

An Evaluation of Personnel Training Policies of Construction Companies in Nigeria

Dubem I. Ikediashi¹, Stephen O. Ogunlana¹, Oluwaseyi A. Awodele¹ and Onuwa Okwuashi²

¹*School of the Built Environment, Heriot-Watt University, UK*

²*Department of Geo-Informatics, University of Uyo, Nigeria*

KEYWORDS Construction Companies. Personnel Training. Policies. Construction Industry. Nigeria

ABSTRACT Construction companies are the engines that propel the construction sector of any nation's economy, and are therefore expected to vigorously train their workforce to effectively match this responsibility. This study investigates the personnel training policies of construction companies in Nigeria. Structured questionnaire was used to collect data from two categories of respondents namely, the technical and managerial personnel using simple random sampling technique. They were analyzed using the basic descriptive and inferential statistical tools. Spearman rank correlation was used to test the level of agreement between the two categories of personnel on the methods of training in their companies. Findings reveal among others that there is a disparity in the training policies of most companies regarding both categories of staff and did not favour the technical personnel. On-the-job training is the most effective method of staff development in the companies. The research has provided insight into key areas that require urgent action at the strategic level of management. Specifically, it has brought into focus perceived disparity between the level of training accorded the lower and higher cadre personnel.

1. INTRODUCTION

Construction industry occupies a significant position, and plays a major role in the economic development of any nation (Idoro 2011). The Nigerian construction industry accounts for 1.4% of its GDP. Despite the growth seen in the sector, its contribution to the nation's GDP has remained abysmally low (Vetiva 2011). The construction companies are the engine that drives the construction industry. They do this through the use of the available manpower both skilled and unskilled for the execution of major infrastructural and developmental projects within the economy. In order to effectively carry out this responsibility, construction companies are expected to formulate and put in place personnel policies that aim to map out recruitment, training and re-training schedules of their personnel (Hengrickson and Au 2001). Odusami et al. (2007) postulates that the capability of the construction industry to develop, procure and deliver innovative, complex and demanding projects, is driven by involvement of highly knowledgeable and skilled personnel.

Personnel training is the process of allowing staff to acquire knowledge, skills and attitudes for the sole purpose of executing specific task(s) more efficiently and effectively (Atiomo 2000;

Ogunlana et al. 2002). It is not a once and for all activity but an ongoing process as new employees are trained, so also are other older employees either transferred to other jobs, promoted or trained for the more challenging jobs (Gann and Senkar 1998). Training policy of an organization is a laid down statement setting out what the organization is prepared to do in terms of developing its employees (Odusami et al. 2007). This policy document may contain such clauses relating to providing opportunities for selected employees to participate in training activities such as attending conferences, workshops, and seminars to prepare them for new roles (Coles 1986). Yet other companies may prefer to recruit personnel that are already trained and professionally qualified as a policy to reduce cost of staff development.

Despite the invaluable contribution of construction companies to Nigeria's economy, a large number of the workforce still remain untrained. This is further corroborated by Jayawardane and Gunawardena (1998) who argue that there is an absence of manpower planning and development among construction companies in developing countries resulting in poor quality, high wastage and long term productivity decline in the industry. This according to Bamisele (2004) is attributable to the non-permanence nature of the construction industry. This discourages companies from sending their personnel for training because of the possibility of disconti-

Address for correspondence:
E-mail: isaacikediashi@yahoo.com

nuity of functions once a particular project is completed. However, notwithstanding the shortcoming, it is an obligatory responsibility for organizations to train their staff.

The south-south geo-political zone of Nigeria is made up of 6 states namely Akwa Ibom, Bayelsa, Cross River, Delta, Edo and Rivers. It is seen as the centre of utmost importance to the Nigerian federation as crude oil, the main stay of the nation's economy is produced from this area. The construction companies in this zone are major players in the development of massive infrastructure in the country and turns in billions of naira worth of gross domestic product into the nation's economy every year. This has been boosted by the improved security situation occasioned by reduced cases of militancy in the Niger Delta. The research questions therefore are: (1) How well have they fared in terms of training for its personnel? (2) Are the methods put in place by these companies for training personnel effective? (3) What is the qualification profile of the workforce? This paper intends to answer these questions.

