



Sustainable Leadership Skills needs of Brick/Block-Laying and Concreting (BBC) Students for Self-reliance in Government Technical Colleges of Kano State

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Abstract

This study determined the sustainable leadership skills need of brick/block laying and concreting students for self-reliance in technical colleges of Kano State, Nigeria. Two research objectives, two research questions and one null hypothesis guided the study. Descriptive survey research design was adopted for the study. The study had a total population of 1,344 respondents with a sampled size of 302 respondents using stratified random sampling technique. The instrument used for gathering data for the study was a structured questionnaire. The instrument was validated by three experts. Cronbach Alpha statistical tool was used to determine the reliability coefficient of 0.88. A total of 302 copies of the instrument were administered to the respondents, however, 296 copies were returned filled. This brings the percentage return rate to 98%. Mean and standard deviation statistical tools were employed to analyze the research questions. While t-test statistical tool was used to test the null hypothesis at 0.05 level of significance. The findings of the study revealed that Brick/Block Laying and Concreting (BBC) Trade students of the study area need sustainable leadership skills that will enable them to coordinate, supervise, budget, maintain good financial records, work together as team and implement policies in their prospective place of work, to enable them fit into the world of work effectively. It was therefore recommended that government should ensure that appropriate policies that will facilitate the training need of BBC students in the area of sustainable leadership skills that will enable them fit into the construction industry should be duly emphasized in the curriculum of Brick/Block Laying and Concreting Trade.

Keywords: Sustainable Leadership, Skills Needs, Brick/Block Laying and Concreting, Self-Reliance

Introduction

Brick/Block Laying and Concreting (BBC) graduates need sustainable leadership skills that will make them successful in the place of work and in their venture. TVET should therefore, empower its recipients with the development of appropriate skills, physical and social abilities and competences to live in and contribute positively to the society. Hence, according to Imogie (2014), there is need of functional training for sustainable leadership as a key to the country's manpower development.

BBC as part of TVET can play a great role in making technical college graduates self-reliance when instilled with the sustainable leadership skills. This is in accordance with the main national goal of Nigeria which is: the building of united, strong and self-reliant nation (FRN, 2013). In the same vein, one of objectives of BBC is to give training and impart necessary skills to individuals for

self-reliance economically (FGN, 2013). This implies that the training of the youths to be independent so as to contribute their quota in sustainable national development (Emesini, 2016).

Skill is an ability to perform a specific task excellently. Skills describe both what you love to do and areas in which you excel. Sets of skill are acquired in one way or the other, at various times, and have made man evolve over time (Adedeji, Rapheal, Opeyemi, Patience & Lekan, 2017). Skill in itself is elastic as it is acquired through all phases of education ranging from the informal, non-formal and formal sectors (Omofonmwan & Chukwuedo, 2013). Skills acquired in formal school system are viewed as technical skills. According to Work Force (n. d), technical skills include person's ability to accomplish specific tasks. Often times, they relate to a specific occupation or field of study. Someone may have learned



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technical skills from previous work experience, school or training. Adegbenjo (2008) advocates that Technical Education is that which passes to individuals useful and usable skills to make individuals self-reliant; thus, technical skills are skills acquired via technical education in formal school system. Leadership is an ability to engage in conflict management, collaboration and cooperation. Leadership skill among others is an element of sustainability skills. It requires someone who can drive forward an organization's sustainability credentials and who has the ability to develop and deliver a vision, policy and strategy, as well as to lead and support the team that will manage change (College of Estate Management, CEM, 2013). Ibrahim (2016) found that Technical College Students are graduating without Work-based skills, and that hinders their transition from school to work. While Mamman, Muhammad, Jirgi and Mubaraka (2013) stated that improving skill acquisition in technical education will no doubt solve Nigerians tripartite problems including the sustainable and economic problems. Njoku (2014) pointed out that there are evidences of the inability of the technical colleges to meet the set standard of the quality of education for some years now; leading to the situation where technical college graduates now parade the streets with paper qualifications and lack the needed saleable skills for self-reliance.

Construction industries found students of technical college deficient in some skills. The major skill gaps previously found in construction industries are cognitive such as numeracy and critical thinking to solve problem and non-cognitive such as communication (interpersonal), leadership, decision-making and technical skills among the craft workers as well (Jayaram & Engmann, 2017; Lututala, 2012; Awe, Stephenson & Griffith, 2010).

Therefore, the need for functional training that will prepare the BBC Students to be self-dependent is an urgent one for the promotion of a progressive united Nigeria. In essence, school programmes should be relevant, this made Esu (2010) to state that functional training is designed to teach students skills which will allow them to function as competent and accepted adults. This study therefore, seeks to find out the

sustainable leadership skills need of brick/block laying and concreting students for self-reliance in government technical colleges of Kano state.

