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## **Impact of Global Economic Crisis on Technical and Vocational Education Facilities in Akwa Ibom State, Nigeria** *(Pp. 119-132)*

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### **Abstract**

*The study examined the relationship between global economic crisis (GEC) and inadequacy of facilities for administration of the Technical and Vocational Education. The descriptive survey design with a random sample of 100 technical teachers from a population of 139 technical teachers in all six Technical Colleges in Akwa Ibom State, Nigeria was used. A validated instrument designed by the researchers; called Global Economic Crisis factors and TVE facilities Questionnaire with the KR-21 reliability index of .93 was used to collect the data. Two null hypotheses were tested at .05 alpha levels using the PPMC. Results showed that there are significant*

*relationships between (1) GEC and inadequacy of workshop facilities ( $Y = .420, p < .05$ ), (2) GEC and inadequacy of instructional media ( $Y = .581, p < .05$ ). Recommendations were made including that: (i) Government and the private sector should adequately fund the TVE and provide the training facilities. (ii) Government should stimulate the economy and create jobs to empower the private sector to partner with government towards funding of the TVE.*

## **Introduction**

In recent times the world economy has been seriously hit by recession leading to the collapse of many businesses-multinational companies, small and medium enterprises. It started about two years ago with a rapid increase in the prices of crude oil – the main export earnings for Nigeria, rising to \$160 per barrel, accompanied by high inflation, high unemployment occasioned by retrenchment and dwindling economy (Fakae, 2008). Currently, the prices of crude oil range between \$65 and \$98 per barrel. This unfortunate scenario has been of great concern to leaders of different Nations including Nigeria, compelling them to take drastic actions to tackle the problem. Some experts refer to this situation as global economic meltdown, while others call it recession, depression or global economic crisis. In this paper it will be referred to as global economic crisis (GEC). The challenges faced by most of the developing countries which have some serious effect on education, particularly Vocational Education, burdened by disappointments and shortfalls in expectations are rooted on social, economic and political factors, which also mutually interact with each other (Coombs, 1985).

In Nigeria the global economic crisis (GEC) has led to depletion of stocks, loss of investment, loss of jobs occasioned by the closing down of many companies, devaluation of the naira, including government inability to fund education, especially the Technical and Vocational Education (TVE). The GEC has seriously affected the TVE as the Technical Colleges lack the basic facilities such as workshop facilities (hand tools, machines, consumable materials, safety equipment etc), instructional media/technology (overhead projector, computer, internet facilities, technical text books and Journals). Experts (Imahiagbe 1992, Momoh 1995) have observed the poor condition of facilities (tools and equipment in Technical Institutions in Nigeria, warning that the condition could bring enormous consequences on the graduates. Onweh (2005) cited in Uzoagulu (1992) as indicating that “where tools and equipment are not adequate/functional, technical training programme will suffer and will lead to the production of highly unskilled personnel who are

unemployable (p54). Unfortunately, the graduates of the TVE are for some reason not easily employed. Even years before the global economic crisis began to be experienced in Nigeria; there were reports of inadequacy of basic training facilities for the TVE. Now the GEC is here and the inadequacy condition of facilities and other resources for the TVE are becoming more severe in schools. This study therefore intends to determine the relationships between the GEC and the prevailing inadequacies of workshop facilities and instructional media, which have led to stakeholders' dissatisfaction with the TVE curriculum.

Technical and Vocational Education has been seriously pursued now and many countries in Europe, America and Asia to provide opportunities for majority of their youths to be prepared for life long careers and employment in wide variety of occupations of their choice. According to Fakae (2008) the entrepreneurship component in the TVET is a major factor responsible for the rapid development of the Asian tigers and indeed other developed societies. Nigerians are now seeing the need, and calling for more attention to be paid to the TVE so that in the face of unemployment, the graduates will be capable of creating jobs. They are calling for the TVE curriculum review, improved funding and better administration of the TVE to meet the needs of the stakeholders. However, this has not yet been translated to concrete action as the conditions of facilities are deteriorating in schools, coupled with increase in students' enrolment.

### **Statement of the Problem**

Technical Institutions in Nigeria are experiencing serious inadequacy and in some cases unavailability of the relevant facilities such as hand tools, equipment, consumable materials and instructional media. Awujo (2007) observed that Vocational Education has not received the attention it deserves in the education sector of the country. The TVE continues to be under-funded by State Governments, without financial support from the private sector, leading to poor programme implementation, lack of programme credibility and unemployment of the graduating students. It is widely suspected that the global economic crisis is partly responsible for the poor situation, but it is not so far determined whether there is any relationship between the GEC and the inadequacies so experienced in the TVE.