The aim of the study is to appraise the personnel training policies of construction companies in a developing economy using the south-south zone of Nigeria as a case study. The objectives in specific terms are; (1) to identify and assess the programmes in place for staff development in the companies, (2) to assess the qualification profile of both technical and managerial staff and (3) to determine the level of effectiveness of the methods of staff development in the companies.

2. LITERATURE REVIEW

2.1 Need for Construction Personnel Training

There is a consensus in literature that the conditions to which construction companies are expected to make meaningful impact on the economy requires a well trained workforce. For instance, Odusami et al. (2007) and Chan (2005) observed that skills and knowledge have become the only sources of sustainable long term competitive advantage in the construction industry. There is an increased need for more varied skills in the construction industry including the ability to address, not only technical, but also financial, property management, and environmental concerns. Atiomo (2000) notes that

these development needs could arise from the following main causes: one arising from changes in structure, policies process or procedure, the other arising from the desire to bring about changes in performance or improved productivity, attitudes, behaviour and relationships. In the construction industry, the variability of construction project requires a continuous supply of trained personnel to match the numerous challenges that are often encountered. From the foregoing, the need for construction labour development can be categorized under the following interrelated points:

2.1.1 Improving Productivity

Productivity is widely known as the relationship between the inputs and the output, often crudely expressed as the output divided by the inputs (Chan 2006). Indeed, productivity is an extremely vital performance measure tool within the construction industry as well as the economy as a whole. Building productivity can thus be equated as the measured value of construction divided by the total cost of labour, plant and materials. CITB (2003) reports that there are significant gaps in the skills needed to improve productivity and hence advocates a technical and leadership skills at the top management level. In other words, there is a correlation between training and improved productivity in the construction industry.

2.1.2 Improving Health and Safety Requirement

Construction is a high –risk activity, and knowledge about the extent and the cause of accidents and ill health is very limited in many parts of the world. This situation can be addressed when government, employers and workers have a common interest in ensuring that health and safety standards are met. This can be effectively achieved through labour and personnel training. According to ILO (2001), the number of accidents will be reduced if all persons involved in the industry are properly informed about risk and trained to carry out their work safely. All those working on site must also be trained in health and safety, with special attention paid to training of workers' health and safety representatives. The Construction Industry Training Board (CITB) in the UK is very concerned about this and has put in place, some

strong measures, one of which is that since 2003 no personnel will work on a construction site without proof of qualification, including certification for their understanding of health and safety issues (CITB 2003). In Nigeria, previous studies (Idoro 2008, 2011) have examined the occupational health and safety efforts in Nigerian construction companies and revealed that local and regional contractors put in the same managerial efforts as their multinational counterparts to achieve a safe and healthy construction work environment. What is however not clear is if the measures put in place for training workers on health and safety is making the required impact.

2.3 Construction Personnel

The technical personnel comprises foremen of different trade sections, specialist and general foremen, structural engineers, electrical engineers, laboratory technicians construction engineers and plant and equipment superintendents. Others are cost accountants, estimators or quantity surveyors and land surveyors.

The skills requirements for technical personnel are usually analytical and problem solving in nature (Learning and Skills Council 2003). According to Yakubu (2005), a construction foreman, for instance should have the ability to identify and estimate the correct type and quantity of materials required to complete a job and accurately estimate how long a job will take to complete and at what cost. After acquiring the skills and knowledge, and with enough experience they advance to supervisors or senior foremen. They also may become project managers or construction superintendents (World Bank 1986).

The managerial personnel on the other hand are responsible for applying the basic principles of management to oversee the execution of projects for the construction companies (Chitkara 2006). They are therefore expected to be properly trained on the use of management techniques to effectively and efficiently manage resources to deliver optimum performance. They often go by the job titles; programmes manager, constructor, construction manager, project engineer, project manager, construction supervisor, or similar designations (World Bank 2006).

