The nature, types and standards of training policy for site operatives by local building contractors in Ghana

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Abstract

This paper presents the concept of training as it relates to the construction industry, and specifically site operatives, that is, the craftsmen and labourers. Training has a systematic undertone with great benefits too. It can determine the effectiveness and efficiency of any organisation. The paper addresses the training policy in place for such operatives in construction firms in Ghana. Literature is reviewed accordingly to provide a framework and direction for the study. The primary data collection was centered on large, medium and small-scale building contractors in six (6) regions in the southern sector of Ghana, seen as a hub of construction activities. From the findings, it is only the large-scale contractors who have some plausible training policies for the site operatives with non-specialists largely doubling as training officers. Training needs are poorly determined and evaluated, and on-the-job instruction is the commonest mode of training site operatives.

Keywords: Site Operatives, Local Building Construction Industry, Training Needs

1. Introduction

1.1 Background information on the study

Who are site operatives on building construction works? These are the personnel who carry out the physical construction work, that is, the tradesmen/craftsmen and the labourers or mates. It is believed (Butler, 1988:3) that the construction industry, as a whole, is one of the few industries that still rely a great deal on the individual skills of the workforce and especially tradesmen/craftsmen; and there will always be the need for such operatives. Modern construction, no doubt, is complex, highly organized, fast moving and exciting. It is both a science, and a commercial business, and also a creative art. From the newest recruit to the mature craftsman of many years experience, it could be quite rewarding, tough and demanding of discipline. Everybody employed within the process of building construction can make a direct contribution not only to the community in general but also to the nation at large.

Construction involves a high volume of specialist work and a wide range of trades/crafts and activities. Construction also is deemed to be labour intensive, the cost of labour often representing over 50 percent of the total cost of a building (Ward, 1979:4). No building construction work could ever commence without the construction operatives and the value and contribution of their efforts need to be well appreciated.

After the employment of personnel by any concern including that for building, nothing is important for the future of that concern than the training of the personnel. This is important irrespective of the size of the concern. A part-training of even semi-skilled workers could be of a valuable advantage in the building industry where an increased proficiency of only 10 percent could mean a considerable gain in productivity (Calvert, Bailey and Coles, 1995:160).

Training has a systematic undertone and great benefits too. Beach (1970) has mentioned that training is a vital and necessary activity in all organizations, in that it plays a large part in determining the effectiveness and efficiency of the establishment.

1.2 Problem statement

Over the years, there has been a lot of clamor on shoddy works being undertaken in the local building contracting industry with local indigenous contractors the worst accused (Daily Graphic, February 11, 2010:40; Ghanaian Times, November 30, 2011:27; Ghanaian Times, December 28, 2011:26; and Daily Graphic, June 17, 2013:23). It may seem the hiring system of operatives is being   done without the need strongly for further training given the number of years some of these contractors have been plying their trade. This lack of policy could seriously hamper the effectiveness and efficiency of site operatives, and by extension impact negatively on quality delivery of construction projects and within time and cost. Building construction site works involve quite a volume of specialist works and a wide range of trades and activities; and as had been stated earlier, the cost of labour activities could represent on the average 50 percent of the total cost of a building. Coupled with the fact that an increased proficiency of only 10% through proper training of even semi-skilled workers could mean a considerable gain in productivity, there is a window of opportunity for building contractors to achieve greater efficiency and effectiveness of work output if proper training programmes are

made available to site operatives. It is against this   background that this research paper is proposed with the following research questions:

1. Is there a training policy in place for site operatives by local building contracting firms?
2. If there is one in place, what is/are the nature, type(s) and standard(s) of the training policy?

1.3 Objectives of the study

The objective of the study is to assess the level of the involvement of local building contractors in the training of their employees specifically the site operatives. Specifically, the study will:

1. Find out if local building contractors have any training policy for site operatives and identify the categories of the contractors having such policy.
2. Ascertain, if the contractors do have any training policy, the nature, types(s) and standard(s) of the policy.

2. Literature Review

The concept of training has a systematic undertone. Its planning and implementation to achieve the purpose must, therefore, be through a series of interrelated and interconnected processes and not done arbitrarily. Training programmes have to be well developed and articulated before any training can be said to have been effectively embarked upon. Training encompasses phases.

