



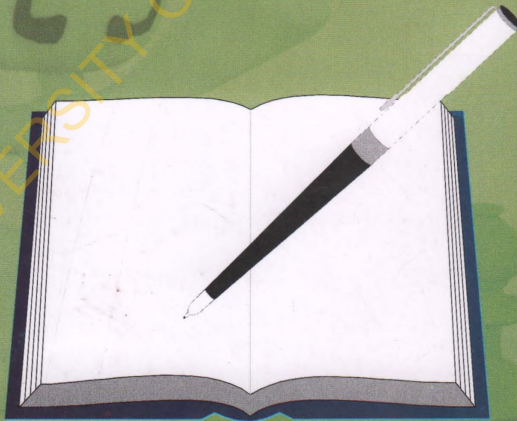
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Educational Resources as Predictors of Effectiveness of Vocational and Entrepreneurial Skill Acquisition Programme in Tertiary Institutions in Ogun State

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Abstract

Nigerians from various quarters have continued to advocate for inclusion of vocational and entrepreneurial skill acquisition as a means of ameliorating poverty, youth and graduate unemployment in the midst of a depressed economy. Some tertiary institutions in the Nigeria have risen to the occasion by establishing the centre for vocational and entrepreneurial skill acquisition, in response to the various calls for the need to do so. In order for the programme to be effective, there is need to consider the input variables that are in place for the programme to achieve its stated goals and objectives. The study therefore investigated some educational resources as predictors of the effectiveness of vocational and entrepreneurial skill acquisition programme in some tertiary institutions in Ogun state Nigeria. The subjects of the study included 534 trainees and 58 vocational skill tutors who were selected through the simple random sampling technique. Two questionnaires (Vocational Trainees' Perception Questionnaire [VTPQ] and Tutors' Perception Questionnaire [TPQ]) were used for data collection, while multiple regression analysis was used for data analysis in the study. The findings of the study revealed that educational resources (human, financial and material resources) reliably predict the effectiveness of vocational and entrepreneurial skill acquisition programme. In the light this, it was recommended that the three educational resources should be adequately provided for and judiciously utilized to ensure the effectiveness of VOS programme. Furthermore, it was also recommended that a vocational trust fund organisation should be established to help supplement institutional financial inputs to cater for human and material resources needed for the effectiveness of the VOS programme.

Key Words: Human Resources, Financial Resources, Material Resources, Vocational skill Tutors and Trainees

Introduction

In a developing country like Nigeria, Vocational and Entrepreneurial Skill Acquisition Programme is perceived as a viable instrument capable for driving technical and technological development. According to the National Policy on Education of the Federal Republic of Nigeria (FRN, 2004), the term vocational education is used to convey a comprehensive term which refers to those aspects of the educational process involving general education. It also include the study of technologies, related sciences, acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of the economic and social life. Osuala (1999) sees vocational education as technical training or retraining which is given in schools or classes under public supervision and control or under contract with a state or local education authority. Vocational education has become part of formal education with major concern for the inculcation of technical know-how and skills among trainees.

Vocational education has the potentiality of inculcating in trainees, skills which are needed for job creation. According to Odu (2011), vocational education is a kind of education which has the main purpose of preparing one for employment in recognized occupation. He identifies the philosophical concept on which vocational education was built, as self-employment and self-reliance of the recipients of the training. Okoro (1993) also sees vocational education as education to prepare persons for gainful employment. Congruently, Oni (2007) sees vocational education as that aspect of education which provides the recipients with the basic knowledge and practical skills needed for entry into the world of work as employees or as self-employed.

However, Ogunmola (2004) critically examined the National Policy on Education (NPE) on vocational education and claimed that, there is a wide gap between what was proposed and the actual implementation of the policy. This may imply that the resources proposed for the implementation of vocational education is statistically more than the resources available for the actual implementation of the programme. His assessment of the level of implementation of vocational education was not significantly different from the assessment of Odu (2011) who also raised issues on the inadequacy of resources for the implementation of the programme.

