

UNIVERSITY OF CAPE COAST

AN EXAMINATION OF TRAINING NEEDS ASSESSMENT OF
ACADEMIC STAFF OF BOLGATANGA POLYTECHNIC

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BY

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation is the result of my own original work and that no part of it has been presented for another degree in this university or elsewhere.

Name: Florence Lardi Manamzor

Candidate's Signature: Date:.....

Supervisor's Declaration

I hereby declare that the preparation and presentation of this dissertation were supervised in accordance with the guidelines on supervision of dissertation laid down by the University of Cape Coast.

Name: Prof. Kankam Boadu

Supervisor's Signature: Date:.....

ABSTRACT

The purpose of this study was to examine the training needs of academic staff of Bolgatanga Polytechnic. The general objective of this study is to determine the training needs of academic staff of Bolgatanga Polytechnic. In furtherance of the general objective, the study sought specifically to examine training policies are adopted by Bolgatanga Polytechnic for its academic staff, identify training needs of academic staff for current and future job assignments, explore methods employed by management of Bolgatanga Polytechnic in conducting training needs assessments of the academic staff, examine the challenges of training needs assessment, and make recommendations to improve training needs assessment.

The study used census survey to solicit the views of academic staff of Bolgatanga Polytechnic. Structured questionnaires were administered to all the 106 academic staff of Bolgatanga Polytechnic concerning issues of staff training and development policy and training needs assessment. The study used Statistical Product for Service Solution (SPSS) version 16.0 to analyse the data.

The study revealed that there is a staff development policy for the polytechnic. There are existing conditions under which academic staffs of the Polytechnic are given training. Training needs assessment was not carried out before training. It was recommended that the existing staff development policy should be modified to make room for training needs assessment and then, management of the Polytechnic should task Departments' Heads or Deans to identify and document specific training and development needs of academic staff.

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DEDICATION

To my mother, Mrs. Rebecca A. Manamzor, and to my lovely daughter,

Michelle Ayinsogya Abogro.

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LIST OF ACRONYMS

CAI	Computer- assisted instruction
DDI	Development Dimensions International
HRD	Human resource development
HRM	Human Resource management
KSAOs	Knowledge, Skills, Abilities and Other Characteristics
OJT	On-The-Job Training
ROI	Return On Investment
SOPs	Standard Operating Procedures
TWI	Training Within Industry
US	United States of America

CHAPTER ONE

INTRODUCTION

Background to the study

The training profession emerged as a result of the outbreak of the World War II, where the industrial sector was once again asked to retool its factories to support the War effort. As with World War I, this initiative led to the establishment of new training programmes within larger organisations and unions (Armstrong, 2012). The federal government established the Training Within Industry (TWI) service to coordinate training programmes across defence-related industries. TWI also trained company instructors to teach their programmes at each plant. By the end of the war, TWI has trained over 23, 000 instructors, awarding over 2 million certificates to supervisors from 16, 000 plants, unions, and services (Werner & Desimone, 2006).

Training has both current and future implications for the success of organisations. Training enables employees do their present jobs effectively and efficiently and also, it helps prepare and equip employees with necessary knowledge and skills needed to do their future work which may include additional responsibilities to their present schedule or taking up promotions in the future. Remedial training was a major issue confronting employers in the 21st century.

Employers also are aware that the training or retraining of individuals for the jobs of the future may determine the success of many firms. Many types of training exist; job-skill training, supervisory training, management development, and employee development (Desimone & Harris, 1998).

Armstrong (2012) points out that training has a complementary role to play in accelerating learning. According to Armstrong, training should be reserved for situations that justify a more directed, expert-led approach rather than viewing it as a comprehensive and all-pervasive people development solution. He also commented that the conventional training model has a tendency to emphasize subject-specific knowledge, rather than trying to build core learning abilities.

Training is a learning process where people acquire skills or knowledge to aid in the achievement of goals. The fact that learning processes are tied to a variety of organisational purposes, training can be viewed either narrowly or broadly. In a limited sense, training provides employees with specific, identifiable knowledge and skills for use on their present jobs. Whiles in its broader sense, it will be focusing on individuals gaining new knowledge and skills useful for both present and future jobs (Mathis & Jackson, 1994).