What is training? McCormick and Tiffin (1975) have defined training as that "intended to provide learning experiences that will help people to perform more effectively in their present or future jobs". Prokopenko and White (1981) have also defined training as "any kind of action taken to impart or improve the knowledge and skills of an employee or to create some other kind of positive change, like improving attitudes or sensitivity to human relations". Those 'people' or that 'employee' can also be construction site operatives – those personnel who carry out the physical construction works i.e. tradesmen/craftsmen and the labourers. Site operatives training can, therefore, be said to be the learning experiences given to a tradesman/craftsman and/or labourer in order to improve his/her knowledge and skills for more effective performance in his/her present or future job on a construction project site.

2.1 Benefits of training

Beach (1970) mentioned that "training is a vital and necessary activity in all organizations. It plays a large part in determining the effectiveness and efficiency of the establishment". He also enumerated the following benefits of training:

1. Reduced learning time to reach acceptable performance through having qualified and experienced instructors to create carefully controlled learning situations.
2. Improved performance on present job.
3. Attitude formation through having training programmes with the objectives of moulding employees attitudes to achieve support for company's activities, and to obtaining better co-operation and greater loyalty.
4. Training can help to fill manpower needs. For instance a manufacturing company finding it quite difficult to recruit sufficiently skilled machinists, say, may establish its own apprentice training programme to help solve this manpower problem, in the long run.
5. Training benefits employees thereby increasing their market value and earning power. In addition trained workers are likely to be in profession of useful skills which enhance their value to their employers and thereby increases their job security. Training may also qualify those workers for promotion to more responsible jobs; this also increases their pay and status.

Ovuorie (1985) also adds that training makes employees to require less constant and detailed supervision so that there is a better basis on which employees may exercise judgments.

2.2 Principles of learning and training

Hallstein (1969) specifically points out that actual training should be grounded in sound learning principles. He, in particular, emphasized the principles that learning must satisfy a need, should be active, should be arranged in a logical order, should be broken down into small steps, should provide repetition, and should provide feedback. In addition, Pigors and Myers (1981) also stated that the best-planned training programmes are likely to be ineffective if the trainers are poorly qualified. A well-qualified trainer is one who not only masters the technical details of a particular job, but also knows how to train, that is, to teach. Learning is the core of the training process. When, for   instance, management installs a new training activity, it reasonably expects that through participation in this training, employees can exhibit new or changed behavior. Indeed, Beach (1970) defined learning as "that human process by which skills, knowledge, habits and attitudes are   acquired and utilized in such a way that behavior is modified".

A person has learned when he or she demonstrates it by performance. A mathematics student, for instance, by solving written human work problem, has demonstrated that he has learned his assigned lessons. Likewise, a welding trainee reveals he has learned to make a pipe weld by actually doing it.

2.3 Phases in the development of the training programme

Phases in the development of training programmes take into cognisance the determination of training needs, the programme design, the programme implementation, and the programme evaluation.

2.3.1. Determination of training needs

Beach (1970) maintains that training programmes should be established only when it is felt that they aid in solving specific operational problems. Therefore, the rational way of deciding what kind of training activity to undertake is to make an analysis of the entire organization (people, jobs, technology, etc) to identify areas of shortcomings where training can help. Training needs can be determined as follows:

2.3.1.1 Personnel Need Analysis

This is the analysis of jobs and employees. McCormick and Tiffin (1975) have highlighted that job analysis is the way and manner of obtaining jobs information through either observation or an interview with a job incumbent which then can lead to a job description, that is, the written statement of an employee's duties and skills. Thus job analysis entails job description and job specification, and this analysis information can help in selecting an employee to fill a job position and to appraise someone who is doing a job through the determination of skills and abilities necessary for the job. A job analysis should state how much training, if any, is needed.

Regular personnel appraisals may also provide the basis for pinpointing the training needs of individuals. However, when there are indications of training deficiencies within groups of employees, a general approach to the determination of their training needs may be in order, looking towards the development of a training programme to improve their job performance. Training needs can be determined by the identification of specific performance problems. Experienced workers can profit from training to overcome some identified faults. If too much material is being wasted, the supervisor can locate the sources of waste and teach workers the correct methods to avoid it. If accidents have been a problem, training aimed at improving attitudes and teaching safe procedures can often help. A training need due to the introduction of new methods and equipment arises when employees have to be conversant with new ways of doing a present task or job or when a new type of equipment is introduced into the market which necessitates training in how to handle the new functions it would entail. Zelikoff (1969) highlights that one of the prices people have to pay for a fast-moving technology is an increase in obsolescence in certain occupations especially those of a scientific and professional nature.