Statement of the Problem

Brick/block laying and concreting students are to be trained to acquire practical and sustainability skills, knowledge and attitudes for skilled jobs. However, it is unfortunate that the skilled job opportunities in industries are not filled, because technical graduates lack technical competency to take up available skilled jobs. Technical college graduates are therefore vastly unemployed, and the performances of the few employed technical skilled graduates in the industries are poor. It is therefore necessary for BBC students to be armed with sustainable leadership skills that will aid them become self-reliant and achieve their set goals. It is against this background that the researcher intends to determine the sustainable leadership skills needs of brick/block laying and concreting students for self-reliance in technical colleges.

Purpose of the Study

The purpose of this study was to:

1. Determine the sustainable leadership skills needs of BBC students for self-reliance in Technical Colleges of Kano state
2. Determine the way of enhancing sustainable leadership skills of BBC students for self-reliance in Technical Colleges of Kano state

Research Question

The study was guided by this research question:

1. What are the sustainable leadership skills needs of brick/block laying and concreting students for self-reliance in Technical Colleges of Kano state?
2. What is the way effective for enhancing sustainable leadership skills of BBC students for self-reliance in Technical Colleges of Kano state?

Hypothesis

The following null hypothesis guided the researcher in carrying out this study and was tested at 0.05 levels of significance.



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Ho₁: There is no significant difference in the mean responses of BBC students of urban technical colleges and that of rural technical colleges on the sustainable leadership skills needs of brick/block laying and concreting students for self-reliance in Technical Colleges of Kano state.

Methodology

Descriptive survey research design was adopted for this study. Survey research design is a design in quantitative research in which researchers administer a survey to a sample or to the entire population of people or subject to describe the attitudes, opinions, behaviors, or characteristics of the population (Creswell, 2012). The area of the study includes all the Government Technical Colleges of Kano state. Kano was selected as area of this study because it has a number of 32 technical colleges where 28 are offering brick/block laying and concreting subjects. And 26 Technical Colleges were used for the study. The population of this study comprised of 1,344 brick/block laying and concreting students. The population is therefore finite. The sample of this study was made up of a total number of 302 respondents from the total population of 1,344, using Krejcie-and-Morgan table of determining sample size of (1970). It was obtained from the 26 technical colleges, using stratified random sampling technique, where the sampled respondents from the colleges of the study area were based on proportion of the sample. The instrument used to collect data for this study was a structured questionnaire with 11 questionnaire items. The instrument was sub-divided into two parts. Part I was on demographic data of the respondents, while part II was made up of the question items based on the 4-point rating scale of Highly Needed (HN) 4, Needed (N) 3, Moderately

Needed (MN) 2 and Fairly Needed (FN) 1. The instrument was validated by three experts; one expert from the Department of Vocational and Technology Education of Abubakar Tafawa Balewa University, Bauchi and two from the Department of Science and Technology Education of Bayero University, Kano. They were required to check and comment on the appropriateness and clarity of the entire instrument. The validators were therefore required to assess the question items with regards to their ability to collect valid and accurate data for the study. Observations, criticisms and advices of the experts were used to provide valid copies of the instrument. The reliability coefficient obtained was 0.88. This means that items in the instruments were internally consistent in measuring what was intended to measure for the study. The instrument was administered and collected by the researcher with the help of two research assistants to brick/block laying and concreting students with an interval of two weeks. The data collected from the respondents was analyzed using mean and standard deviation to answer the research questions. The statistical software of SPSS version 20 was employed to analyze the data. Hence, the cut-off point of 2.50 was used for the research questions, mean responses above 2.50 were termed Needed while the mean responses below 2.50 were termed Not Needed. For the hypothesis, t-test was run through the same statistical software at 0.05 level of significance.

Results

Research Question 1: What are the sustainable leadership skills needs of brick/block laying and concreting students for self-reliance in Technical Colleges of Kano state?



Table 1: Mean Responses of the Technical College Students on the Sustainable Leadership Skills Needs of Brick/Block Laying and Concreting Students for Self-Reliance

S/N	ITEM	Mean (X)	SD	Remark
1.	Ability to lead a team that will manage change	3.37	0.80	Needed
2.	Skill of driving forward an organization	3.08	0.93	Needed
3.	Ability to develop and deliver a vision, policy and strategy	3.20	0.91	Needed
4.	Ability to encourage good relationship among the co-workers	3.09	1.02	Needed
5.	Skills in emotional awareness	2.87	1.01	Needed
6.	Skills in emotional and stress management	3.00	1.04	Needed
7.	Skills in scheduling of duties and supervision	3.13	0.89	Needed
8.	Skills in budgeting and handling of financial records	3.00	0.97	Needed
9.	Skills in influencing the behaviour or actions of others positively	2.85	1.00	Needed
10.	Ability to persuade others to behave or act differently	2.52	1.08	Needed
11.	Ability to support a team that will manage change	2.94	0.86	Needed
	Grand Mean	3.00	0.96	Needed

