Balancing Resources Input With Technology Requirements In Nigeria

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ABSTRACT

This study was carried out to investigate the balance between resources input and technological requirements in Nigeria. Two research questions were drawn to guide the investigation. Data were gathered from 4860 sample subjects through the instrument of questionnaire.. The analysis of the data was carried out with the use of simple percentage on two tables. The findings which were made led to the conclusion that there was no balance between resources input and technological requirements in Nigeria. Recommendation was offered appropriately.

Introduction

There have been complains over the years that Nigeria does not seem to have economic development focus. The result of which the country probably has many excruciating crisis of non balance of trade, low per capita income, high inflation, non stable foreign exchange rate, importation of almost all goods (used goods now predominantly inclusive), etc. Yet it is to supply goods and services for local needs and exportation that is the primary purpose of education which Nigeria ought also be involved in.

Since 1960 when educational experts such as Harbison (1960) propounded the idea that the formation of human capita is the linchpin for national development, Nigeria and almost the rest African countries have been making relative massive investment s in education. The hope was that the education of the respective citizens in Africa countries wound bring about rapid development in the national settings.

A close assessment of how much education has helped in the provision of skills and knowledge towards development in Nigeria reveals that there are argument for and against acceptable level of economic, political and socio cultural progress owning to the huge investments of material and human resources in the system. Why some people argue that the necessary technological inputs especially in the fields of engineering and computer are not provided adequately to move the country up socially and economically. There are those who complain that Nigeria's attention on development is not focused since there is usually no matching between resources input provision and technological development requirement in Nigerian. This was the basis of this study.

Objective of the Study

Because of the fearce arguments which abound that Nigeria is not developing owing to the nature of its technological education which their

citizens acquire, the urge to start off this investigation emerged. For example, some people complain that the educated individuals are not adequately trained hence their level of productivity is comparatively low. They argue that the educational skills and knowledge offered and acquired in the school setting are not based on technological development, a need which has provided power of efficiency and effectiveness to developed countries in the pursuit of their national goals and objectives

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Another school of thought's evaluation of national goals argues that it is matching between investments on resources input and the technological applications that should be examined in relation to provisions of needs and requirements in Nigeria. Seeming to differ sharply, the group argues that the benchmark of matching level is not even high but that where problems exist may be in the aspect of supply of job opportunities. They argue further that unemployment and level of job performance might have played some keys roles in low level development in Nigeria.

The deployed individuals in working situations in Nigeria play different roles in their respective organizations. But still all of them argue that what impedes their level of productivity most often is inadequate supply of their respective personal needs. While many also complain of short supplies of

their requirements, some others also complained of wrong low quality technological material supply. But they all seem to maintain one voice on the complain that their level of productivity is probably low because of the problem of late responses to requests outside time-frame.

Imagining the immense significant benefit which are likely to occur to the entire facets of the country, if the technological education is properly harnessed, the researchers decided to embark on this investigation. As a result they formulated two questions which guided in carrying out the study as follows:

1. Is there a balance between resources inputs and the technological requirements in Nigeria?

2. Are factors of positive influence on technological skills acquisition adequately provided for in Nigeria?

The need to properly design educational goals and provide relevant inputs to achieve national goals and objectives in Nigeria cannot be over emphasized. To succeed in the pursuit of national goals and objectives, Nigerian leaders have lesson to learn from Pennsylvania (2002) which advised developing nations to invest on their human resources and to also publish the outcomes in terms of employments.

Realizing that it is education that serves as the most potent instrument for creation of human capital formation which according to Harbison (1963) provides the basis of wealth of nations, the trained individuals need to be seen as the agents of hope in terms of national economic, socio-cultural and political development. The expert holds that it may be expedient to adopt the educational system which should be on the basis of character building and effort maximization toward the implementation of school curricular, school improvement strategies etc. The author also states that the implementation of educational objectives should be pursued through the process of selecting, collecting, analyzing and assessment of resources to achieve the set goals of technological development programmes.

 The author also states that the need for maximization of human and material resources is because school institutions are the paramount agent of change in terms of economic and social development. Hence, Anneslay (2005) instructs that majority of the resources to schools should be provide by government as it is done in developed countries. The author went further to state that such resources include staffing, funding, curriculum materials, etc.

The world-bank (2003) however identified some problems and categorized them into three aspects which it associated with allocation and utilization in the educational settings as follows:

i- Inadequate or lack of accountability

ii- Arbitrary allocation of resources

iii- Limited and inaccurate data in regard to resources

For education to be supplied and acquired to generate national development, matching input is necessary. In this regard, Walter (2001) instructs that available resources are required to be identified and that government should take stock of the resources periodically. The stock according to the author should include finance, human and material resources which he proffered should be allocated in accordance with the goal under pursuit. Witham (1992) offered the formula of allocation as follows:

i- For fixed need in each organization (school) e.g. salaries of teachers, funds for facilities, utility charges etc.

ii- Additional fixed amount for each organization (school).

iii- Per capita base for every individual (student).

