

# STRATEGIES FOR IMPROVING MANPOWER PRODUCTION IN VOCATIONAL TECHNICAL EDUCATION IN NIGERIA

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## ABSTRACT

Nigeria as a developing country needs manpower to satisfy both the social and technical needs of the society. But the dearth of manpower production to satisfy these needs leaves much to be desired. This paper examined the problem of manpower production in vocational technical education in Nigeria and discussed approaches for manpower production in Nigeria. Key Words: Manpower, Vocational Technical Education, Industrial Work Experience

## INTRODUCTION

Man in any society has some specific duties to perform in order to live a happy life. As man continues to live in his environment his demand and problems continue to rise, ranging from single to complex. Nowadays, the need of any society has long transcended from those of food, shelter and clothing. They have grown to encompass the need for wealth, prestige, physical fitness, political independence, transportation and communication among others. As these demands continue to be complex, therefore, there arose the need to equip man strongly to grapple with the complexity of demands in his environment, hence the emergence and development of vocational education to develop manpower to help solve the aforementioned societal needs.

According to Smith (1991), vocational education in its broad sense refers to the training that enables one to carry on successfully a socially useful occupation. This definition refers to vocational education as training for useful employment in trade and industrial, agricultural, business and home making among others. Manpower on the hand according to Okorie (2000) could be seen as the total supply of person available and fitted for service.

Thus vocational education prepares manpower since according to Olaitan (1992) vocational education is a process of getting people ready and keeping them ready for the types of service we need. Vocational education is thus a sine-qua-non for manpower development. Unfortunately, the level of manpower production

in vocational technical education compared with the needs of the society for technical development has never been encouraging. Ozoro (1990) stated that vocational technical education has remained uncoordinated, unplanned, inadequate and to a considerable extent irrelevant to societal needs.

It is also unimaginable that in a country like Nigeria where resources abound, many technicians and technologists are found in the streets of towns and cities without jobs, a situation which buttresses Ozoro's claim that their training is inadequate for or irrelevant to societal needs. It is against this background that it becomes important to seek ways of improving the quality and quantity of manpower production in vocational technical education in Nigeria.

## PROBLEMS OF MANPOWER PRODUCTION IN VOCATIONAL TECHNICAL EDUCATION IN NIGERIA

Since independence, the quality and quantity of manpower produced in the country have been constrained by a number of factors. These include:

### Over reliance on imported technology:

Steward (1989) noted that the poverty in the third world countries is traceable to the underdeveloped state of their abundant manpower. Thus so much labour is idle most of the time and while in use labour productivity is low. Igwe (1985) equally attributed the low productivity of manpower in Nigeria to technological dependence. He observed that a country's march towards industrialization should

not go for the alternatives by importing package of such forms that require mere robot-like and routine operations. If this happens, the training system cannot but provide such caliber of manpower.

#### **Ineffective organization of industrial attachment:**

It should be noted that the student industrial work experience scheme (SIWES) programme, which was designed to familiarize trainees with the world of work is fast degenerating into a mere formality. This according to Mbata (2000) is that the programme has fallen short of expectation as a result of poor coordination between industries and training institutions. Other cases of degeneration as outlined by Osinem and Nwoji (2005) including:

1. Limited number of well-equipped industries
2. Trainees/ students apathy towards industrial work experience
3. Apathy of industrial and institutions staff towards the supervision of industrial work experience
4. Non- provision of allowance/ incentive to some participating trainees/ students
5. Non- provision of allowance to all staff
6. Failure by the SIWES unit to prepare the master list and placement list in time
7. Non-streamlined job specification by institutions and employees
8. Absence of orientation programme for SIWES participating students

Placement services that are lacking include: information on knowledge and skills of different occupation, technique of getting a suitable place for the attachment and proper attitude toward work, co-worker, supervisors and adult world among others.