The first step in designing a training and development programme is to conduct a needs assessment. The assessment begins with a need which can be identified in several ways, but is generally described as a gap between what is currently in place and what is needed now and in the future. Gaps can include discrepancies/differences between; what the organisation expects to happen and what actually happens in terms of its current performance in the achievement of it

targets and goals which is far below the expected performances (Mathis & Jackson, 1994). It may also have to do with the current performance of individual employees in an organisation which is far below their desired performances. Also, the individual employee may also be deficient in terms of capabilities and skills which might not support the employee in the performance of his or her present and future job. All these point to the fact that a gap or discrepancy really exists which might call for studying the gap further and taking appropriate action (Werner & Desimone, 2006). Thus, the concept of need typically refers to a discrepancy or gap between what an organisation expects to happen and what actually occurs. Hence a needs assessment is a systematic investigation of an audience(s) to identify aspects of individual knowledge, skill, interest, attitude and/or abilities relevant to a particular issue, organisational goal, or objective (Hackett, 2004).

Needs assessment is a process by which an organisation's human resource development (HRD) and training needs are identified and articulated. It is the starting point of the HRD and training process. A need assessment can identify an organisation's goals and its effectiveness in reaching these goals. Every organisation whether profit or non-profit, government or non-governmental has goals to meet for the short, medium and or long term. The accomplishment of these goals therefore, will mean that, the organisation should be effective in both its material and human resources. The issue of effectiveness in human resource towards the accomplishment of organisational goals might call for equipping or improving upon the knowledge and skills levels of employees now and the future

for both current and future jobs. Need assessment can also help identify discrepancies or gaps between employees' skills and the skills required for effective current job performance. Needs assessment may unveil deficiencies in the current knowledge and skills level of employees to enable them perform current jobs successfully, the identification of these deficiencies might suggest appropriate training solutions for skills improvement for current jobs.

Discrepancies or gaps between current skills and the skills needed to perform the job successfully in the future can also be identified through need assessment. Every organisation is working to succeed both now and in the future, hence the future of the business environment may call for expansion and growth in organisations as well as staff development programmes to enable organisations operate successfully in the eyes of competition.

Before developing a training programme, organisations must identify if any training needs exist. Institutions differ greatly in terms of what kinds of training needs they have. For instance, some institutions may need in-house short term training while others may have training needs that can be satisfied by offsite short and long term training. Hence, institutions need to determine training needs first before instituting any training programme and this can be done through three types of needs analyses such as organisational analysis, task analysis and person analysis. A training needs assessment is used to determine whether training is the right solution to a workplace problem. It is an ongoing process of gathering data to determine what training needs exist so that training can be developed to help the organisation accomplish its objectives (York, 2010). To put it more simply, it

is the process of collecting information about an expressed or implied organisational need that could be met by conducting training (Barbazette, 2006).

Essentially, information is collected and analyzed so that a training plan can be created. The assessment determines the need for training, identifies what training is needed, and examines the type and scope of resources needed to support a training programme. Rossett (1987) mentions that a company conducts a training needs assessment to seek information about optimal performance or knowledge, actual or current performance or knowledge, feelings of trainees and other significant people, causes of the problems, and solutions to the problem.

Bolgatanga Polytechnic was established in 1999 to train middle level manpower who will provide services to the major sectors of the Ghanaian economy, thus, agriculture, industry and service sectors. In order to successfully turnout these middle level manpower, the active agents of the polytechnic (personnel; academic and administrative) need some amount of training to be equipped with the necessary skills and competencies to be able to do so. On account of this, it should therefore be realised that training needs assessment is a critical activity for the training and development function. Thus, whether you are a human resource manager or a specialist, you should be adept at performing a training needs assessment.

Statement of the problem

Management Bolgatanga Polytechnic has put in place a number of measures including training to ensure that their employees are provided with

current skills and knowledge necessary for improving the productivity of the Polytechnic. However, the training is not complement with needs assessment. The challenges associated with training without needs assessment among others are that, the training provided may not be appropriate to solving the existing and future performance problems and may not also fill the gaps that exist (Jacobs & Jones, 1995).