2.4 Objectives of Construction Labour Training and Development

Since the advent of Human Resource Development (HRD), labour training and development

have formed a vital component as indicated in the literature. According to Tabassi et al. (2011), they are designed to increase an individual's level of self awareness, skills and motivation to perform duties well. Obiegbu (2003) in an effort to justify the importance of labour training and development to the construction industry outlines the following as its major objectives:

- ♦ Enabling that personnel acquire sufficient and relevant academic and technical knowledge and skills for dealing with problems of the Construction Industry.
- ♦ Acquiring practical field exposure and laboratory/workshop study that bear on enlightened application of the problems in the Industry.
- ♦ Appreciating through theoretical and practical field work exposure, the problem confronting the Nigerian Construction Industry with the aim of satisfying the need for sourcing local construction materials, and in so doing, sustaining Nigeria's goal in nation building process.
- ♦ Providing the technical ability to visualize and solve practical construction problems.
- ♦ Providing managerial knowledge to make sound decisions and implement them on a prudent and economic basis.
- ♦ Enhancing the safety of workmen in the use of machines.

These objectives have further reinforced the belief that a construction workforce well trained and motivated will impact significantly on project delivery. Tabassi et al. (2011) argue that training plays a critical role in increasing workers' adaptability and flexibility which employers have found to be increasingly important. Thus, it is imperative to admit that every necessary step should be adopted to meet the basic objectives of training and development.

2.5 Factors Affecting Effective Labour Training and Development Among Construction Companies

Several studies have been reported in literature on the factors working against the effective implementation of training and development policies among construction companies particularly in developing economies like Nigeria.

First, the nature of employment in construction is a major impediment. According to Obiegbu (2003), the Nigerian construction is charac-

terized by contractors, subcontractors and a large number of self employed. As apparent from research on the United Kingdom construction industry, self employment has devastating effect on levels of training and is a critical factor in explaining low levels of training in the sector (Arkani 2003). Besides, the construction industry unlike many manufacturing industries is concerned mostly with one – off projects, thus creating retention problems and high rate of employee and apprentice turn over with consequent difficulty in training.

Besides, the dominance of most of the construction market by multinationals means that expatriates are imported to do most of the highly skilled jobs. The multinational corporations are international businesses made up of firms from a number of developed countries like USA, UK, China and Japan. The main objective of these multinationals is to amass profit and repatriate same to their countries. Besides, the companies import most of their expatriate workers from their home countries and pay them heavily only to pay peanuts to the Nigerian counterpart. The implication is that most of the multinationals are not willing to provide appropriate trainings to the local workers.

Additionally, the neglect of vocational education and the eventual rise of certificate syndrome have worsened effective construction personnel training in Nigeria. This trend is evident in the poor funding of vocational schools by government and lack of patronage by employers. The placing of more emphasis on academic oriented education has led to the escalating enrolment at the university level to the detriment of the institutions that train middle manpower (Arkani 2003). These have all led to the low personnel skills in the construction industry.

The failure of the local training bodies to fill the gap has compounded the challenge. For example, the Industrial Training Fund (ITF) is the statutory body established by decree no. 47 of 1971 in Nigeria, with a mandate to raise levies to support training from all employees ‘in scope’ of it. However it has failed over the years in its primary purpose of initiating, improving and facilitating trainings and development of training standards for use throughout the construction industry. This is with particular emphasis on ensuring an adequately trained workforce and establishing and enhancing national training standard.

Finally, the unattractive image of construction work has branded the construction industry as an institution where anybody can work. According to Pears (2003), 3D represents an acronym for “Dirty, Difficult and Dangerous” depicting the perceived image of the construction industry. In addition, the Industry suffers from an image of poor pay and working conditions and limited opportunities for career progression. This has resulted in the exodus of potential workers who would have continued in their trade into other sectors. Consequently, the pool of labour available at this stage is not highly skilled.