Table 1 shows the result of the research question on sustainable leadership skills needs by brick/block laying and concreting (BBC) students of Technical Colleges in Kano State. The result shows that all the 11 items statements were needed with Mean scores ranging from 2.52 to 3.37 and Standard Deviation (SD) of 0.80 to 1.08 respectively. The items were termed needed because the Mean scores were rated above the cut off Mean of 2.50. The Grand Mean of 3.00 and SD of 0.96 respectively, also shows that sustainable leadership skills were needed by BBC students of technical colleges.

This implies that the need to inculcate the right skills of sustainable leadership in BBC students from technical colleges that will enable them to coordinate, supervise, budget, maintain good financial records, work together as team and implement policies in their prospective place of work is very important to enable them fit into the world of work effectively and become self-reliant.

Research Question 2: What is the way effective for enhancing sustainable leadership skills of BBC students for self-reliance in Technical Colleges of Kano State?

The effective way of enhancing sustainable leadership skills of BBC trade students is to train the students the basic elements of sustainable leadership skills (leadership style) as found needed in research question one.

Hypothesis

Ho₁: There is no significant difference between the mean responses of BBC students of urban technical colleges and that of rural technical colleges on the sustainable leadership skills needs of brick/block laying and concreting students for self-reliance in Technical Colleges of Kano state.

Table 2: t-Test on Urban and Rural Technical Colleges on the Sustainable Leadership Skills Needs of Brick/Block Laying and Concreting Students for Self-Reliance in Technical Colleges of Kano State

Variables	N	X	S.D	t	DF	p-value	Decision
Urban	68	3.242	0.312				
				6.513	294	0.000	Rejected
Rural	228	2.933	0.433				

Key: N- Number of Respondents, X- Mean Scores S.D- Standard Deviation, DF- Degree of Freedom



Data presented in Table 2 revealed that p-value returns 0.00 level of significance which is less than 0.05, therefore, based on the stated decision rule, the null hypothesis was said to be rejected. Hence, there was a significant difference between the mean responses of BBC students of urban technical colleges ($X=3.242$, $SD=0.312$) and that of rural technical colleges ($X=2.933$, $SD=0.433$); $t(294) = 6.513$, $p = 0.00$, on the sustainable leadership skills needs of brick/block laying and concreting students for self-reliance in Technical Colleges of Kano state. The outcome of this result is not out of place considering the difference in exposure of the two settings in relation to the sustainable leadership skills.

Findings of the Study

The finding revealed that brick/block laying and concreting (BBC) students in technical colleges need sustainable leadership skills that will enable them to coordinate, supervise, budget, maintain good financial records, work together as team and implement policies in their prospective place of work is considered as very important to enable them fit into the world of work effectively.

The finding also reveals that there was a significant difference between the mean responses of BBC students of urban technical colleges and that of rural technical colleges on the sustainable leadership skills needs of brick/block laying and concreting students for self-reliance in Technical Colleges of Kano state, due to the difference in exposure of the two settings in relation to the sustainable leadership skills.

Discussion of Findings

The findings of this study therefore, confirms the theory of vocational education developed by Prosser (1949) which stated that technical and vocational education will be efficient in proportion as the environment in which the learner was trained was a replica of the environment in which he/she must subsequently work. Due to the fact that, the study confirms that BBC students need sustainable leadership skills as the environment in the first part of the theory which the learner is trained, and construction industry's need is the environment in the last part of the theory in which he/she may

subsequently work. The findings of this study revealed that the sustainable leadership skills identified are needed to BBC students of technical colleges of Kano state. This is therefore in line with the studies of Jayaram and Engmann (2017) which mentioned sustainable leadership skills as one of the skills gap found in the construction industries. Jayaram and Engmann (2017) further urged that technical college graduates must possess sustainable leadership skill in encouraging good relationship among the co-workers. The study of Olusola (2019) rated sustainable leadership skills as important to students with approximate mean of 4. Unfortunately, Kennedy (2012) reported 16 out of 17 items of managerial skills for Entrepreneurship in Block laying and Concreting as not possessed by the students. Moreover, Abbass (n.d) argued that sustainable leadership skills are essentially necessary for technical graduates to enable them accomplish the vision and mission of the construction industries.