Thus, major questions that come to mind are: what are the training needs of the staff of the Bolgatanga Polytechnic? How will training need assessment meet the training needs of staff? What methods are employed by management of the Polytechnic in conducting training needs assessment? It is against this background that a study to examine the training needs of academic staff of Bolgatanga Polytechnic is essential. There is also a dearth of literature specifically on training needs assessment while no research has been found to have been conducted on the subject in the Bolgatanga Polytechnic. It is based on these grounds that it becomes necessary to conduct an in-depth study to fill the gap.

Objectives of the study

The general objective of this study is to determine the training needs of academic staff of Bolgatanga Polytechnic. In furtherance of the general objective, the study sought specifically to:

1. examine training policies are adopted by Bolgatanga Polytechnic for its academic staff.

2. identify training needs of academic staff for current and future job assignments.
3. explore methods employed by management of Bolgatanga Polytechnic in conducting training needs assessments of the academic staff.
4. examine the challenges of training needs assessment
5. make recommendations to improve training needs assessment.

Research questions

The study was guided by the following research questions:

1. What training policies are adopted by Bolgatanga Polytechnic for its academic staff?
2. What are the training needs of academic staff for current and future job assignments?
3. What are the challenges of training needs assessment in the Bolgatanga Polytechnic?

Significance of the study

Through the findings of the study, the problems of training needs assessment will be unveiled. This will help management of organisations and polytechnics in general to develop strategies to overcome these challenges so as to be able to conduct their training needs assessment effectively and efficiently. The strategies developed to overcome the challenges in training needs assessment will

also be a source of motivation to others, so that, they will undertake training needs assessment prior to training and development.

Scope of the study

The study looked at only training needs assessment of academic staff of Bolgatanga Polytechnic. It covered the training policies adopted by the Bolgatanga Polytechnic for its academic staff. It also covered the training needs of academic staff for current and future job assignments. It included all the 106 academic staff of the Polytechnic.

Organisation of the study

Chapter one introduces readers to the study. It is sub-divided into the background to the study, statement of the problem, objectives of the study, research questions, significance of the study, scope of the study, definition of terms as well as organisation of the study. Chapter two consists of the review of literature related to the subject of study so as to discover the extent of work or studies already carried out by other researchers in the study area. In general, the chapter deals with the concept of human resource development. The methods of the study are outlined in chapter three. The research design, population, sample and sampling procedure as well as the development of the research instrument and its administration will be described. A description of methods of analysis of data will also be explained. Chapter four presents the results and discussion of the data

collected. The summary, conclusion and recommendation of the study are presented in chapter five, which is the final chapter.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

Introduction

This chapter deals with the review of relevant literature related to the subject under investigation. The review includes literature found in textbooks, empirical work documented in journals and on the internet. The review covers the following: the concept of human capital development, meaning of training, meaning of training needs assessment, reasons for training needs assessment, levels of training needs assessment, types of training needs assessment, phases of training needs assessment, methods of training needs assessment, methods of training, training techniques and a summary of the chapter.

The concept of human resource development

The importance of human capital in national development cannot be overemphasized. Indeed, the growth strategy of major businesses and multinational corporations the world over is to invest in human capital formation, ahead of equipment, capital, and physical and infrastructural capital. Recalling the triple role of human beings, machines and materials in economic production theory, it is now generally acknowledged that no sustainable economic progress is possible without the pivotal role of human beings. That is why we must all be

concerned about the need to assess the training needs of employees from one level to another in our institutions and organisations. This will enable the employees be given the right skills, information and knowledge needed as a good indication of progress towards the formation of higher order capital. In a changing global environment, the development of human capital has been identified as the process that enables the individual organisations and nations to meet the challenges of change.