### **Purpose of the Study**

The study is intended to determine the relationship between global economic crisis and inadequacy of TVE facilities in Akwa Ibom State. Specifically, the objectives are:

- (i) to determine the relationship between global economic crisis factors and inadequacy of workshop facilities for the TVE curriculum.
- (ii) to determine the relationship between global economic crisis factors and inadequacy of instructional media/technology for the TVE curriculum.

### **Research Questions**

- 1) What is the relationship between global economic crisis and inadequacy of workshop facilities for the TVE curriculum?
- 2) What is the relationship between global economic crisis and inadequacy of instructional media/technology for the TVE curriculum?

HO<sub>1</sub>: There is no significant relationship between global economic crisis and inadequacy of workshop facilities for the TVET curriculum.

HO<sub>2</sub>: There is no significant relationship between global economic crisis and inadequacy of instructional media/technology for the TVET curriculum.

### **Review of Related Literature**

A lot of literature materials have indicated the very low level of funding persistently allocated to education in general and to TVE in particular by the Federal Government and the different State governments. Najimu (2008) cited Chiweyike (1990) as decrying the inability of Government to finance technology to a level that would make appreciable impact on national economic development. The low funding situation has had serious consequences on the administration of the TVE, which according to Kareen and Usman (2008) is leading to a near total collapse of the whole educational system in Nigeria including the Technical and Vocational Education Programme.

The global economic crisis is worsening the situation as it is becoming more difficult to administer an effective TVE; this has led to poor management and poorly trained graduates, who cannot be useful to themselves due to inadequate learning environment. UNESCO (2000) emphasized that good

quality teaching and learning environment assure effective learning outcome. According to Akpan (1997), financial constraints have affected seriously, the administration of schools, giving rise to lack of resources and facilities which in turn affects the effectiveness of the school administrators in the implementation of the curriculum. The lacks of facilities, equipment, coupled with adverse policy issues constitute a serious problem toward the success of the TVE. Though the global economic crisis affects the TVE negatively, Government must use the TVE effectively to ameliorate the suffering of the people by funding it properly to provide adequate training in entrepreneurial skills which will enable them be self reliant in the face of the GEC. Some studies (Awotisayo 1997 cited in Maigida 2007 and Mbaba, Essien and Akpan 2003) have indicated that the TVE curriculum does not satisfy the needs of employers in terms of attainment of standards of skills desired by them as the training lacks relevance and does not relate to viable practical skills needed at the workplace.

Many people blame the GEC for the pathetic state of affairs in the technical institutions, but the question is, what is the relationship between the global economic crisis and the perceived inadequacy of facilities for the TVE? This study intends to gather data to answer this question.

### **Methodology**

The study used a descriptive survey design. The population used was 139 technical teachers in the six public Technical Colleges in Akwa Ibom State (source: Akwa Ibom State Technical Schools Board 2008/2009). A random sample of 100 technical teachers was used for the study. The researchers developed instrument called Global Economic Crisis Factors and Technical/Vocational Education Facilities (GECFTVEF) was validated and used for gathering data for the study. The instrument sought for the respondents' (Technical teachers') perception of the impact of the global economic crisis on the TVE funding by government, non-governmental agencies and individuals on one hand, and their perception of such impact on certain aspects of administration of the TVE namely workshop facilities and instructional media to enable it provide skills required by students for employment and job creation, meeting the standards required by employers and meeting public expectations on the other hand. It was structured with four point response options of very great extent (VGE = 4), great extent (GE = 3), less extent (LE = 2) and very less extent (VLE = 1). The instrument's reliability was .93 obtained using the Kuder Richardson (KR - 21) formula after administering it on 39 Technical teachers.

The Pearson Product Moment Correlation Coefficient (PPMC) was used to analyse the data at .05 level of significance.

### Findings

Data for global economic crisis, workshop facilities and instructional media/technology are presented on table one, table two and table three respectively.

Table 1 showed that all the 10 materials except one bothering on TVE funding were all affected by the global economic crisis. Their mean scores range from 1.14 to 2.46, indicating inadequacy which means that they were seriously affected by the GEC. Together all the 10 materials in this table had a mean of 1.93. Data on table 1 (GEC) were used as independent variable data while inadequacy of workshop facilities (Table 2) and inadequacy of instructional media (Table 3) were used as dependent variables.

The 10 materials in workshop facilities section (Table 2) except one recorded inadequacy with means ranging from 1.5 to 2.39. The total mean of this group was 2.16. Since they are all below the cut-off point of 2.5, it means that the facilities are inadequate to support the TVE probably as a result of the GEC. The facilities surveyed include hand tools, machine/power tools, well ventilated workshop, service equipment and consumable materials. Others were simulation laboratory, Personal Protective Clothing (PPC), fire extinguishers and health facilities/clinic.