Conclusion

Based on the findings of the study therefore, it was concluded that the performance of BBC graduates of technical colleges are said to be poor in the industries. In most cases, the graduates were given pre-employment training by the industries as if they were not exposed to the job experience during their stay in Technical College. Whilst, employers need a workforce fully equipped with skills beyond the basics of reading, writing, and arithmetic to grow their businesses. Thus, BBC graduates as either prospective employees or employers of labour (construction industries) need to have even little skill in; driving forward an organization, encouraging good relationship among co-workers, emotional and stress management, scheduling of duties and supervision and skills in budgeting and handling of financial records among others.

Recommendations

Based on the finding of the study, the following recommendation was made:

1. Government should ensure that appropriate policies which will facilitate the training need of BBC Trade students in the area of sustainable leadership



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skills to enable the students fit into the construction industry are duly emphasized in the curriculum of BBC Trade.

2. Government should also ensure that the training of sustainable leadership skills to the BBC Trade students is done by trained personnel in the area of sustainable leadership.

Development. *British Journal of Education*. 4(9): 46-54.

Esu, A. E. O. (2010). Functionality of Curriculum in Nigeria. WCCI Seminar Series No. 5 Held at the University of Nigeria Nsukka in October, 2009.

Federal Government of Nigeria, (2013). *National Policy on Education*. NERDC: Abuja.

References

Abbass, I. M. (n.d). Management Skills–Tools for Leadership Imperatives in Democracy. *European Scientific Journal*. 8(16)114-129.

Adedeji, A., Rapheal, O., Opeyemi, O., Patience, T. & Lekan, A. (2017). Integrating Construction Craft Skill Acquisition in the Built Environment Curriculum using a Competence Based Education Approach. *Research Journal of Applied Sciences*. 12(3-4):295-303.

Adegbenjo, A. (2008). Skills Acquisition Promotion through Technical and Vocational Education for Realization of Vision 2020 in Nigeria. *21st Annual Conference, Nigeria Association of Teachers of Technology (NATT)*. Pp.420-421.

Awe, E. M., Stephenson, P., & Griffith, A. (2010). Impact of Vocational Training on Skilled Labour Shortage within the Nigerian Construction Sector. W089-Special Track 18th CIB World Building Congress May 2010 Salford, United Kingdom, 252.

College of Estate Management, CEM. (2013). *Defining a Profession: Core Competencies for Sustainability*. Occasional Paper Series.

Creswell, J. W. (2012). *Educational Research: Planning, Conducting, and Evaluating Quantitative and Qualitative Research*. (4th Edn.). University of Nebraska–Lincoln.

Emesini, N. O. (2016). Empowering of Students in Technical Colleges in Nigeria with Trade Skills for Self Reliance to Enhance Sustainable

Ibrahim, M. (2016). Work-Based Skills for Enhancing School-To-Work Transition of Building Trade Graduates of Technical Colleges in Jigawa State. *Bichi Journal of Technology Education (BIJOTE)*. 4(1): 56-65.

Imogie, I. A. (2014). 100 Years of Western Education in Nigeria: The Wobbly Tripod of Growth, Progress and Shortcomings in University Education in the Journey So Far. A Keynote Address Presented at 100 Years of Nigeria Education: The Journey So Far and Prospect for The Future, By Faculty of Education, University of Benin, Benin City, Held from 21st-24th October.

Jayaram, S. & Engmann. M. (2017). *Diagnosing the skill gap in Bridging the Skills Gap* (pp. 1-14). Springer, Cham.

Kennedy, O. O. (2012). Technical and Managerial Skill Needs of Block Laying and Concreting Graduates for Effective Entrepreneurship in Nigeria. *Asian Journal of Management Sciences and Education*. 1(1):102-121.

Krejcie, R. V. & Morgan, D. W. (1970). Determining Sample Size for Research Activities. *Educational and Psychological Measurement*. 30(3). 607-610.
<http://journals.sagepub.com/doi/pdf/10.1177/001316447003000308>

Lututala, B. M. (2012). *Skills for Employability: Sub-Saharan Africa*. Results for Development Institute



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(R4D). Washington, District of
Columbia: R4D.48p.

Njoku, C. A. (2014). Automation in Industry and Curriculum Review Needs of Mechanical Engineering Craft Practice Students in Technical Colleges in Lagos State. An Unpublished M.ED. Thesis University of Nigeria, Nsukka.

Olusola, A. O. (2019). Skills Gap Assessment to Enhance the Delivery of Technical and Vocational Education: A Case Study of Electrical Installation Graduates in Ogun in Kaduna States of Nigeria. Thesis Submitted in Partial Fulfilment of the Requirements of the University of the West of England, Bristol for the Degree of Doctor of Philosophy.

Omofonmwan, G. O. & Chukwuedo, S. O. (2013). Availability and Adequacy of Resources for Skill Acquisition in Digital Electronics Repairs in the National Open Apprenticeship Scheme in Edo State, Nigeria. *International Journal of Vocational and Technical Education*. 5:110-116.