2.6 Methods of Personnel Training

In order to effectively implement training and development programmes, several methodologies have been put forward in previous studies. Atiomo (2000) identifies On–The–Job Training as the training in the normal work situation, in the attitude/knowledge/skill behaviour pattern appropriate to a task or job. In other words, the trainee learns as he does his job and with time perfects completely. Off–The–Job Training, on the other hand, is the training in the attitude/knowledge/skill behaviour pattern required for a task, job or occupation away from the normal work situation and day–to–day pressures (Smith 2002). Tabassi and Bakar (2009) made a comparison between on-the-job and off-the-job training. According to the authors, in terms of emphasis, off-the-job training is about learning basic facts and skills while on-the-job is about getting the job done. The ultimate goal of off-the-job is “knowledge” while that of on-the-job is developing “best practices”. The knowledge obtained from off-the-job training is static, de-contextualized and general while the knowledge obtained from on-the-job is dynamic, situated and practice-oriented. In terms of topics/problems, off-the-job is given by curriculum while they arise from and embedded in work situation for on-the-job trainings. The scope of learning for off-the-job is primarily individual while that for on-the-job ranges from individual to group and organisation (Tabassi and Bakar 2009).

Other training methods include: *Apprenticeship programmes*: are more comprehensive trainings that combines on – the – job training with related classroom instruction and are available for electricians, iron workers, carpenters and other artisans; *Vocational training schools*: are vestibule schools which provide practical on –

the – job knowledge and skills in diverse areas of human endeavour and is more formal than apprenticeship programme; *Industrial training*: is a form of training that provides an on – the – job situation for trainees and is usually part of the curricular for higher educational programmes in Universities, Polytechnics and lasts between 3 and 4 months. It is coordinated in Nigeria by the Industrial Training Fund; *Conferences and Workshops*: are for professional peers and superiors to rub minds, interact and share ideas on developments within a profession or industry; and *Higher Qualification Programmes*: include diploma, graduate and postgraduate programmes offered in institutions of higher learning and companies and organizations alike use it as a platform to sponsor their staff acquire knowledge at the higher level to equip them with requisite skill to face more daunting tasks in the organizations.

The various methods discussed above are complementary in ensuring that the goals of training and development are achieved in an organisation. There is however the question of whether they are actually been utilized in the construction industry especially in developing economies.

3. METHODOLOGY

3.1 Research Approach

Research designs are plans and procedures for research that span the decision from broad assumptions to detailed methods of data collection and analysis (Creswell 2009). Quantitative research method is used for testing objective theories by examining the relationship among variables (Sanders *et al.* 2009) and uses the collection of quantitative factual data to study correlations between facts and its relationships with theories and findings of previous research (Fellows *et al.* 2003). In other words, it uses assumptions to test theories deductively, building in protections against bias and is able to generalise and replicate findings (Creswell 2009). The research is purely deductive in nature relying on the quantitative survey approach using a structured questionnaire.

3.2 Research Methods

3.2.1 Research Participants

In it, a field survey involving a sample of 116 respondents were randomly drawn from the

population of contractors registered with the Federation of Construction Industry (FCI) and practicing professionals registered with their various professional bodies. The specific bodies are Council of Registered Builders of Nigeria (CORBON), Architects Registration Council of Nigeria (ARCON), Quantity Surveyors Registration Council of Nigeria (QSRCON) and Council of Registered Engineers of Nigeria (COREN).

3.2.2 Measuring instruments

A questionnaire survey was used to elicit the opinions of operators, artisans (technical personnel) and the Builders, Quantity surveyors, Engineers and contracts/project managers (managerial personnel) on personnel training activities in their companies. They were asked questions relating to qualifications as well as rating of training programmes available in their companies. Likert scale was used as the scale of measurement.

Specifically, respondents were asked to rate programmes in place in their companies for staff development using a four point Likert scale of 1 for strongly disagree, 2 for disagree, 3 for agree and 4 for strongly agree (objective one). The constructs measured are training policy, identifying development and training needs, designing and training programmes, acquisition of skills, accreditation and evaluation of feedback.