Collection of employees and managerial opinions through interviews and questionnaires to obtain views regarding necessary and desirable training programmes can also determine training needs.

2.3.1.2 Task Need Analysis

The most obvious training need occurs when there is the arrival of new employees in the organization. The new employees would need to know:
   a) What the organization is like and what their roles will be in it; and
   b) What work is expected of them to be done and how to perform that work.

The first (a) is met by some form of job instruction, some method of identifying the tasks to be performed in the job and the requirements of the task in question (Miller, 1962).

2.3.1.3 Organisational Need Analysis

The identification of specific problem areas in an organization can suggest ways in which training may help towards a solution. The following can be areas in which an organization can determine training needs: low productivity; high costs; poor quality of work; excessive scrap and waste; excessive labour-management strife; excessive grievances; excessive violation of rules of conduct; poor discipline; high employee turnover; excessive absenteeism; delayed production (schedules not met); expansion of business; new products; new services; new designs; new plants; new technology; organizational changes; and manpower inventory (comparing present manpower resources with forecasted needs).

2.3.2 Programme Design

2.3.2.1 Satisfactory answering of Training Questions

Programme design is the second phase in the development of training programmes. The generative concepts of the various identified training questions have to be analysed toward a satisfactory training programme design for employees. These training questions are: Who to train? Why train? What to train in? How? Where? and When?

2.3.2.1.1 Who?

This training question relates to the personnel to be trained as a result of some identified training needs. Klatt, Murdicle and Schuster (1985) have mentioned that training and development programmes are usually

differentiated to develop five groups of employees:

a. Managers
b. Professional personnel
c. Semi-professional employees (technicians)
d. Office and clerical help
e. Factory and other production personnel

Fleishman (1967) also mentioned that training of employees and managers represents one of the most extensive personnel activities in modern organizations.

2.3.2.1.2 Why?

This relates to the organization's general objectives of getting an optimization of the use of manpower/human resources in line with identified needs. An organization may embark on a training programme for its employees for a number of purposes. Pigors and Myers (1981) identified the following objectives:

a. To maximize profit or increase the firm's share of the market in business enterprise.
b. To improve efficiency or expand the scope of services.
c. To expand facilities; and
d. To develop human resources.

2.3.2.1.3 What?

What are the contents and materials to be taught? These recognize the training needs of the organisation that have been determined.

2.3.2.1.4 How?

This is about the methods and techniques of training. A wide spectrum of training methods and techniques, each with its own peculiar uses and constraints, is available for various training programmes by organisations. Some of these are:

a. On-the-job
b. Vestibule (classroom training for semi-skilled production and clerical jobs)
c. Lecture
d. Conference
e. Case method (analyse problem and to discover underlying principles)
f. Role playing (play the part of someone in a simulated situation)
g. Programmed Instruction (PI) (from simple steps to complex steps)
h. Computer-Assisted Instruction (CAI) (a sophisticated descendant of PI using computers).
i. Audio-visual aids (motion pictures, slides, film strips, power point presentations and television).
j. Simulators and training aids (training with physical equipment that resembles to some degree that which is to be used on the job).
k. Human relations laboratory training (supervisory and managerial development to facilitate inter-personal relationships).
l. Management games (dynamic training exercise utilizing a model of a business situation).
m. Demonstration (sight learning in which trainer actually shows trainee how to do something for skill acquisition).
n. Job rotation (rotation among positions in different functions to test ability to meet new situations and solve different problems).
o. Delegation (skillful selection of subordinate employees for job assignments).
p. In-basket training.
q. Sensitivity training (for top management, to enable individuals to develop abilities to solve problems).

2.3.2.1.5 Where?

This refers to the types of training programmes for employees. Pigors and Myers (1981) have stressed that the types of employee training best suited to a specific organisation depends upon a number of factors such as skills called for in jobs to be filled, qualifications of candidates applying for jobs, and the kinds of operating problems confronted by the organisation.