Human resource development (HRD) is concerned with the introduction of organized activities designed to foster increased skills and competencies and improves behaviour (Gilley & Egglund, 1989). McGuire and Jorgensen (2011) broadly define human resource development as the process of building the knowledge, the skills, and the working abilities and the innate capacities of all the people in the society. He notes further that human resource constitutes the ultimate basis for the wealth of nation's capital and natural resources are passive factors of production; human beings are the active agents who accumulate capital, exploit natural resources, build social, economic and political organisations and carry forward national development. A country which is unable to develop the skills and knowledge of its people and to utilize effectively in the national economy will be unable to develop anything else (McGuire & Jorgensen 2011). In the view of Harbison and Myers (1964), human resource development is "the process of increasing the knowledge, the skills, and the capacities of all the people in the society.... the process of human resource development unlocks the doors to modernization" (p. 19).

Champion (2008) gave a definition of HRD as organized learning activities arranged within an organisation in order to improve performance and/or personal growth for the purpose of improving the job, the individual, and/or the organisation. Thus, HRD includes:

1. The areas of training and development, career development, and organisation development. This is related to Human Resource Management; a field which includes HR research and information systems, union/labour relations, employee assistance, compensation/benefits, selection and staffing, performance management systems, HR planning, and organisation/job design.
2. The learning of new skills and the development of new abilities, to respond to changes in life, careers, and organisations. These can be dealt with constructively, using change for competitive advantage and as opportunities for personal and organisational growth.

From another point of view, the goal of HRD is to improve the performance of organisations by maximizing the efficiency and performance of employees. This can be done through the development of knowledge and skills, actions and standards, motivation, incentives, attitudes and work environment (Gilley & Egglund, 1989).

Also, Swanson and Arnold (1996) said that, the goal of HRD is to improve performance. This view is founded on the premise that HRD, when practiced in productive organisations, should strive to contribute directly to the organisations' goals. These goals, according to them, are based on a purposeful system needing

to obtain effective and efficiency survival, and are also performance-oriented. It is on account of this, they say the responsibility of HRD is to focus on performance.

In the view of Swanson and Holton (2009), HRD is about adult human beings functioning in productive systems. Thus, the goal of HRD is to focus on the resources that humans bring to the success and organisational system success. The two core threads of HRD are;

- i. Individual and organisational learning and
- ii. Individual and organisational performance.

According to them, although some view learning and performance as alternatives or rivals, most see them as partners in a formula for success. Thus, the assessment of HRD success or results can be categorized into the broad domains of learning and performance. In all cases, the intent is improvement.

The goal of HRD according to Champion (2008) is to improve the performance of organisations by maximizing the efficiency and performance of the people working in and for the organisations. According to them, HRD will help develop knowledge and skills, actions and standards, motivation, incentives, attitudes and the work environment as a whole.

From the numerous views presented by the different authors on the goal of HRD, the researcher's own view on the goal of HRD is that, it is concerned with identifying human resources and work environment as well as integrating both at an acceptable level so as to achieve success in every productive system or organisation. Integrating at an acceptable level means that the right amount in

terms of quantity and quality of human resource (knowledge, skills, and abilities) should be made available to the right working environment.

Human resource development, in a sense, represents a broad vision of the relationship between individuals and society regarding their capabilities and capacities for sustainable economic development. However, when human resources development is directed towards a specific sector, in this case the public sector, the focus changes to a specific process of dealing with the attraction of people into, their retention in, and subsequent departure from that sector. It attempts to achieve the goals and objectives of the organisation by maximizing individual and collective productivity. It also attempts to create a healthy relationship between the organisation and its people; that is, both its human and non-human environments.

The meaning of training

Training is a planned process to modify attitude, knowledge or skill behaviour through learning experience to achieve effective performance in an activity or range of activities. Its purpose, in the work situation, is to develop the abilities of the individual and to satisfy the current and future needs of the organisation (McGehee & Thayer, 1961).

Ivancevich (1998) presents the following points in respect of training: Training is the systematic process of altering the behaviour of employees in a direction that will achieve organisation goals. Training is related to present job skills and abilities. It has a current orientation and helps employees' master

specific skills and abilities needed to be successful; a formal training programme is an effort by the employer to provide opportunities for the employee to acquire job-related skills, attitudes, and knowledge; learning is the act by which the individual acquires skills, knowledge, and abilities that result in a relatively permanent change in his or her behaviour; any behaviour that has been learned is a skill. Therefore, improvement of skills is what training will accomplish. Motor skills, cognitive skills, and interpersonal skills are targets of training programmes. This definition demonstrates the fact that both training and learning are interrelated or interdependent, thus training, whether in its formal or informal form will influence learning in one way or the other. Learning also has an impact on behaviour, be it the improvement of an existing skill or the acquisition of new skills.