Presently, the importance of entrepreneurship education is being emphasized in our educational institutions. Stakeholders in education have continually expressed concerns on the quality of education with special reference to the inclusion and inculcation of vocational and entrepreneurial skill training. The acquisition of these skills is expected to help graduates adjust to work life, especially self-employment ability. Some tertiary institutions in Ogun state have risen to the challenge by establishing vocational and entrepreneurial skill acquisition centres. There is however an apprehension whether the authorities of these institutions are prepared to make the programme achieve its objectives and goals. This speculation is arising from the level of implementation of the programme in many of the schools currently undertaking it. The programme seems more theorized than practicalized in many of these institutions. Whereas, vocational skill and entrepreneurship acquisition is a true life oriented skill which should be more practical than theoretical. Although, Ibode

and Awotedu (2013) found out that there is a statistical significant difference in trainees' skill acquisition before and since they started the vocational skill programme in Ogun state government tertiary institutions. This however serves as an indication that the vocational and entrepreneurial skill acquisition programme is effective, considering the observed mean difference between trainees' skill acquisition before and since they started the programme. It has therefore become imperative to investigate these educational resources and their effectiveness on the vocational and entrepreneurship skill acquisition.

Obadara (2006) sees educational resources as the provisions that are made available directly or indirectly to the educational sector in order to facilitate the transmission of knowledge, competence and skills. Simply put, educational resources are the inputs used for the purpose of accomplishing educational goals and objectives. It is imperative for any organisation to have the necessary input mechanism to efficiently operate and produce effective outcomes. These input mechanisms in the educational system are referred to as educational resources. Obadara (2006) further categorized these educational resources into three, which include human, financial and material resources. The vocational and entrepreneurial skill acquisition programme, if it must record success must avail itself the availability, adequacy and judicious utilization of these educational resources. The human resources in the vocational and entrepreneurial skill acquisition programme include the trainees, tutors, administrative staff and other non-teaching staff in the institutions where the programme is being run. The human resources according to Ajibade (2013) are the most important of all the three category of resources. He argued that shortage of other resources does not pose so much threat to the achievement of organizational goals compared to shortage in human resources. Obadara (2006) therefore asserted that the reason for the importance of human resources over other resources might be because it is the only resource that has the capacity to organize and utilize other resources for the achievement of organization objectives.

The financial resources on the other hand are the input that comes in monetary forms, used for the efficient running of the programme. They may come in form of grants, donations, or budgetary allocation. It helps provide the purchasing power with which the programme may acquire its human and material resources. Financial resources to education are the monetary inputs given by the government, educational institutions or/and the society in order to educate individual or group of people (Obadara, 2006). Apparently, for the VOS programme to be efficient, there may be need for the provision of buildings, furniture, fittings, machinery, equipment and tools. There will also be need for the recruitment of people to use up all these resources. The financial resources offer the enablement for a successful coordination of human and financial resources. The lack or inadequate provision of the financial resources may hamper the provision of other resources and in turn, hinder the effectiveness of the VOS programme.

The material resources stand as the last category of educational resources mentioned, though not the least. It is worthy of note here that these resources are dependent on each other. The material resources refer to physical facilities that are essential for an effective functioning of a system, educational institution inclusive.

Educational materials facilitate teaching-learning activities and make learning more meaningful, permanent and less boring. This is true, especially when talking about vocational and entrepreneurial skill acquisition. For skill acquisition to take place, there is need for concerted effort to bring learners' hands on task and engage them in practical work. The provision and availability of material resources offer the opportunity for such practical to be done. According to Odu (2011), tools and machines in schools' workshop are oftentimes short in supply, obsolete and non functional. The unavailability or inadequacy of these resources may impede the development and effectiveness of an educational programme since the outcome of a programme is determined by its inputs. Obadara (2006) identified six categories of material resources which include physical facilities, instructional facilities, furniture facilities, health facilities, recreational facilities and others. In the light of this study however, the first three of the facilities are considered important for the efficiency of the VOS programme. The physical facilities may include structures and fixtures such as classrooms, vocational and entrepreneurial laboratories, workshop etc. The instructional facilities are the instructional materials used for the purpose of imparting skills. For example, the computer science/maintenance skill acquisition may need instructional materials such as voltage meter, soldering irons, soldering lead, screwdrivers, electronics spare parts such as capacitors, integrated circuits, resistors, diodes etc. Moreover, the furniture facilities includes students' desks, lockers, , chairs, cupboards, tables, book shelves, cabinet shelves, sorting trays, upholstery chairs, wardrobe, windows etc.