In order to assess the qualification profile of the respondents, they were asked to tick as appropriate the qualification that fits in their present status (objective two). The four constructs for technical personnel are: city and guild, trade test, General certificate of Education, Ordinary level, and National diploma. Four constructs were equally measured for the managerial personnel. They include: National diploma, higher national diploma, Bachelor of Science degree and Masters Degree.

For objective three, respondents were asked to determine the level of effectiveness of the methods of staff development in their companies using a four point Likert scale of 1 for not effective at all, 2 for not effective, 3 for effective and 4 for very effective. The constructs measured include: apprenticeship, vocational training, industrial training, and conference/workshops. Others are group training, National directorate of employment sponsored trainings, higher qualification, and on-the-job training.

In order to determine the significant scores, a benchmark of $(1+2+3+4)/4 = 2.5$ was used. In effect, those scores above 2.5 are significant while the scores below 2.5 are not significant.

3.2.3 Research Procedure

The study covered six major cities in the six states of the south - south geopolitical zone of the country. A total of one hundred and eighty (180) questionnaires broken down into thirty (30) for each were distributed. Copies of the questionnaire accompanied by a letter of introduction and a self addressed envelope were distributed while they were given two weeks to complete and post the questionnaire back to the researcher. Purposive sampling technique was used to administer the questionnaires. Out of the 180 questionnaires distributed, 116 were returned giving a total response rate of 64.7%.

3.3 Statistical Analysis

Descriptive statistical tools such as percentages and means were used to analyze the data collected. Also, Spearman's Rank Correlation

coefficient was used in this study to show the degree of agreement between the technical and managerial personnel on the effectiveness of the training policies put in place by the companies. It indicates the degree of agreement on a -1 to +1 scale and is based on the relative ranks of values by a group of respondents (Udofia 2011). Sample estimates of correlation close to unity in magnitude imply good correlation, while values near zero indicate little or no correlation (Assaf and Al-Hejji 2006). It is computed by the formula:

$$R_s = 1 - \frac{6\sum d^2}{N^3 - N} \quad (1)$$

Where R_s = Spearman's ranked correlation coefficient

d = differences between the ranks

N = number of factors ranked

4. RESULTS AND DISCUSSION

The details of responses from the administered questionnaires as indicated in Table 1 shows that 78 out of 120 responded from the technical staff while 38 out of 60 responded from the managerial staff giving a total response of 116 and a response rate of 64.7%. Respondents

Table 1: Analysis of detail of responses from administered questionnaires

Cities	Tech		Mangr		Total		% Distr	% Resp
	N/Distr	N/Resp	N/Distr	N/Resp	N/Distr	N/Resp		
P/H	20	17	10	8	30	25	16.7	13.9
YEN	20	14	10	7	30	21	16.7	11.7
CAL	20	13	10	6	30	19	16.7	10.6
WARRI	20	14	10	7	30	21	16.7	11.7
ABA	20	10	10	5	30	15	16.7	8.4
UYO	20	10	10	5	30	15	16.7	8.4
Total	120	78	60	38	180	116	100	64.7

TECH = technical MANGR = managerial %DISTR = % distributed %RESP = % response

P/H = Port Harcourt YEN = Yenegoa CAL = Calabar

Table 2: Analysis of the result on training programmes in place for staff development

Prog	Tech		Mangr		Aggre	
	Mean	Rank	Mean	Rank	Mean	Rank
T/POLICY	3.24	3	3.13	5	3.21	3
I,D andT	1.85	5	3.37	3	2.34	5
D/TP	2.87	4	2.74	6	2.83	4
A/S	3.41	1	3.5	1	3.44	1
ACCRED	3.35	2	3.39	2	3.36	2
EV/FED	1.59	6	3.32	4	2.16	6

PROG = programme TECH = technical MANGR = managerial AGGRE = aggregate T/POLICY = training policy I,DandT = identifying development and training needs D/TP = designing of training programme A/S = acquisition of skills ACCRED = accreditation EV/FED = evaluation/feedback

from Uyo have the highest response rate of 13.9% while the least of 8.4% each was from Warri and Aba. Uyo got the highest response rate because one of the authors is based in Uyo and was able to follow up on the respondents effectively.