In table 3, respondents indicated that the 10 instructional media for TVE are inadequate, with means ranging from 1.02 to 2.39. The total mean for the materials here was 1.44. That means that modern instructional media are not provided for the TVE currently.

**Research question 1:** What is the relationship between global economic crisis and inadequacy of workshop facilities for TVE?

**H<sub>01</sub>:** There is no significant relationship between global economic crisis and inadequacy of workshop facilities for TVE.

Table 4 was used to answer this question and test the hypothesis with tables one and two providing the data.

Table 4 showed an  $r_{cal}$  of .4207 implying a positive relationship between the global economic crisis and inadequacy of workshop facilities for TVE curriculum. Furthermore, when compared with the  $r_{cri}$  of .1946, the  $r_{cal}$  .420 is

significant, leading to the rejection of  $H_{01}$ . Table 4 was used to answer this question and test the hypothesis with tables one and two providing the data.

**Research question (2):** *What is the relationship between global economic crisis and inadequacy of instructional media/technology?*

Table 5 was used to answer this question with data from tables one and three.

**HO<sub>2</sub>:** There is no significant relationship between global economic crisis and inadequacy of instructional media/technology for TVE.

The  $r_{cal}$  of .5816 on Table 5 implies a positive relationship between global economic crisis and inadequacy of instructional media. Since the  $r_{cal}$  of (.5816) is greater than the  $r_{cri}$  (.1946) the hypothesis is hereby rejected.

### **Discussion of Findings**

This study has revealed a significant relationship ( $r = .4207$  at  $p < .05$ ) between the global economic crisis (GEC) and inadequacy of workshop facilities for the TVE. This means obviously that as the GEC bites harder, inadequacy of workshop facilities are more and more experienced for the TVE. This is obvious because with the GEC, industries, Government, individuals and donor agencies are cash-trapped and cannot contribute meaningfully to the funding of the TVE. Vocational education is very expensive; therefore government and nongovernmental organizations should make adequate allocation of resources for it as poor investments cannot yield attractive returns. The study has revealed a very dire situation of gross inadequacy of workshop facilities such as hand tools, machines/power tools, safety/personal protective clothing, fire extinguishers consumable materials, and health facilities probably as a result of the global economic crisis. This does not augur well for skill development in TVE, yet all indicators point to the TVE as an important tool for self-reliance and economic development. The low relationship coefficient of  $r = .4207$  however shows that though the global economic crisis has a positive relationship with inadequate workshop facilities, economic factors are not the only factors that contribute to inadequacy of facilities. Other factors include social, cultural, environmental and political factors all of which play significant roles in effective implementation of the TVE. This implies that effective implementation of the TVE requires not only funding but a multi-faceted approach with the cooperation of all stakeholders.

Furthermore, the study revealed a serious inadequacy of instructional media/technology for teaching in the TVE. It showed a relationship

coefficient ( $r$ ) of .5816 between the GEC and inadequacy of instructional media/technology (IMT). Again this indicates that as the global economic crisis persists, inadequacy/unavailability of instructional media/technology for TVE continues to be experienced, leading to poor training, unemployment and general dissatisfaction with the TVE curriculum by stakeholders. While the developed countries in Europe and America now use multimedia technology for teaching in the TVE, such as power points, computer, video cassette recorder (VCR) and internet, films and slides etc these instructional media are, not available for use by teachers of TVE in Nigeria. Experts (Dike 1998), Udofia 2000 and Etim 2006 have shown the relationship between instructional media utilization and students' academic performance on one hand and the relationship between utilization of instructional media and teachers' performance on the other hand. Non-utilization of instructional technology is a serious handicap experienced by teachers in educational institutions in Nigeria, and this situation has actually scuttled effective teaching service delivery in the TVE.

### **Conclusions**

The TVE programme has greatly been negatively impacted by the global economic crisis in various ways, the result which is a poorly administered TVE, which its graduates can neither be employed nor capable of being self-reliant. The study has shown significant relationships between global economic crisis and each of the dependent variables namely inadequacies of workshop facilities and instructional media technology. It underscored the importance of adequate funding of the TVE for the provision of workshop facilities and instructional media to bring about a programme which will meet the needs of stakeholders.

### **Recommendations**

- (1) Adequate funding is necessary for effective administration of the TVE; Government, non-governmental organizations and individuals should join hands and provide the funds.
- (2) The Federal Government is to be commended for the economic reforms so far implemented especially the Bank capitalization and the bailout / stimulate package of ₦ 620b to prevent the collapse of five commercial Banks in Nigeria, however, government should continue to put measures in place to stimulate the economy and create jobs. A viable economy will increase funding for education, including the TVE.