#### **No sufficient data on manpower needs:**

There is no reliable statistics on manpower demands in technical manpower development in the country. Data available are mere projections of output from training institutions. In support of this, Olaitan (1992) observed that there has been acute shortage of data on manpower demand since independence. The few available ones are too current with time and expected plan for development. The lack of statistics on manpower needs tends to account for the incidence of unemployment among technicians and technologists which also is occasioned by the inability of the trainers to tailor training efforts toward manpower need and

effective demand by industries and other agencies.

One of such serious needs that lacks data in the rising demand for skilled personnel. With industrial development, there is need for training programmes for persons for all working ages to help meet demands for new skills and adaptation to changes in the industrial structure.

#### **Attitude of industries:**

Any investment in vocational technical manpower production and development does not only benefit the trainee and the government, but more so the industry. Okorie (2000) note that although industries usually prefer their job specific in plant training programme to formal training, sometimes products of formal vocational technical institutions form the bulk of their trainee- employees. The foregoing suggests that there is therefore the need for big employers of technical manpower (mostly industries) to contribute materially towards formal training of technical staff.

#### **Poor state of training institutions:**

There are four major problems faced by vocational technical institutions. These according to Okorie (2000) include quality of entrants, staffing situations, very low level of funding and inadequate training facilities. The quality of students who now gain admission into vocational technical training institutions are without the requisite qualifications, these may be the left over from those who could not be accommodated by general education and when admitted into vocational institutions, they end up graduating within the available facilities and funds, with non-marketable certificates.

In addition to poor quality of entrants, adequate training facilities, qualified technical instructors and funding are becoming very scarce in training institutions. In the country today, training institutions as is the characteristics of depressed economies are hardly able to get enough instructors to be adequately funded and to render their facilities to keep pace with technological progress.

According to Boyi (2008) infrastructure in schools today reveal that some schools do not even have a defined workshop where students can practice what they learn practically. Some buildings have had their roofs removed, windows and doors pulled out, no desks for students to sit comfortably and learn. These students are exposed to cold or hot weather and sometimes they are beaten by rain under trees where they

manage to take shelter. At times one wonders how meaningful learning can take place under this atmosphere.

A critical assessment of our institutions revealed that some machines supplied by the federal government as far back as 1982 to technical colleges are still lying in crates (in some cases outside) for lack of workshops to install them. Parts of these machines have depreciated, others have disappeared over night or converted to personal use by domestics thieves. In some cases, the few machines available have become too old to be used or have broken down due to lack of maintenance. Facilities that are functioning have no electricity to power them.

The implication of inadequate facilities for technical education on the nation will among others include: low level of advancement, low productivity, high level of unemployment, poverty will engulf the nation, over-dependence on foreign nations for materials and human resources, high level of crime, political and economy stability, shortage of qualified vocational technical teachers, insecurity of lives and property, conflicts, over-dependence on few people working, loss of national reputation and high level of prostitution.

### **APPROACHES TO IMPROVING MANPOWER PRODUCTION IN VOCATIONAL TECHNICAL EDUCATION**

In view of the foregoing, various approaches that can be used to foster improved manpower production in vocational technical education include:

#### **The solution to the problem of dearth of manpower information:**

There is need to forge closer links and cooperation between industries, training institutions and government than it exist presently. Accordingly, Okorie (2000) is of the view that employees of technical manpower, if they have a stake in the quality of manpower produced, would display greater commitment through job training and financial contribution to promote the quality of training in technical institutions. Such employers, he further noted, having contributed materially, would be more forthcoming in exposing trainees on industrial attachment to worth-wile work experience and in helping to evaluate their job performance. This can be achieved by inducing enterprises to develop training programmes especially designed

to meet employers' needs, technical institutions would be ensuring that their products are accepted in the world of work. However, care must be taken not to limit the employment opportunities and job mobility of the products by putting them through straight-jackets-job specific training programmes.

#### **Giving the employer the opportunity to participate in recommending training for job seekers and potential students:**

If this is done, employers become committed towards enhancing the quality of the programme. Lending credence to this approach, Olaitan (1992) believed that such an approach would serve as a check on high unemployment rate as it encourages trainees to seek employer or maintain contacts with employers before enrolment.