4.1 Identification of Training Programmes

The details of analysis of results to identify the programmes in place for staff in the companies are shown in Table 2. Using a score of 2.5 as bench mark for identifying significant factors, all the six programmes are significant according to the managerial staff. They are in order of ratings: Acquisition of skills, Accreditation, Identifying development and training needs, Evaluation/Feedback, Training policy and Designing of training programmes. This means that in the view of the managerial staff, all the six programmes are in place for staff in their organizations. The most rated programme is Acquisition of skills.

On the other hand, only four programmes are significant according to the analysis of the responses of the technical staff. They include Acquisition of skills, Accreditation, Training policy and Designing of training programmes in that order.

4.2 Qualification of Respondents

A breakdown of the respondents according to their qualification profiles (Table 3) shows that 33 or 42.3% of the technical staff have Trade Test, 30 or 38.5% are G.C.E Ordinary Level holders, 12 or 15.4% are National Diploma holders and 3 or 3.8% are City and Guild holders. This is an indication that all the technical personnel

Table 3: Analysis of result on qualification profiles of respondents

QLF/T	NO	%	QLF/M	NO	%
CandG	3	3.8	ND	9	23.7
TR/TST	33	42.3	HND	14	36.8
G.C.E O/L	30	38.5	BSC	9	23.7
ND	12	15.4	MSC	6	15.8
TOTAL	78	100	TOTAL	38	100

QLF/T = qualification/technical QLF/M = qualification/managerial CandG = city and guild TR/TST = trade test

possess one form of qualification. Also the result of analysis show from Table 3 that 14 or 36.8% of the managerial staff have Higher National Diploma, 9 or 23.7% of the respondents National Diploma and Bachelor of Science degree each and 6 or 15.8% are Master of Science degree holders. This shows that majority of the managerial staff are holders of high profile qualifications in the companies.

4.3 Level of Effectiveness of Training Methods

The result of analysis of respondents on the effectiveness of methods of staff development in the companies as shown in Table 4 indicates that on – the – job training was rated the most effective by both the technical and managerial staff. Apprenticeship scheme and vocational training were rated second and third in that order by the technical staff while conferences and workshops, Industrial training programme were rated second and third in that order by the managerial staff. However National directorate of employment (NDE) sponsored trainings and Company sponsored Higher Educational trainings were among the least rated indicating that they are almost absent in the organizations.

Table 4: Analysis of result on the level of effectiveness of training methods of staff in the companies

Mtds	Tech		Mangr		Aggre	
	Mean	Rank	Mean	Rank	Mean	Rank
APPRT	3	2	3	6	3	2
V/T	2.77	3	3.16	4	2.89	3
IDUST/T	2.54	4	3.24	3	2.76	4
CON/WSP	2.23	5	3.32	2	2.59	5
GT	2	7	3.08	5	2.35	6
N/ST	2.05	6	2.29	7	2.13	7
HQ	1.69	8	1.87	8	1.75	8
OJT	3.69	1	3.39	1	3.59	1

APPRT = apprenticeship V/T = vocational training IDUST/T = industrial training CON/WSP = conferences/workshops

G/T = group training N/ST = NDE sponsored trainings HQ = higher qualification OJT = on- the- job training

Spearman's rank correlation coefficient was used to determine the level of agreement on the effectiveness of the methods of training among both technical and managerial personnel. Substituting the values of d and N into equation 1 gave a value of 0.38 meaning that the degree of agreement is 38%. This means that there is a low degree of agreement between the two groups on the level of effectiveness of training policies put in place by the construction companies.

4.4 Evaluation of the Findings

The purpose of this study was to appraise the level of personnel training policies in place among construction companies in a developing economy (Nigeria). There is a general apprehension in the literature that construction companies particularly in developing economies are far behind in this regard. This study therefore attempts to fill this gap by testing this existing proposition. To the best of the researchers' knowledge, there is nowhere in the literature to suggest that this has been done before.