Training programmes in organisations take on many forms but fall into the following broad categories:

a)   Orientation

Typically employed for orienting new employees to an organisation by providing information about the organisation, its history, products, policies and so on. Thus orientation as defined by Beach (1970) is "the guided adjustment of the employee to the organisation and his work environment". The main objective of orientation should be for the organisation to make the newcomer feel he or she is wanted and needed.

b)   On-the-job-training

Employed in helping employees to learn new jobs; may be on an organised, systematic basis, or on a catch-as-catch-can basis. Black (1975) maintained that probably 90% of training done in industry utilizes the technique of on-the-job training. We rely on it every time we explain the operation of a job to an employee, show him or

her how to do it, ask him or her to do it while the supervisor stands by to coach, give encouragement, correct mistakes, and at last, when the trainee decides he or she can do it alone, periodically check or follow up to make sure performance is satisfactory. On-the-job training is useful for learning unskilled or semi-skilled manual type jobs, clerical jobs, and sales work.

c)   Off-the-job training

This can cover a wide range of training activities given by an organisation, such as vestibule training (training for specific jobs), supervisory and management training and development, some apprentice training, and job-improvement training. It may be combined with on-the-job training, as in the case of apprentice training programme.

d)   Outside training

This is training that is arranged with outside bodies, such as universities, polytechnics, trade and professional associations or groups and manpower/human resource development agencies.

2.3.2.1.6 When?

When to train is synonymous with the determination of training needs. The scheduling of learning can be either "massed" or distributed. It is generally believed that for any given training situation, there is some "optimum" schedule that contributes most effectively to training. The fact of different schedules having differential effort has been documented by experts. It is likely that a training programme spaced out properly in time duration yields more fruit that that concentrated. The problem for any specific training however, is that of figuring out what duration and spacing would be optimum for the particular training that is being planned. Bass and Vaughan (1966) offer the following ideas:

- Distribution of learning has to be more consistently beneficial to the learning of motor skills than to verbal learning and other complex forms of learning; and
- The less meaningful the material to be learned and the greater its difficulty and amount, the more distributed practice will tend to be retained longer than material learned in concentrated doses.

In addition, it seems desirable to have each training period cover some cohesive segment of the training content. Also one should avoid the onset of excessive boredom or inattention by interspersing breaks in the training sessions now and then. Short breaks frequently facilitate the learning process.

2.3.3 Programme Implementation

This is the third phase in the development of a training programme. After the satisfactory answering of the training questions enumerated above, the implementation of the designed programmes has to come in. A properly designed training programme can only be properly appraised when it is implemented. This can be done by employees undergoing the right types of training using the right methods.

2.3.3.1 Types of training

Basically we have four training types and these have already been discussed. They are: orientation, on-the-job, off-the-job and outside training. A particular type of training is chosen for an employee based on what has been identified as a training need. For construction operatives, orientation and on-the-job training types seem popular.

2.3.3.2 Methods of training

After the type of training has been identified, the method to use in training an employed has to come into focus. There are different methods to use and these have also been highlighted in earlier discussions.

The type of employee sent on training will normally dictate the training method to be used. Usually, the following methods of training are suitable for low-level workers in general:

-        On-the-job
-        Vestibule
-        Lecture
-        Role-playing
-        Demonstration
-        Simulation
-        Audio-visual aids
-        Delegation

For building construction operatives, that is, the craftsmen and labourers, the methods of on-the-job, demonstration, simulation and audio-visual aids tend to be the norm.

2.3.4 Programme Evaluation

This is the last phase in the development of a training programme. It is the evaluation of the training effort in order to ascertain whether trained employees have acquired the desired skills, knowledges, and attitudes after training. It is in effect an evaluation of the effectiveness of the training programme.

Basically, according to McCormick and Tiffin (1975), the levels of evaluation are reaction, learning, behaviour, and results. However, there are various techniques also available to evaluate the effectiveness of training under the levels of evaluation. Beach (1970) mentioned the following techniques:

a) Administration of questionnaires to the trainees at the completion of the programme to obtain their

opinions as to its worth.
b) Interviews to elicit opinions.
c) Measuring the knowledge and/or skill that employees possess at the beginning of training and again at the completion of same through the administration of the same examination before and after.
d) Using various indices of work performance and compare them after the training with values before the training.
e) Measuring performance before and after training for both a control group and an experimental group. This procedure can be accomplished by selecting two groups of employees that are approximately equivalent in education, experience, skill, job conditions and performance. Subject one (experimental) group to the training programme and give no training to the other (control) group.