Training, in the most simplistic definition, is an activity that changes people's behaviour. Increased productivity is often said to be the most important reason for training. But it is only one of the benefits. Training is essential not only to increase productivity but also to motivate and inspire workers by letting them know how important their jobs are and giving them all the information they need to perform those jobs (Bartram & Gibson, 2000).

Training is the acquisition of knowledge, skills, and competencies as a result of the teaching of vocational or practical skills and knowledge that relate to specific useful competencies. Training has specific goals of improving one's capability, capacity, and performance and as well, forms the core of apprenticeships (McGehee & Thayer, 1961).

The first two submissions above focus on formal training as a tool to changing the behaviour of employees towards success in their current jobs which should be provided for by the employer. This means that the object of training is to achieve an improvement in employees' skills for current jobs. This should be provided for by the employer and can take the form of current job related training whether within or outside the organisation for short periods of time. The last two definitions looked at training to be a learning process towards the improvement of skills by an individual who may be an employee. These definitions see skills improvement to be the end product of training.

The researcher views training as a tool designed to impact new knowledge and skills in an individual or to build upon the existing knowledge and skills of an individual. Training should be provided for by an employer, but not always the case, because an employee can initiate a search for training opportunities outside the organisation towards the improvement and acquisition of knowledge and skills for both current and future jobs. The researcher also holds the view that training and learning are related to some extent, but learning can take place in some circumstances without the existence of training.

Human capital theory

Human capital theory rests on the assumption that formal education is highly instrumental and necessary to improve the productive capacity of a population. In short, human capital theorists argue that an educated population is a productive population. Human capital theory emphasizes how education

increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability, which is a product of innate abilities and investment in human beings. The provision of formal education is seen as an investment in human capital, which proponents of the theory have considered as equally or even more worthwhile than that of physical capital (Woodhall, 2000).

Human Capital Theory (HCT) concludes that investment in human capital will lead to greater economic outputs however the validity of the theory is sometimes hard to prove. In the past, economic strength was largely dependent on tangible physical assets such as land, factories and equipment. Labour was a necessary component, but increases in the value of the business came from investment in capital equipment. Modern economists seem to concur that education and health care are the key to improving human capital and ultimately increasing the economic outputs of the nation (Becker, 2001).

In the new global economy, hard tangible assets may not be as important as investing in human capital. Thomas Friedman, in his wildly successful book, *The World is Flat 2007*, wrote extensively about the importance of education in the new global knowledge economy. Friedman, not to be confused with the famous economist Milton Friedman, is a journalist. His popular book has exposed millions of people to human capital theory. The term itself is not introduced, but evidence as to why people and education (human capital) are vital to a nation's economic success, is a common reoccurring theme in the book.

Throughout western countries, education has recently been re-theorized under human capital theory as primarily an economic device. Human capital theory is the most influential economic theory of western education, setting the framework of government policies since the early 1960s. It is increasingly seen as a key determinant of economic performance. A key strategy in determining economic performance has been to employ a conception of individuals as human capital and various economic metaphors such as ‘*technological change*’, ‘*research*’, ‘*innovation*’, ‘*productivity*’, ‘*education*’, and ‘*competitiveness*’. Economic consideration *per se* in the past, however, has not determined education.

Noted economist, Adam Smith, in the *The Wealth of Nations* (1776) formulated the basis of what was later to become the science of human capital. Over the next two centuries, two schools of thought were distinguished. The first school of thought distinguished between acquired capacities that were classified as capital and human beings themselves, who were not. The second school of thought claimed that human beings themselves were capital. In modern human capital theory all human behaviour is based on the economic self-interest of individuals operating within freely competitive markets.