- (3) Government should pay more attention to the TVE by providing a conducive environment in terms of provision of hand tools, machines, consumable materials and instructional media/technology.
- (4) Students on Industrial attachment and their supervisors should be paid allowances to motivate them.

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**Table 1:** Mean rating of respondents on the impact of global economic factors in Administration.

	To What is the extent has the global economic crisis affected the TVE as follows:	Very Adequate VGE (4)	GE (3)	LE (2)	VE (1)	[ X	X —	Decision
1	Adequate funds are provided for the TVE programmes	2	35	54	9	230	2.30	Ina
2	Corporate bodies assist in funding the TVE.	1	5	20	74	133	1.33	Ina
3	Individuals assist in funding the TVE	-	10	18	72	138	1.38	Ina
4	Adequate facilities are provided for the TVE	4	42	50	4	246	2.46	Ina
5	International/Donor agencies assist the TVE with funds	-	2	87	11	191	1.91	Ina
6	Government funding for TVE is prompt	8	33	40	19	230	2.30	Ina
7	Government funding for TVE is regular	32	30	31	7	287	2.87	Ade
8	TVE students are paid allowance while on individual attachment.	-	5	15	80	125	1.25	Ina
9	TVE supervisors of students on industrial attachment are paid allowances.	-	2	10	88	114	1.14	Ina
10	Adequate practical experiences are taught in the TVE.	8	35	42	15	236	2.36	Ina
	Total	55	199	367	379	1930	1.93	Ina

Ade = Adequate, therefore not affected by the global economic crisis.

Ina = Inadequate, therefore affected by the global economic crisis.

**Table 2:** Mean Rating of Respondents on inadequacy of workshop facilities for TVE.

N = 100

	What is the extent of inadequacy of workshop facilities for TVE in terms of:	Adequate VG (4) Very	GE (3) Adequate	LE (2) Inadequate	VE (1) Very Inadequate	X	X —	Decision
11	Essential hand tools for practical experiences.	2	40	45	13	231	2.31	Ina
12	Non-essential tools (ones used occasionally).	5	26	50	19	217	2.17	Ina
13	Machine/power tools	0	15	38	47	168	1.68	Ina
14	Non-tool/service equipment	8	22	25	45	193	1.93	Ina
15	Consumable materials	10	30	49	11	239	2.39	Ina
16	Well ventilated workshop	15	35	44	6	259	2.59	Ade
17	Simulation laboratory	2	12	20	66	150	1.50	Ina
18	Personal Protective Clothing (PPC)	5	40	40	15	235	2.35	Ina
19	Fire extinguishers	8	32	45	15	233	2.33	Ina
20	Health facilities/clinics to support TVE	4	38	48	10	247	2.47	Ina
	Total	59	290	404	247	2161	2.16	Ina

Ade = Adequate

Ina = Inadequate

**Table 3:** Mean rating of respondents on inadequacy of instructional media/technology for the teaching of TVE.

N = 100

	What is the extent of inadequacy of instruction of media/technology for the TVE as follows:	VEG (4) Adequate	GE (3) Adequate	LE (2) Inadequate	VE (1) Very Inadequate	X	X —	Decision
21	Overhead projector	-	8	42	50	150	1.50	Ina
22	Computer software	-	-	2	98	102	1.02	Ina
23	Computer hardware	-	1	3	97	106	1.06	Ina
24	Radio/cassette recorder	-	2	2	96	106	1.06	Ina
25	Video/television	-	-	3	97	103	1.03	
26	Internet Networking	-	-	-	100	100	1.00	Ina
27	Adequate Textbooks	3	14	45	38	182	1.82	Ina
28	Charts	12	40	23	25	239	2.39	Ina
29	Schematics/Drawings	18	25	15	42	219	2.19	Ina
30	Technical Journals	12	4	12	82	126	1.26	Ina
	Total	35	94	147	725	1441	1.44	Ina

Ade = Adequate

Ina = inadequate

**Table 4:** Relationship between global economic crises and inadequacy of workshop facilities

S/n Variable	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	df	r
1. Global Economic Crisis	1930	38786	42888	98	.4207*
2. Inadequate of workshop Facilities for TVE.	2161	51823			

\*Significant at  $p < .05$

**Table 5:** Relationship between global economic crisis and inadequacy of instructional media/technology

S/N	Variables	$\sum x$ $\sum y$	$\sum x^2$ $\sum y^2$	$\sum xy$	df	r
1. Global Economic Crisis		1930	38786	28466	98	.5816*
2. Inadequacy of instructional Media/technology for TVE		1441	21589			

\*Significant at  $p < .05$