This last technique has been established as the most refined method of evaluating training (and one that also avoids the errors of other techniques) and is one of the most fruitful methods available.

2.3.4.1 Reaction

This level of evaluation asks, for instance, how well did the trainee like the programme? And the answer can be got through the application of any of the techniques of   evaluation as enumerated above.

2.3.4.2 Learning

This level asks the basic question: to what extent did the trainee learn the facts, principles, and approaches that were included in the training?

2.3.4.3 Behaviour

This level asks the question: to what extent did their job behaviour change because of the training programme?

2.3.4.4 Results

This last level asks the question: what final results were achieved (reduction in cost, reduction in turnover, improvement in production, etc.)?

These four levels can be viewed as four different types of criteria, but with the distinct implication that "results" are clearly the most appropriate criterion in most cases.

3. Methodology

3.1 Study Area:

The southern sector of Ghana was taken as the study area. This sector seems to be the   major   hub   of commercial and construction activities in the country. A study undertaken in the sector, therefore, can be representative of the situation in the country as a whole.

3.2 The Population of the study:

The population of the study were local building and civil engineering contractors spanning small, medium and large categories and as classified in the financial category by the Ministry of Water Resources, Works and Housing (MWRWH).

3.3 The Sampling Procedure and Sampling size:

The contractors were stratified into small, medium and large companies and random samples taken from each of the stratum.

3.4 Study Design:

The study design was based on the descriptive quantitative research with survey research as the type or method. The study was carried out using structured questionnaire, observation and unstructured interview.

3.5 Data and Instrument for Data Collection:

Both primary and secondary data were gathered. The primary data were collected from the field with questionnaires, observations and interviews. The secondary data were collected from documented literature.

3.6 Test of Validity and Reliability of Measurement Instrument:

Face validity was employed for the test of validity. The test-retest reliability method was employed for the reliability of the data measuring instruments.

4. Results and Discussion

The survey research was undertaken in six (6) regions in the southern sector of Ghana. These were Greater-Accra, Eastern, Central, Western, Ashanti and Brong Ahafo regions. One hundred (100) sets of questionnaire were administered: 25 to Greater Accra with the remaining five regions having 15 each. 34 of the administered questionnaires were responded to as follows: Greater-Accra (25); Eastern (1); Central (1); Western (3); Ashanti (Nil); and Brong Ahafo (4). Tables 1, 2 and 3 below indicate the analyses of the respondents as per their scope of operation, financial classification, and category (small -, medium -, or large-size).

Table 1: Building Works only Contractors

Financial Classification	No. of firms	Category of Firm
D1K1	2	Large
D2K2	4	Medium
D3K3	3	Medium
D4K4	2	Small

Table 2: Both Building and Civil Engineering Works Contractors

Financial Classification	No. of firms	Category of firm
D1K1	4	Large
D1K1	7	Medium
D2K2	4	Medium
D3K3	4	Medium
D4K4	3	Small

Table 3: Electrical and Mechanical Engineering Contractors

Financial Classification	No. of firms	Category of firm
D3K3	1	Medium

Table 4 below indicates the summary of the categories of firms, financial classifications and number that responded.

Table 4: Summary of categories of firm, financial classification and number that responded

Category of firm	Financial Classification	No. of firms	Remarks
Large	D1K1	6	
Medium	D1K1	7	
Medium	D2K2	8	
Medium	D3K3	8	
Small	D4K4	5	
Total		34	

Table 5 indicates the number of contractors with human resource (HR) policy on training and retraining of employee for the development of his or her skills.

Table 5: Contractors with HR policy on training and retraining of employee.

Category of firm	Financial Classification	No. of firms	Remarks
Large	D1K1	4	66.67%
Medium	D1K1	5	71.43%
Medium	D2K2	3	37.5%
Medium	D3K3	5	62.5%
Small	D4K4	1	20%
Total		18	

The above indicates that HR policy is not being properly championed by medium D2K2 and small D4K4 contractors. The other contractors do moderately champion HR policy.