Human capital theory stresses the significance of education and training as the key to participation in the new global economy. In one of its recent reports, the Organization of Economic Cooperation and Development (OECD), for example, claims that the radical changes to the public and private sectors of the economy introduced over recent years in response to globalization will be

severe and disturbing to many established values and procedures. In another report it explains internationalism in higher education as a component of globalization. The OECD believes that internationalism should be seen as an imperative in 21st Century capitalism. This form of capitalism is based on investment in financial markets rather than in manufacturing of commodities, thus requiring dependence on electronic technology.

The OECD also boldly asserts that internationalism is a means to improve the quality of education. In keeping with human capital theory, it has been argued that the overall economic performance of the OECD countries is increasingly more directly based upon their knowledge stock and their learning capabilities. Clearly, the OECD is attempting to produce a new role for education in terms of human capital subject required in globalized institutions.

The success of any nation in terms of human development is largely dependent upon the physical and human capital stock. Thus, recent social research focuses on the behavioral sciences of humanity in relation to economic productivity. Generally, human capital represents the assets each individual develops to enhance economic productivity. Further, human capital is concerned with the wholesome adoption of the policies of education and development. In short, the human capital theorists argue that an educated population is a productive population. Human capital theory emphasizes how education increases the productivity and efficiency of workers by increasing the level of cognitive stock of economically productive human capability, which is a product of innate abilities and investment in human beings. The provision of formal education is

seen as a productive investment in human capital, which the proponents of the theory have considered as equally or even more equally worthwhile than that of physical capital (Smith, 2006).

According to Babalola (2003), the rationality behind investment in human capital is based on three arguments:

1. The new generation must be given the appropriate parts of the knowledge which has already been accumulated by previous generations.
2. The new generation should be taught how existing knowledge should be used to develop new products, to introduce new processes and production methods and social services;
3. People must be encouraged to develop entirely new ideas, products, processes, and methods through creative approaches.

Eurich (2000) posits that human capital theory provides a basic justification for large public expenditure on education both in developing and developed nations. The theory is consistent with the ideologies of democracy and liberal progression found in most western societies. Its appeal was based upon the presumed economic return of investment in education at both the macro and micro levels. Efforts to promote investment in human capital were seen to result in rapid economic growth for society. For individuals, such investment was seen to provide returns in the form of individual economic success and achievement. Most economists agree that it is human resources of nation, not its capital nor its material resources, which ultimately determine the character and pace of its economic and social development. Human resources constitute the ultimate basis

of the wealth of nations. Capital and natural resources are passive factors of production, human beings are the active agencies who accumulate capital, exploit natural resources, build social, economic, and political organizations, and carry forward national development.

Empirical evidence of human capital model

Based on the significance of education, the concept of human capital has been brought to the forefront of many discourses in the field of economic growth and development. Studies have shown that improvements in education accelerate productivity and contribute to the development of technology, thus improving human capital. More than anything else, it has been the spectacular growth in East Asia that has given education and human capital their current popularity in the field of economic growth and development. Countries such as Hong Kong, Korea, Singapore, and Taiwan have achieved unprecedented rates of economic growth while making large investments in education. In the statistical analysis that accompanied his study, the World Bank (2009) found that improvement in education is a very significant explanatory variable for East Asian economic growth. There are several ways of modeling how the huge expansion of education accelerated economic growth and development. The first is to view education as an investment in human capital. A different view of the role of education in the economic success is that education has positive externalities; educate part of the community and the whole of it benefits.

The idea that education generates positive externalities is by no means new. Many of the classical economists argued strongly for government's active support of education on the grounds of the positive externalities that society would gain from a more educated labour force and populace. Smith (2006) reflects such progressive contemporary thought when he wrote that by educating its people, a society derives no inconsiderable advantage from their instruction. The more they are instructed, the less liable they are to the delusions of enthusiasm and superstition, which, among ignorant nations, frequently occasion the most dreadful disorders. Instructed and intelligent people are always more decent and orderly than ignorant ones. Smith views the externalities to education as important to the proper functioning not only of the economy but of a democratic society.

Application of human capital theory to training

In order to enhance human development in the general society, it is necessary to apply the theory of human capital to training. By such means, productivity is enhanced and sustained based on an increased and diversified labour force. Babalola (2003) asserts that the contribution of training to economic growth and development occurs through its ability to increase the productivity of an existing labour force in various ways. Therefore, economic appraisal of educational investment projects should take into account certain criteria.