#### **Outright streaming of students into training institutions:**

This is for those seeking training only where the need to improve quality and quantity of products becomes obvious. Entry into different types of schools must be influenced more by the nation's needs and students potentials for meeting such needs than personal preferences. At the senior secondary level, students should be streamed into technical, commercial and grammar schools on the basis of their potentials as exhibited in the junior secondary school examination and the WAEC aptitude test.

#### **Periodic appraisal of manpower needs assessment:**

This should be done between 8-12 year bearing in mind the logistics and cost implications of such an exercise. Also, periodic revision and accreditation of programmes should be conducted immediately after each manpower need assessment exercise. The aim of periodic appraisal of manpower need assessment is to keep pace with technological assessment and with technological development.

#### **Improvement in the quality of vocational technical education programmes:**

In his contribution to the additional roles of the national board for technical education, Olaitan (1996) suggested that the board should have an advisory for technical education. The

achieve the high standard necessary for them to lead fulfilling lives and become productive citizens for sustainable national development that is much sought for.

Staff development and training are related processes which help the organization to keep abreast with the correct trend in education system. Training according to Inyang and Akpama (2002) could be in the systematic development of knowledge, skills and attitudes required by an individual to perform adequately in a given task or job. This presupposes that training in any organization is aimed at giving employees at all levels sufficient instruction and guidance to enable them perform their job effectively and prepare themselves for promotion and advancement (Inyang, 1998). Fafunwa (1991) opined that no significant change in education could take place in any country unless its teaching staff is well trained and retrained. Researches globally and nationally have reiterated teachers' roles, responsibilities and contributions to union building and development (Olubor, 2000; Sim, 2004; Ifamuyiwa, 2007). This can be sustained through constant staff development and training.

Facilities and instructional materials are also of utmost importance if proper learning is to take place. UNICEF emphasized the importance of the learning environment when it encouraged schools to have child-friendly learning environment.

The UNICEF child-friendly initiative is a school where the learning environment is conducive, quality education is ensured (Enueme, 2002). Unfortunately, most of the Nigerian schools are characterized by inadequate classroom space, furniture, equipment, teaching

and learning materials and poorly motivated teachers, (Enueme, 2002). This is in support of Ozigi (1977) who recognized the importance of facilities and equipment to a teacher and referred to them as teachers trade tools. He pointed out that an institution lacking in essential equipment could not reasonably expect to achieve its objectives.

From the perspective of Nigerian educational developmental history, there have always been substantial shortcomings in Nigeria's institutional and personnel capacities for the delivery of a sound education for all citizens. The Federal Republic of Nigeria (2004) declares that there are widespread disparities both in quality and access across the nation. Available infrastructural facilities, teaching and learning materials as well as qualified teachers are grossly inadequate. Odigbo (2005), NERDC (2002B); NERDC, (2002), Maduwes, (2004) documented that the following factors contribute to low quality of education in Nigeria: poorly motivated and unqualified teachers, lack of materials and equipment, overcrowded classroom, lack of furniture, teaching and learning materials.

Despite government outlined aims and objectives for secondary education, the expectations are yet to be achieved. On the other hand, the lowered quality of education in Nigeria has been a source of concern to government, institutions, the community, researchers and educators. This is confirmed by the performance of students in science subjects during the period covering 2003 – 2005 as indicated by table 1.

**Table 1**  
3-Year % Performance in (5) Science Subjects in May/June  
WASSCE (2003- 2005)

Subject	% of passes at credit level (1-6)			& of failure (F9)		
	2003	2004	2005	2003	2004	2005
General Mathematics	36.83	33.97	38.2	23.74	34.47	34.41
Physics	46.9	49.4	41.5	18.78	19.26	25.88
Chemistry	49.44	37.88	50.94	21.51	32.76	27.28
Biology	42.22	29.68	35.74	26.47	34.68	32.18
Agricultural Science	41.67	23.48	15.51	26.42	48.67	53.46

**Source:** Adapted from WAEC. CRS Committee Report (2006)

Analysis of data on table one showed an overall below average in percentage of passes at credit level (1-6) in all the subjects for 2003, 2004, 2005 WASSCE. This staggering decline in student's performance according to Odusumo (2001) is due to lack of textbooks and other facilities as well as teachers' poor attitude to work and job ineffectiveness. Edet (2006) blames it on lack of staff training, exposure to new methods of teaching, and teachers' low morale/esteem.