The D1K1 financially-classified contractors (D1KI contractors) are those contractors who handle contracts $500,000.00 and above in value, more than double that handled by other financially-classified contractors.
This presupposes that these D1K1 contractors are better-resourced than the others. Developing HR policy and making it implementable requires a lot of resources since training of employees and managers represents one of the most extensive personnel activities in modern organizations (Fleishman, 1967).Once proper training is an extensive activity, it is therefore great in amount and which, undoubtedly, it is the large concerns that can quite afford the venture.

Table 6: Contractors aware of the Labour Act

Category of firm	Financial Classification	No. of firms	Remarks
Large	D1K1	6	100%
Medium	D1K1	7	100%
Medium	D2K2	7	87.5%
Medium	D3K3	5	62.5%
Small	D4K4	3	60%
Total		28	

Analysis of Table 6 indicates that a lot of the contractors (28 No) are aware of the Labour Act. It is, therefore, presumed that these contractors know what it entails to implement the Act, although the medium D3K3 and small D4K4 contractors are less aware.

Part of the duties of the employer under the Labour Act is to develop the human resources by way of training and retraining of the workers as part of the employer's right to formulate policies, execute plans and programmes to set targets for better productivity. Given the obvious benefits of training earlier enunciated, it should be quite understandable why a whole lot of the contractors would want to avail themselves with information that could make the employee to be trained and retrained for the development of his or her skills.

Table 7: Contractors employing Training Officers per se.

Category of firm	Financial Classification	No. of firms	Remarks
Large	D1K1	2	33.33%
Medium	D1K1	4	57.142%
Medium	D2K2	4	50.0%
Medium	D3K3	6	75%
Small	D4K4	0	0%
	Total	16	

The small-scale contractors did not have any Training Officers. The large scale contractors surveyed had only a third of them (33.3%) employing training officers. 14 out of 23 medium scale contractors, average of 60.0%, do employ Training Officers. This shows that the issue of training, per the Labour Act, is not being taken very seriously by Ghanaians contractors; non-specialists double as training officers in most of the companies.

The small-scale contractors adduced the reason of lack of additional funds to employ a full-time staff for that purpose, and most of these contractors have the owners of the company doubling as training officers.
For the large-scale and the medium-scale contractors, the issue of not engaging adequately training officers on other duties when employed came up. Hence for such companies, it would be quite 'unproductive' to engage full-time specialist training officers who at certain points in time would most likely be idle. Thus site managers, site engineers, project managers or even foremen have been tasked to perform the specialized function of the training officer in addition to routine duties. Other reasons advanced for not seeing the need to employ full-time training officers are high productivity achievement, good materials control, low wastage on site, and schedules met mostly on time.

Table 8: Contractors having training policy for site operatives

Category of firm	Financial Classification	No. of firms	Remarks
Large	D1K1	5	83.33%
Medium	D1K1	5	71.43%
Medium	D2K2	5	62.5%
Medium	D3K3	4	50%
Small	D4K4	1	20%
Total		20	

Table 9: Determination of training needs for contractors having training policy for site operatives.

Category of firm	Financial Classification	No. of firms	Common Determinants
Large	D1K1	5	Job Analysis; Employee appraisal; Testing; Improving cooperation and team spirit; introduction of new methods and equipment; employees have newly arrived; poor material control; frequent labour-management strife; expansion of business by organisation.
Medium Medium Medium	D1K1 D2K2 D3K3	5) 5) 4)	Job Analysis; employee appraisal; too much materials wastage; overcoming absenteeism; employees have newly arrived; poor quality of work/work rejection by client; new plant/equipment acquired; introduction of new technology; high production costs (cost overruns established).
Small	D4K4	1	Nil

Large-scale contractors should have a better capacity-building strategy than the other types. Overcoming the following, therefore, should not be a problem: absenteeism, poor quality of work/work rejection by client, introduction of new technology or new plant/equipment, and high production costs. The common determinants as highlighted in Table 9 above for large-scale contractors are some of the rational ways of identifying possible areas of shortcomings where training can be of help in overcoming.

The medium-scale and the small-scale contractors seem to have lesser capacity-building strategies, and coupled with lack of effective resources, the common determinants (with none for the small-scale contractors) as indicated in Table 9 are not out of place at all.