According to world Bank (1991), the available resources and the utilization in a growing economic system must take account of the development commitment in the society, which are in competition for the resources allocation to achieve the desired efficiencies among all the components of national development. To exemplify balancing technological requirement with resources, Schwatz and stiefel (2004) assert that school institutions with greater needs but with concentrated minority representations have more staff but with less salaries. Roza and Hill (2003) in their studies revealed however that school institutions with high needs had more allocation of teachers than those with less needs. They amplified that provision and allocation of resources to areas of need in education is so vital that government at all levels need to consider a reliable system of resources allocation. This is by adopting what Miles and Roza (2004) identified as simplification of allocation method. The authors described the method as "mortification" of allocation process in terms of resources increase or decrease.

Investigation methodology

Sampling method

A sample of 4860 was taken for the study. The technique adopted in arriving at the selection of the figure was by selection of 10 out of the present 36 states. The authors selected 5 states from the North and 5 from

the South of Nigeria through random sampling technique. Finally 500 sample was selected from each state to attain the total 5000 drawn initially for the study through sampling technique. The sample was made up of students, teachers, heads of institutions of learning, graduate workers, employers of labour, ministries of education, technology, labour and productivity, as well as the federal office of statistics. The sample consisted of more males of 3250 than females who were only 1750.

Instrument of the study

Questionnaire method was adopted in drawing relevant data from the sample subjects. The administration of the instrument was carried out by the researchers and research assistants. The mortality rate was relatively infinitesimal. The data were subjected to necessary sorting after which the percentage statistic was used to analyze the data as follows:

Question 1: Is there a balance between resources inputs and technological requirements in Nigeria?

Table1: Resources input and technological requirements

Resources input	Technological requirements		
	High %	Low %	Total %

Provisions of science and technology requirements in higher institutions	1696 34.89%	3164 65.10%	4860	100%
Provision of science and technology requirements in the lower level institutions	1681 34.58%	3179 65.41%	4860	100%

Question 11: Are factors of positive influence on technological skills acquisition adequately provided for in Nigeria?

Table 11:Provisions for factors of acquisitions of technological skills.

Influencing factors	Provisions towards acquisition of technological skills				
	Very high level	High level	Low level	Very low level	Total
Adequately trained science and	1945 40.02%	361 7.42%	1522 31.31%	1032 21.23%	4860 100%

technologists					
Job creation and employment opportunities	943 19.40%	1009 20.76%	1318 27.11%	1590 32.71%	4860 100%
Technological skilled individuals job satisfaction and job performance	416 8.55%	309 6.35%	2810 57.81%	1325 27.26%	4860 100%
Technological skills investment and job performance	1856 38.18%	465 13.27%	1638 33.70%	721 13.27%	4860 100%

Findings and discussion

The analysis of the findings of the study were presented on table 1 and 11 above. The finding showed that there was no balance between resources inputs and technological requirements in Nigeria.

Table 11 revealed that factors with positive influence on acquisition of technological skills were not adequately provided for in the country. The results of the study were supported by World Bank (2003) assertion that arbitrary allocation of resources is one of the problems associated with allocation and utilization in educational settings. The World Bank (1991) also stated that availability of resources and their mode of utilization have

adverse influence on the manner of resources allocations towards the achievement of national goals and objective.

The finding of table 11 was instructive to Nigeria and other African leaders. This is with regard to the fact that out of the five factors investigated in terms of their positive influence in the determination in the pursuit of technological skills in the country, non was scored up to 50% by the 4860 respondents

Thus, the instruction by Anneslay (2005), World Bank (2003), Walter (2001), Witham (1992) and Pennsylvanian (2002) have not been heeded by the educational leaders and government of Nigeria . Hence the authors' instructive views and findings e.g that government should provide resources adequately and that a proper channel of distribution should be put in place were a strong support to the finding on table 11 in this research

Conclusion and Recommendations

From the findings attained in this study, the conclusion was reached that there was no balance between resources inputs and technological requirements in Nigeria. The conclusion was strengthened by the finding that the factors with positive influence on acquisition of technological skills did not determine adequate provisions of resources for the programs in

Nigeria. It was deemed expedient to recommend that a reliable process should be designed to supply and deploy necessary resources in the education sector to ensure efficiency in productivity particularly in technological training in Nigeria.

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