant for people who are academically backward. A ranking of funding needs (table 2) shows that the respondents for this study attached the greatest importance to payment of allowances to teachers and teacher trainees as the funding need of vocational and technical education. This work provides an added emphasis to the call by teachers and entire public to pay allowances regularly. Salami, (1992) declared that inadequate funding has led to non-payment of teachers allowances. With reference to alternative approaches to consistent funding of vocational and technical colleges, the analysis on table 3 shows that 10 out of 12 items under this cluster were accepted. The respondents for this study attached greatest importance to the statement that international oil companies such as SHELL; 'CHEVRON' etc be required to give scholarship to students and teachers of vocational/technical colleges as extended to other disciplines. The study provide added emphasis on recommendation by Dacosta, (1998) that scholarship should be available to the student of technology as well as the exploitation of varied unexplored financial sources. The respondents seemed to attach importance to the statement that 5% of fund realised from Value Added Tax (VAT) be used for financing of vocational/technical colleges. This seems to be in popular demand, may be due to some publication recently that the money realised from the tax system is shared among individuals. The result of the study showed that 10% of total money available on manpower development are attached to technical education and government should establish technical manpower production trust fund with a seed money of about 1 billion naira. This confirms the work of Olaitan, (1992); Ajetunmobi, (1995) and Abdullahi, (1998). The work added emphasis to the co-operative involvement of federal, state, local and private sectors to the funding of vocational/technical education in Nigeria.

## CONCLUSION

The global economic down turn calls for alternative means of financing vocational/technical education in Nigeria. The sole responsibility of funding of vocational/technical education since colonial era calls for the co-operative

involvement of other stakeholders such as Non-Governmental Organisations (NGO's), communities and Private Voluntary Organisations (PVO's). By so doing, this will help in no small measure to minimise the crisis of funding vocational/technical colleges in a democratic Nigeria.

### RECOMMENDATIONS

Based on the result of the study the following recommendations are proffered

- (i) The administration of vocational/technical education should as a matter of urgency be separated from science and general education.
- (ii) Government should establish technical manpower production trust fund with a seed money of about 1 Billion Naira.
- (iii) 10% of the total money available for manpower development should be allocated to technical education.
- (iv) 5% of fund realised from Value Added Tax (VAT) should be used for financing vocational/technical colleges.
- (v) All vocational/technical instructors should imbibe the spirit of regular maintenance culture.

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