Table 10: Method(s) of training site operatives for contractors with training policy for site operatives

Category of firm	Financial Classification	No. of firms	Remarks
Large	D1K1	5	On-the-job
Medium	D1K1	5	-do-
Medium	D2K2	5	-do-
Medium	D3K3	4	-do-
Small	D4K4	1	Nil
	Total	20	

On-the-job instruction is the commonest method of training the site operatives by those contractors with training policy for site operatives. Clearly, this is not enough as simulation and demonstration have been known, in conjunction with on-the-job instruction, as one of the best approaches to the training of site operatives in order to achieve maximum productivity from the training effort.

Simulation and Demonstration, as methods of training, involve much more resources in terms of cost and time. Simulation requires that site operatives training takes place with physical equipment that resembles to some degree that which is to be used on the job; and this is clearly an extra cost both in acquisition, installation and maintenance. In addition, trainers would need to acquire the skills needed to manipulate such equipment to impart the knowledge that is required- an additional cost.

Demonstration involves sight-learning in which the trainer actually shows the trainee how to do something for skill acquisition and which is later imparted on the job. This also calls for an independent trainer who is tasked outside the main work regime on site with a programme of training with time schedules attached. All these would involve extra costs in remuneration and time.

On-the-job training, as the name implies, is much easier, less costly and wastes less time to achieve. The operative is trained as he or she is performing actually the task although with some obvious delays to production runs as mistakes made would need to be immediately corrected before works proceed any further.

Table 11 below indicates the responses to the various means by which the evaluation of the outcome of the training programme are done by those contractors having a training policy for site operatives.

Table 11: Evaluation of Outcome of training programme

Category of firm	Financial Classification	No. of firms	Remarks
Large	D1K1	5	Questionnaire (Q) – 20% Interview (I) – 60% Measurement (M) – 80% Work Index (WI) – 100% Control Versus Experimental Group (CVEG) – 60%
Medium Medium Medium	D1K1 D2K2 D3K3	5) 5) 4)	Q – 57.14% I – 71.43% M – 57.14% WI – 100% CVEG – 57%
Small	D4K4	1	Nil

From the data gathered in Table 11 above, it is obvious that for large-scale contractors, measurement of knowledge and/or skill at the beginning of training, and at the completion of the training, and the comparison of the values of work performance index before and after the training are the highly preferred means of evaluation (80% and 100%).

For the medium-scale contractors, interviews to solicit trainees' opinions and the comparison of the values of work performance index before and after the training are the highly preferred means. The small-scale contractor did not indicate any means of evaluation, that is, the company does not evaluate the training effort.

The small-scale contractors to a very large extent do not train site operatives. Hence little surprise that there is no evaluation of the training effort by these. There would be nothing actually to evaluate!

The medium-scale contractors place more emphasis on Interview and Work Performance Index. Questionnaire design, measuring knowledge and/or skills and performance measurement for both a control and experimental group are quite involving resource-wise both in design, documentation, and implementation as compared to Interviews and Work Performance Indices. Easier options have been taken for the evaluation process here.

The large-scale contractors, given the resources at their disposal, can at least afford to do the design, documentation and implementation of Measurement in addition to Work Performance Index which would be much easier to do to get a better picture of the evaluation process.

Albeit, it has been established (Beach, 1970) that the measurement of performance before and after training for both a CONTROL group (those not sent on training) and an EXPERIMENTAL group (those sent on training) is the best evaluation technique, the most refined method for evaluating training, one that avoids the errors of the other techniques, and is also one of the most fruitful methods available. Thus it shows that local building contractors that have training policies for site operatives are not properly evaluating the outcome of the training programme hence there is the likelihood of not knowing properly whether the training effort has been effectively and efficiently organised to achieve better productivity of work.

Findings

1. Human Resource (HR) policy is being undertaken to some moderate extent by large and medium scale contractors.
2. The large scale contractors are most aware of the Labour Act. However, its implementation is quite another ball game.
3. Most of the companies, across board, do not have training officers per se. Where there are semblances of training officers, non-specialists double as these.
4. Training policy for employees generally is highly formulated by large-scale contractors compared to the medium- and small-scale contractors.
5. It is only the large-scale contractors, however, who have any quiet plausible training policy in place specifically for construction site operatives. The training policy for site operatives by medium-scale contractors was not found to be that plausible. The small-scale contractors do not have any training policy for site operatives.
6. Job analysis; employee appraisal; introduction of new methods and equipment; employees have newly

arrived; and poor materials control are the most common determinants of training needs for site operatives for both the large and medium contractors. The small-scale contractors have no training determinants. Even for the large-scale contractors, the needs have not been based on highly systematized job analysis.