Scholars have continued to postulate the importance and relationship between organization resources and effective achievement of organization goals (Adeogun and Osifila, 2009; Obadara and Alaka, 2010). It remains imperative to determine the extent to which the adequate provision and utilization of these educational resources which include human, financial and material resources reliably predict the effectiveness of the vocational and entrepreneurial skill acquisition programme. Hence, this study investigated educational resources as a predictor of the vocational and entrepreneurial skill acquisition programme in tertiary institutions in Ogun state, Nigeria.

Research Questions

To what extent do the following predictors (adequacy of human resources, accessibility to the facilities, adequate motivation of trainees, efficiency of human resources, motivation of human resources and adequacy/usage of financial resources) reliably predict the effectiveness of the vocational and entrepreneurial skill acquisition programme from trainees' and tutors' perspectives?

Method

The descriptive research design was adopted using the survey research approach. This was used because the researcher reported the variables measured as it existed, without manipulating such.

Population

The target population for the study comprises of all Federal and State government tertiary institutions in Ogun State Nigeria, who have introduced vocational and entrepreneurial skill acquisition programme as a supplement to regular academic programme.

Sample and Sampling Techniques

The sampling techniques used in this study were in a multi-stage - A purposive sampling technique was used to select tertiary institutions in Ogun State that have introduced the vocational and entrepreneurial skill acquisition programme as a supplement to regular academic programme. These institutions must have operated the programme for at least three consecutive years. Two institutions were found to meet these criteria. Moreover, trainees were also randomly selected to participate in the study, and all vocational skill tutors found on ground also participated in the study. The sample of the study thus included 58 tutors, 534 trainees who were 300 and 400 level students. The rationale behind using 300 and 400 level students is that they are the ones who have been consistent in the programme, having spent 3 and 4 years respectively offering the course.

Instrumentation

Two questionnaires designed by the researchers were used for data collection. The instruments were Vocational Trainees' Perception Questionnaire (VTPQ) and Tutors' Perception Questionnaire (TPQ). The VTPQ and TPQ are Likert type response instruments, divided into two sections. Section A was used to obtain respondents' personal information while Section B consists of 25 and 20 items for trainees and tutors respectively. The TPQ sought the perception of the tutors while the VTPQ sought information from trainees concerning the vocational and entrepreneurial skill acquisition programme in their institutions. The instruments were subjected to face validity by three research fellows of the Institute of Education, University of Ibadan. The instruments were also pilot tested on respondents outside the sample of the study. The reliability coefficient was determined, using Cronbach Alpha which was found to be 0.81 and 0.88.

Data Analysis

The data collected were analysed using multiple-regression analysis.

Results

The results of the data analysis were presented in tables and interpretations were given after each table.

Research Question: To what extent do the following predictors: adequacy of human resources, accessibility to the facilities, adequate motivation of trainees, efficiency of human resources, motivation of human resources and adequacy/usage of financial resources; reliably predict the effectiveness of the vocational and entrepreneurial skill programme from the trainees' perspective?

Table 1.1: Correlation Coefficients among the Predictors and the Criterion as Perceived by the Trainees

Variables \	Human Resources Adequacy	Accessibility to Facility	Adequacy of Trainees' Motivation	Efficiency of the Human Resources	Effectiveness of VOS
Human Resources Adequacy	1.000				
Accessibility to Facility	.278**	1.000			
Adequacy of Trainees' Motivation	.294**	.343**	1.000		
Efficiency of the Human Resources	.647**	.267**	.332**	1.000	
Effectiveness of VOS	.660**	.679**	.696**	.647	1.000

* Correlation is significant at the .05 level

Table 1.1 presents the correlation matrix of adequacy of human resources, accessibility to the facilities, adequacy of trainees' motivation, efficiency of human resources and the effectiveness of the vocational skill acquisition programme from the trainees' perspective. The table shows the relationship among the four predictors and the criterion (effectiveness of the VOS programme), and it was revealed that there is a statistical significant relationship between each of the predictors and the criterion from the trainees' perspective.