From the foregoing, one wonders if there is any significant relationship between teachers' non monetary compensation and their attitude to work. The problem of this study therefore is to ascertain if there is any significant relationship between non-monetary compensation and teachers' attitude to work.

**HYPOTHESIS**

There is no significant relationship between teachers' non monetary compensation and their attitude to work

**METHODOLOGY**

The research design adopted for this study is the ex-post factor design. The area covered is Cross River State of Nigeria. The population included three thousand three hundred and forty eight (3348) teachers and fourteen thousand Senior Secondary two (SSII) students in two hundred and eight (208) public secondary schools in the three (3) educational zones in Cross River State.

**SAMPLE**

The sample size was made up of five hundred (500) teachers and two thousand

students (2000) drawn from thirty (30) public secondary schools in the three (3) educational zones of the state. The students were used to assess teachers' attitude to work. This amounts to 15% of the total population.

**INSTRUMENTATION**

The instrument used for the study were the researchers developed questionnaires called Teachers' Non Monetary Compensation Questionnaire (TNMCQ) and Students Assessment to Teachers' Attitude to Work Questionnaire (SATAWQ)

TNMCQ was designed to elicit information from teachers' on their satisfaction with non monetary compensation (staff development, esteem/recognition, adequate facilities). SATAWQ was designed to enable students assess teachers' attitude to work. The instrument was subjected to scrutiny by experts in Educational Measurement and Evaluation. Choices and corrections were made to produce the final instrument. This process ensured the face and content validity of the instrument.

**RESEARCH QUESTION**

To what extent are teachers' satisfactions with non monetary compensation related to their attitude to work?

**RESULTS**

**Hypothesis** There is no significant relationship between teachers' satisfaction with non monetary compensation and their attitude to work

**TABLE 2**

Pearson Product Moment Correlation of the relationship between teachers' satisfaction with non-monetary compensation and teachers attitude to work (N =500)

Variables	Correlations			
	Rx <sub>1</sub> y <sub>1</sub>	rx <sub>2</sub> y <sub>2</sub>	rx <sub>3</sub> y <sub>3</sub>	rx <sub>T</sub> y <sub>T</sub>
Non-Monetary Compensation				
X. Staff Development	.096*	.096*	-.083	.053
X. Esteem and Recognition	-.014	.014	-.030	-.017
X. Instructional Materials	-.009	-.045	-.071	-.020
X. Total non-monetary compensation	.031	.073	-.090*	.005

\*significant at .05 level, df = 498, critical r=0.088

**Key:**

$Y_1$	=	Punctuality
$Y_2$	=	Quality of work
$Y_3$	=	integrity at work
$Y_T$	=	Total attitude to work

The result of the analysis in table 2 indicated that there was a positive relationship between teachers' satisfaction with staff development and their punctuality ( $r = .096$ ;  $P < .05$ ); teachers' satisfaction with staff development and their quality of work ( $r = .096$ ;  $P < .05$ ). This was because the calculated  $r$ -values of .096 and .096 were higher than the critical  $r$ -value of 0.088 at .05 alpha level and with 498 degrees of freedom. With regards to the above result the null hypothesis was rejected and the alternate hypothesis retained. This implied that the higher the teachers' satisfaction with non-monetary compensation in terms of staff development, punctuality and quality of work respectively the more favourable their attitude to work in terms of punctuality and quality of work.

Further examination of table 2 showed that there was a significant negative relationship between non-monetary compensation when taken together and teachers' integrity at work. This was because the calculated  $r$ -value of -.090 was greater than the critical  $r$ -value of .088 at .05 alpha level and with 498 degrees of freedom. The null hypothesis for this case was also rejected and the alternate hypothesis accepted.