7. On-the-job instruction is the commonest method of training of construction site operatives by their employers, and especially the large- and medium-scale ones.

8. The preferred means of evaluation of the training effort for site operatives by large-scale contractors are the measurement of knowledge and/or skill at the beginning of training and at the completion of the training, and the comparison of the values of work performance index before and after the training. For the medium-scale contractors, evaluation mostly centered on interviews and the comparison of work performance index before and after the training. Thus the comparison of work performance indexes is common to both contractors. Small-scale contractors do not evaluate the training of their craftsmen and labourers.

Conclusion

1. The first objective was to find out if local building contractors have any training policy for site operatives, and to identify the categories of such contractors having the policy. From the findings, it is only the large-scale contractors who have some plausible training policies for site operatives; although these companies have largely non-specialists doubling as training officers.

2. The second objective was to ascertain the nature, type(s) and standards of the training policy for those contractors having a training policy. From the findings, job analysis, employee appraisal, introduction of new methods and equipment, employees have newly arrived, and poor materials controls are the commonest determinants of training needs for such large-scale contractors. On-the-job instruction is the commonest method of training of site operatives. The preferred means of the evaluation of the training effort are the measurement of knowledge and /or skill at the beginning of training and at the completion of training; and the comparison of the values of work performance index before and after the training.

References

1. Bass, B. M. and Vaughan, J. A. (1966). Training in industry. The Management of Learning. Belmont, California. Wadsworth Publishing Company.
2. Beach, D. S. (1970). Personnel. The Management of People at Work. London. The MacMillan Co.
3. Black, J. M. (1975). The Basics of Supervisory Management. New York. McGraw – Hill Book Company.
4. Butler, John T. (1988). Elements of Administration for Building Students (4th Edition). Leckhampton, Gt. Britain. Stanley Thornes (Publishers) Ltd., p.3.
5. Calvert, R. E., Bailey, G. I., and Coles, D.C.H. (1995). Introduction to Building Management, (Sixth Edition). Oxford, U. K. Butterworth – Heinemann, p. 160
6. Daily Graphic (2010). "Poor roads, main headache of Western Region", February 11, p. 40.
7. Daily Graphic (2013). "Minister unhappy with shoddy works", June 17, p. 23.
8. Fleishman, E. A. (1967). Studies in Personnel and Industrial Psychology (Revised Edition). Illinois, USA. The Dorsey Press.
9. Government of Ghana Official Gazette (2003). Labour Act, 2003 (ACT 651).
10. Hallstein, R. W. (1969). "We know where to start". Ironing and Developing Journal, 23(7), 32-33.
11. Klatt, L. A., Murdicle, R.G. and Schuster, F. E. (1985). Human Resource Management. Ohio, USA. Charles E. Merill Publishing Company.
12. McCormick, E. J. and Tiffin, J. (1975). Industrial Psychology (Sixth Edition). New Jersey. Prentice Hall Inc.
13. Miller, R. B. (1962). Task description and Analysis, in R. M. Gagne (Ed.), Psychological principles in system development. New York. Holt, Rinehart and Winston.
14. Ovurie, J. M. (1985). Administrative Management (Principles and Practices of Modern Management). Lagos. Creative Educational and Management Publications.
15. Pigors, P. and Myers, C. A. (1981). Personnel Administration. A point of view and a method (Ninth Edition). New York. McGraw Hill Inc.
16. Prokopenko, J. and White, J. (1981). "Modular programme for supervisory development". International Labour Office, Geneva, Vol. 5, 1-47.
17. The Ghanaian Times (2011). "National Building, Civil Contractors Excellence Awards to be held in Accra on December 8", November 30, p.27.
18. The Ghanaian Times (2011). "Review the lowest bidder principle in award of contracts", December 28, p.26.

19. Ward, P. A (1979). Organisation and Procedures in the Construction Industry. Estover, Plymouth. McDonald and Evans Limited, p.4.

20. Zelikoff, S. B. (1969). "On the obsolescence and retraining of engineering". Training and Development Journal, 23(5), 3-14.