Findings reveal that the training programmes put in place by most construction companies for the managerial staff are not consistent with that for the technical staff. The findings clearly indicate that acquisition of skills is given the highest amount of priority according to both categories of personnel. The managerial personnel however are of the view that all the six programmes are in place in the companies but with varying degrees of implementation. The technical personnel who are mostly artisans and subordinate staff in the companies however differ slightly in their opinion insisting that there are only four programmes in place in the construction companies. A possible explanation for this is that the managerial personnel who are mostly at the top level of management may be out of touch with what is going on at the lower level.

Findings from the result also reveal that most of the personnel possess paper qualification as entry qualification. However, from personal interviews with most of the respondents, there have not been any opportunities to go for higher qualifications as the companies are not willing to sponsor mostly the low level technical staff for higher trainings to improve their qualification profile. The possible explanation for this hinges on previous studies which have suggested that non permanent nature of construction

projects have given room for break-up and readjustment of site personnel for site production (Odusami *et al.* 2007). Most companies are therefore not willing to commit huge resources to training personnel especially at the lower level.

On-the-job training is the most effective method of training /staff development in the companies according to the respondents. This is largely expected as most duties in the construction industry are mostly carried out on-the-site giving opportunities to large group of employees to be trained while on the job.

There is significant difference in the opinion of the two groups of personnel according to the result of the test of hypothesis. The possible explanation for this result is that while there are effective training policies for managerial personnel, the story is likely to be different from the perspective of the technical personnel.

This study had two major limitations. The research was conducted in one of the six geopolitical zones of Nigeria using mainly quantitative techniques to test existing theories. A larger scale follow-up study is suggested using qualitative techniques such as interviews and observations to triangulate the findings of this study. Besides, it was carried out in Nigeria, one of the many developing economies. It will be useful to see how the outcome of this research can be compared with that conducted in other countries in the developing world.

5. CONCLUSION

The study focused on the appraisal of personnel training policies of construction companies in south-south Nigeria with a view towards assessing the qualification profile of staff, identifying the training programmes in place in the companies and determining the level of effectiveness of their methods of training. It is clear from the study that things are far from being right in the training of personnel in the construction industry in Nigeria. Having carefully appraised the phenomenon under investigation, and analyzed the relevant data, the study revealed that although both the technical and managerial employees identified some basic programmes as applicable in the companies, they are clearly inadequate. Besides, the study has provided greater insight into the level of effectiveness of the methods of training identified. On-the-job training was rated the most effective. The study also revealed that the training

policies of most of the construction companies provide opportunities only to selected members of staff especially those at the managerial level.

6. RECOMMENDATIONS

Based on findings of the study and suggestions made by respondents, the following recommendations are made:

1. Construction companies in the zone should make it a policy to provide adequate training for every employee irrespective of his/her cadre in the companies.
2. The government in conjunction with the stakeholders should review the policies of the companies to ensure that adequate provision is made for staff development through workshops and other human development schemes.
3. Government should provide the enabling environment for effective training by enacting enabling legislation that will make it mandatory for construction companies to train its staff. More research should be conducted to explore the relationship between personnel training policies and construction project success.