**DISCUSSION**

This study showed that there was a relationship between non-monetary compensation and attitude to work when taken individually, it was interesting to note that results on table 2 showed that teachers staff development in Cross River State had significant influence on their punctuality and quality of work while the total non-monetary compensation in terms of staff development, esteem/recognition and instructional materials had significant relationship with teachers' integrity at work.

This asserted the importance of staff development in the career growth of teachers in Cross River State. It should be noted that knowledge is not static, it is growing everyday. What holds for truth today may be obsolete tomorrow. This was in line with Ryan (1960) who noted that educators whose professional knowledge and skills were not up to date become

not only increasingly obsolete but down right dangerous to society. Thus, who dared to teach must never cease to learn. Okpala (1999) also agrees that training did not exist for its own sake. Its function was to increase effectiveness and satisfaction.

These findings supported Chapman (1994) who stated that one reason for the low morale that could lead to teachers' low performance and attrition was that teachers were poorly prepared for the challenges of the classroom. If they lacked the skills to prepare and deliver lesson contents, maintain classroom discipline and merged the flow of classroom activities, they could quickly become discouraged.

Further still, he said that it was not uncommon in some countries for teachers to have 2-3 grades of schooling more than the children they taught. Even teachers with more education might lack the pedagogical skills or solid grounding in the particular content they were expected to cover. To curb these problems, he recommended frequent seminars and professional contacts with educators as its provided opportunities for the teachers to develop a network of social relationship with counterparts from other communities. Consequently, this could reduce teachers' sense of isolation and build a sense of spirit that could contribute to higher professional morale and performance.

As regarded teachers' low integrity at work, the problem surrounding the school system in Cross River State had been that of general slack in morale which stemmed from the lack of recognition, poor earnings which did not meet their needs or the needs of their extended family members under their care. As a result of this, teachers involved themselves in the act of extortion of money from students, embezzlement of school funds and other behaviours to meet their need. Therefore, the low attitude to work by teachers in Cross River State secondary schools was not innate; it was a reaction to the condition in which teachers found themselves.

Also instructional materials/facilities related significantly to attitude to work which accounts for the poor quality of graduates turned



out into manpower market. The learning facilities and environment should be of utmost importance for effective teaching and learning. No wonder Oyesola (2000) lamented that it was pathetic to find students sitting on the floors without desk or being taught in classrooms which were death traps due to their poor dilapidating states of having over a hundred students in a class designed to accommodate forty students.

Oloyede (2008) agreed completely with the findings of this study when he recommended that seminars, workshops, training, retraining programmes should be organized for teachers, infrastructure, facilities, conducive environment and training packages should be put in place for effective productivity

## CONCLUSION

Based on the findings of the study it is concluded that staff development was mostly valued by the teachers and had a major role to play in terms of punctuality and quality of work. Employee training and development therefore are at the heart of employee utilization, productivity commitment, motivation and growth. This training could be the systematic development of knowledge, skills and attitudes required by an individual to perform adequately in a given task or job. Therefore teachers' training should be government priority. Also teachers' professional status, esteem has been noted as a strong conditioner for their commitment and performance. These privileges and the provision of instructional and infrastructural facilities mentioned in the study are expected to motivate a tenured staff meet the obligation of their organization including effective teaching.

## RECOMMENDATIONS

The following recommendations were made in line with the findings:

1. The issue of staff development should be viewed more seriously by the Ministry of Education and the State Secondary Education Board. A well planned growth oriented professional through staff training exposure to latest research in science and technology, arts and social science, the art and science of administration as well as pedagogy of teaching should be organized for teachers on a yearly basis as this will help update their knowledge and

contribute to effectiveness in instructional delivery.

2. Teaching should be made a profession to lift her status. This will redeem to some extent teachers low morale/esteem and their attitude to work.
3. Instructional facilities and other infrastructures like classrooms, furniture, textbooks etc should be provided by government and other stakeholders to create a better atmosphere for effective teaching and learning.

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