Table 1.2: Model Summary and ANOVA Table

R	= .958				
R Square	= .919				
Adjusted R Square	= .918				
Standard Error	= .2.999				
Model	Sum of Squares	Df	Mean Square	F	Sig.
Regression	53698.640	4	13424.660		
Residual	4760.785	529	9.000	1491.696	.000*
Total	58459.425	533			

*ANOVA is significant at $p < .05$ level

Table 1.2 shows the regression model summary and ANOVA of the effectiveness of VOS, by the adequacy of human resources, accessibility to facilities, adequacy of trainees' motivation and efficiency of the human resources. The Regression ANOVA table shows that the observed variance accounted for by the four predictors (adequacy of human resources, accessibility to facilities, adequacy of trainees' motivation and efficiency of the human resources) is 91.8%. It also shows that the F-ratio is statistically significant, $F(4, 529) = 1491.696$, $P < .05$. This means that the

model is reliable in predicting the effectiveness of the programme from the trainees' perspective.

Table 1.3: Coefficient of the Effectiveness of the VOS Programme

Model	Unstandardized Coefficients		Standardized Coefficients	T	Sig.
	B	Std. Error			
(Constant)	3.643	.797		4.569	.000*
Human Resources Adequacy	1.204	.053	.321	22.803	.000*
Accessibility to Facilities	1.373	.048	.386	28.456	.000*
Adequacy of Trainees' Motivation	1.095	.040	.376	27.190	.000*
Efficiency of Human Resources	1.020	.051	.282	19.849	.000*

* Correlation is significant at the .05 level

Table 1.3 shows that all the predictors are reliable in predicting training effectiveness of VOS programme from the trainees' perspective. It is evident from the above table that Human Resources Adequacy: $\beta = .321$; $t(533) = 22.803$, $P < .05$; Accessibility to Facilities: $\beta = .386$; $t(533) = 28.456$, $P < .05$; Adequacy of Trainees' Motivation: $\beta = .376$; $t(533) = 27.190$, $P < .05$ and Efficiency of Human Resources: $\beta = .282$; $t(533) = 19.849$, $P < .05$. This implies that for every one unit change in these predictor variables, there is a corresponding increase of 0.321, 0.386, 0.376 and 0.282 respectively in the criterion (effectiveness of the VOS programme).

Research Question: To what extent do the following predictors: adequacy of human resources, accessibility to the facilities, adequate motivation of trainees, efficiency of human resources, motivation of human resources and adequacy/usage of financial resources; reliably predict the effectiveness of the vocational and entrepreneurial skill programme from the tutors' perspective?

Table 2.1: Correlation Coefficients among the Predictors and the Criterion as Perceived by the Tutors

Variables	Human Resources Adequacy	Accessibility to Facilities	Motivation of Human Resources	Adequacy and Usage of Financial Resources	Effectiveness of VOS
Human Resources Adequacy	1.000				
Accessibility to Facilities	.073	1.000			
Motivation of Human Resources	.091	-.093	1.000		
Adequacy and Usage of Financial Resources	.142	.344**	-.033	1.000	
Effectiveness of VOS	.381**	.324*	.749**	.455**	1.000

*Correlation is significant at the .05 level

Table 2.1 shows the relationship among the four predictors (human resources adequacy, accessibility to the facilities, motivation of human resources and adequacy and usage of financial resources) and the criterion (effectiveness of VOS) from the tutors' perspective. The table revealed that there is a statistical significant relationship between each of the predictors and the criterion at the .05 correlation significant level.