REFERENCES

- Arkani A 2003. Regulation for survival: Training skills in the construction labour in Jersey, Channel Islands. *Journal of Vocational Education and Training*, 55(22): 12-24.
- Assaf AS, Al-Hejji S 2006. Causes of delay in large construction projects. *International Journal of Project Management*, 24: 349 – 357.
- Atiomu AC 2000. *Practical Human Resources Management*. 1st Edition. Lagos: Malt House Press Limited.
- Bamisile A 2004. *Building Production Management. The Professional's Instruction Manual*. Lagos: Foresight Press Limited.
- Chan P 2005. *Construction Training and Labour Productivity*. Ph.D. Thesis, Unpublished. London University.
- Chitkara KK 2006. *Construction Project Management (Planning, Scheduling and Controlling)*. 11th Edition. New Delhi: Tata McGraw-Hill Publishing Company Limited.
- Cole AG 1996. *Management Theory and Practice*. 5th Edition. London: Martins Printers Limited, pp. 26, 174.
- Construction Industry Training Board 2003. Construction skills annual report. From <www.cskills.org/uploads/annual_report_2003_tcm17-6109.pdf> (Accessed on August 29, 2009).
- Creswell JW 2009. *Research Design: Qualitative, Quantitative and Mixed Methods*. 3rd Edition. California: SAGE Publications.
- Fellows R, Liu AMM, Stephanie J 2003. *Research Methods for Construction*. West Sussex: Blackwell Publishing Limited.
- Frimpong Y, Oluwoye J, Crawford I 2003. Causes of delay and cost overruns in construction of ground-water projects in developing countries: Ghana as a case study. *International Journal of Project Management*, 21: 321-326.
- Gann D, Senkar P 1998. Construction skills training for the next millennium. *Construction Management and Economics*, 16: 557 – 580.
- Hengrickson C, Au T 1989. *Project Management for Construction*. New Jersey: Prentice Hall, Woods.
- Idoro GI 2011. Comparing occupational health and safety (OHS) management efforts and performance of Nigerian construction contractors. *Journal of Construction in Developing Countries*, preview manuscript.
- Idoro GI 2007. Contractors' Characteristics and Health and Safety Performance in the Nigerian Construction Industry. *Proceedings of CIB World Building Conference on Construction for Development*, Cape Town, South Africa, May 14-18.
- International Labour Organization, 2001. *Tripartite Meeting on the Construction Industry in the 21st Century: Its Image, Employment Prospects and Skills Requirements*. ILO Office Geneva, 10th – 15th December, pp. 16, 26.
- Jayawardane AKW, Gunawardena ND 1998. Construction workers in developing countries: A case study of Sri Lanka. *Construction Management and Economics*, 16(5): 521-530.
- Learning and Skills Council 2003. Sector Study Series for Kent and Medway. From <www.isc.gov.uk/kentandmedway.com> (Accessed on August 29, 2009).
- Moore D, McCabe G, Duckworth W, Sclove S 2003. *The Practice of Business Statistics*. New York: Freeman.
- Obiegbu ME 2003. Education and Training of Builders Towards Proactive Roles in the 21st Century Building Industry in Nigeria. *Seminar for Lecturers of Building Programme in Tertiary Institutions*. Nigerian Institute of Building (NIOB), 13th December.
- Oduami KT, Oyediran OS, Oseni AO 2007. Training needs of construction site managers. *Emirate Journal for Engineering Research*, 12(1): 73-81.
- Ogunlana SO, Thapa S, Dey PK 2002. Assessing engineering training needs, methods, and effectiveness In: S O Ogunlana (Eds.): *Training for Construction Industry Development*. Rotterdam: CIB Publication, pp.94-102.
- Pears D 2003. *The Social and Economic Value of Construction. A Report of the Industry Research and Innovation Strategy Panel*. London: Management Support Unit.
- Sanders M, Lewis P, Thornhill A 2009. *Research Methods for Business Students*. 5th Edition. Essex: Pearson Education Limited.
- Smith PJ 2002. "Modern" learning methods: Rhetoric and reality-further to Sadler-Smith et al. *Pers Rev*, 31(1): 103-113.
- Tabassi AA, Ramli M, Bakar AHA 2011. Training, motivation and teamwork improvement: The case

- of construction firms. *African Journal of Business Management*, 5(14): 5627-5636.
- Tabassi AA, Ramli M, Bakar AHA 2011. Training, motivation and performance: The case of human resource management in construction projects in Mashhad, Iran. *Internal Project Management*, 27:471-480.
- Udofia PE 2011. *Applied Statistics with Multivariate Methods*. 1st Edition. Enugu: Immaculate Publications Limited.
- VETIVA 2011. *Construction Industry Report: A Haven of Opportunities*. A Publication of VETIVA Capital Management Limited, Lagos, Nigeria, May 2011.
- World Bank 2006. *Construction Industry: Issues and Strategies in Developing Countries*. World Bank, Washington D.C., pp. 25, 35 and 38.
- Yakubu N 2005. Collapse of Buildings Again. *New Nigerian Newspapers, Kaduna*, June 2nd, P. 1.