According to Paul and Anantharaman (2003), training plays a great and significant role in the economy of a nation; thus, training expenditures are found

to constitute a form of investment. This augments individual's human capital and leads to greater output for society and enhanced earnings for the individual worker. It increases their chances of employment in the labour market, and allows them to reap pecuniary and non-pecuniary returns and gives them opportunities for job mobility. Training is a source of economic growth and development only if it is anti-traditional to the extent that it liberates, stimulates, and informs the individual and teaches him how and why to make demands.

The meaning of training needs assessment

Training is designed to help the organisation accomplish its objectives. Determining organisational training needs is the diagnostic phase of setting training objectives. An organisation or an individual employee must be studied before a course of action can be planned to make the employee or the organisation function better.

DeSimone, Werner and Harris (2002) stress that the first vital step in HRD is the identification of needed skills and active management of employee learning for their long-range future, especially, in relation to explicit corporate and business strategies. If an organisation wants its training to be effective, not only should individual needs be identified but also how their needs fit the overall objectives.

Bernhard and Ingolis (1988), in studying training and its strategic implementation in US companies, believe that a considerable amount of money is 'thrown away' mainly because fundamental issues such as analysis of training

needs in relation to the short and long-term business plans had not been addressed. According to them, an integral part of analysing training needs is the recognition of what will 'fit' the company culture, as well as the company strategy and objectives. In other words, the training scheme that may fit one company may not fit another, and these company differences can only be ignored at great cost.

Needs assessment is a process by which an organisation's HRD needs are identified and articulated. It is the starting point of the HRD and training process. As stated by Werner and DeSimone (2006), a need assessment can identify the following:

1. An organisation's goals and its effectiveness in reaching these goals.
2. Discrepancies or gaps between employees' skills required for effective current job performance.
3. Discrepancies (gaps) between current skills and the skills needed to perform the job successfully in the future.
4. The conditions under which the HRD activity will occur.

Training needs assessment is the assessment of the training requirements of a target group in terms of the number of trainees, their educational and professional background, their present level of competence and the desired behaviour or skill level acquired at the completion of the training (Rossett, 2002).

A training needs assessment is the process of collecting information about an expressed or implied organisational need that could be met by conducting training. The need can be a desire to improve current performance or to correct a

deficiency. A deficiency is a performance that does not meet the current standard. It means that there is a prescribed or best way of doing a task and that variance from it is creating a problem. The needs assessment process helps the trainer and the person requesting training to specify the training or performance deficiency (Barbarzette, 2006).

The researcher sees training needs assessment as a process of researching an organisation and its employees as well as its performance objectives and training plans for the purpose of identifying what type and level of knowledge, information and skills should be provided in terms of training so as to equip concerned staff to achieve performance standards and objectives in general. Thus it is through training needs assessment that performance gaps of employees can be identified and appropriate training programmes implemented to bridge those gaps.

Reasons for conducting training needs assessment

There are several reasons for which training needs assessment is done. According to DeSimone and Harris (1998), training is done to identify specific problem areas in the organisation. According to them, human resource and management must know what the problems are so that the most appropriate training (if training is the answer) will be directed to those organisational problems. For example, if a manager approached the human resource department with a request for a communications programme, too often the trainer's response (eager to serve management) will be to proceed to look around for a good

communications programme and conduct training without conducting a needs assessment first.

In another view of DeSimone and Harris (1998), training is conducted to obtain management support. According to them, management usually thinks training is a "nice thing to do." This stance can be laid directly at the doorstep of a poor (or non-existent) needs assessment. Thus, the way to obtain management support is to make certain that the training directly affects what happens in that manager's department. Trainers should view themselves the same way that management does, making a direct contribution to the bottom line. Management will be committed to training when HR can show that it clearly improves performance on the job. As a result, training programmes and budgets will not be the first things to be cut or trimmed.