Table 2.2: Model Summary and ANOVA Table

R	=	.964			
R Square	=	.930			
Adjusted R Square	=	.925			
Standard Error	=	1.884			
Model	Sum of Square	Df	Mean Square	F	Sig
Regression	2492.230	4	623.057		
Residual	187.995	53	3.547	175.657	.000*
Total	2680.224	57			

*ANOVA is significant at $p < .05$ level

Table 2.2 shows the model Summary and ANOVA of VOS Effectiveness by Human Resources Adequacy, Accessibility to the Facilities, Motivation of Human Resources and Adequacy and Usage of Financial Resources from tutors' perspective. The regression ANOVA table shows that the observed variance accounted for by the four predictors (human resources adequacy, accessibility to facility, motivation of human resources and adequacy and use of financial resources) is 92.5%. It also showed that the F-ratio is statistically significant, $F(4, 53) = 175.657, P < .05$. This means that the model is reliable in predicting the effectiveness of the VOS programme from the tutors' perspective.

Table 2.3: Regression Coefficients of the Effectiveness of VOS Programme

Model	Unstandardized Coefficients		Standardized Coefficient	T	Sig.
	B	Std. Error	Beta β		
(Constant)	-1.287	2.238		-.575	.568
Human Resources Adequacy	1.344	.175	.285	7.670	.000*
Accessibility to Facilities	1.667	.218	.299	7.639	.000*
Motivation of Human Resources	1.075	.052	.762	20.790	.000*
Adequacy and Usage of Financial Resources	1.077	.126	.336	8.544	.000*

*Correlation is significant at the .05 level

It is evident from table 2.3 that all the predictors contributed significantly to the prediction model from the tutors' perspective. Human Resources Adequacy $\beta = .285, t(57) = 7.670, P < .05$; Accessibility to Facilities $\beta = .299, t(57) = 7.639, P < .05$; Motivation of Human Resources $\beta = .762, t(57) = 20.790, P < .05$; Adequacy and Usage of Financial Resources $\beta = .336, t(57) = 8.544, P < .05$. This implies that for every one unit change in the predictors, there is a corresponding increase of 0.285, 0.299, 0.762 and 0.336 respectively in the criterion variable.

Discussion of Findings

The findings of the study revealed that there is a statistical significant relationship between each of the predictors (human, financial and material resources) and the criterion variable (vocational and entrepreneurial skill acquisition) of the study. It could therefore be inferred that educational resources which include the human, financial and material resources are reliable in predicting the effectiveness of the vocational and entrepreneurial skill acquisition programme. This finding corroborates Obadara (2006), who asserted that the human, financial and material

resources are vital resources that any educational institution or endeavour needs to put in place if the goals and objectives of such institutions are to be maximally achieved. Congruently, Obanya (2013) and Yoloye (2013) postulated the need for provision of adequate and efficient human resources, physical/environmental resources and financial resources for effective teaching/learning exercise to take place in the educational system. Moreover, the World Bank (1994) also identified three factors that are responsible for economical growth and development of a country to include natural, physical and human capital. The World Bank is of the view that these three factors are variables that when adequately and appropriately put in place, are likely to translate into economical growth and development. This assertion holds true as this study confirmed that educational resources (human, financial and material resources) have a positive correlation with the effectiveness of the vocational and entrepreneurial skill acquisition programme

Conclusion/Recommendations

This study has helped to establish that input variables or educational/organizational resources are germane to the achievement of goals and objectives set by such organisation. They could be referred to as the wheels on which goals and objectives of an organisation (educational institutions inclusive) ride to its destination for achievement. It is imperative to note that none of these three educational resources could be swept under the carpet. The inadequate provision, under-utilization or over-utilization of one for other may have devastating effect on skill impartation activity. It is therefore important for school managers/administrators to ensure adequate provision and efficient utilization of all educational resources which include human, financial and material resources, needed for the effectiveness of vocational and entrepreneurial skill acquisition programme or any other educational programme in their institution.

Moreover, since financial resources offer purchasing power for the acquisition of human and material resources, a vocational trust fund organisation may be established by the government for the purpose of setting aside financial resources for the vocational and entrepreneurial skill acquisition programme. This vocational trust fund organisation should be passed into law and be made to function like the Educational Trust Fund (ETF). This will help supplement institutional fund allocation to aid adequate provision of educational resources such as human and material resources, which will in turn translate into effectiveness of the VOS programme.

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