One of the reasons, according to Rossett (1990), is to develop data for evaluation. Unless informational needs are developed prior to conducting training, the evaluations that take place after the programme may not be valid. In conducting a needs analysis first, trainers can measure the effectiveness of a programme. DeSimone and Harris (1998) further said that training needs assessments is conducted to determine the costs and benefits of training. According to them, training is usually looked upon as a nuisance rather than a contribution to the bottom line of the organisation. This happens when trainers fail to develop a cost-benefit analysis for the training they conduct. For instance few managers would balk at spending \$20,000 to correct a problem costing them \$200,000 a year. Yet, most of the time trainers complain that management will

not spend money on training. However, a thorough needs assessment that identifies the problems and performance deficiencies, allows management to put a cost factor on the training needs. DeSimone and Harris (1998) mentioned that, the major question trainers need to address in cost-benefit analysis is the difference between the costs of no training versus the cost of training? This entails finding out what the costs (out-of-pocket, salary, lost productivity, etc.) would be if the need continues without being met. Next, an analysis must be made of the cost of conducting the training programme that can change the situation. The difference between these two factors will usually tell both the trainee and manager whether or not the training should be conducted.

On the side of Gupta (2008), the purpose of training needs assessment involves the following:

1. To determine the performance gap. That is, performance gap in terms of the differences between the expected performance and the actual performance. This difference might suggest to management the need to organize and implement a training programme for concerned employees towards the bridging of the differences in performance now and for the future.
2. To develop the evaluation outcomes for training. It would be a useless investment to implement a training programme if there are no clear cut outcomes for assessment. Once training needs assessments unveil some weaknesses causing the underperformance of employees, it could also on

the other hand help determine training outcomes for the purpose of evaluation.

3. To determine if training is the most appropriate intervention. It is a best strategy that every management in the event of resolving employees' performances challenges should conduct a training needs assessment prior to the implementation of a training programme. The fact actually could be that some employees underperform not simply because they lack certain skills to perform but rather as a result of other management issues such as motivation and others. In such a situation, one would realise that training would actually not be an appropriate tool for underperformance.
4. To assess the financial need for training. Training needs assessment is not only done so as to identify what training gaps exist in employees, but then in addition to knowing what training to provide to bridge existing gaps, Management and Human Resource Development Officers for that matter are able to determine what would go into training so as to be able to prepare a training budget and seek for funding.

Furthermore, Overmyer-Day and Benson (2011) identified four other reasons for conducting training needs assessments as follows:

1. To inform trainees of currently available training and determine trainees need or interest in taking training. Overmyer-Day and Benson (2011) believe that conducting training needs assessment is a way of determining the training needs of staff as well as boosting their interest to participate in

training for skills enhancement. In addition, it also unveils and suggests existing training facilities for which staff could participate.

2. To gather and prioritize trainee ideas for additional training areas. Training needs assessment opens a channel for Human Resource Development Officers to interact with management and employees. Through this interaction, numerous training ideas could be generated and a data base built from that. This in turn would inform present and future training areas for the organisation and its personnel.
3. To determine the capacity of company and staff to train others. Conducting training needs assessment may bring to the knowledge of management that some training areas could be well undertaken internally instead of spending scarce resources outside the needed areas. This is done to provide knowledge and skills which would well be undertaken internally. Some large organisations have human resource development departments and units well equipped and resourced to take up training activities internally which might lead to cost management.
4. To assess how trainee will like to take training. Individual differences may arise when it comes to implementation of training programmes. As training needs assessments are conducted, trainees might individually express their areas of interest and the training methods that best suit their individual differences.

According to Barbazette (2006), the purpose of a needs assessment is to answer some familiar questions: why, who, how, what, and when as follows: Why

conduct the training? The purpose of this is to tie the performance deficiency to a business need and be sure the benefits of conducting the training are greater than the problems being caused by the performance deficiency. This involves conducting two types of analysis to answer this question: (1) needs versus wants analysis and (2) feasibility analysis. Who is involved in the training? This has to do with the involvement of appropriate parties to solve the deficiency and conducting a target population analysis to learn as much as possible about those involved in the deficiency and how to customize a training programme to capture their interest.

How can the performance deficiency be fixed? This means that training can either fix the performance deficiency or suggest other remediation if training is not appropriate. This means therefore that conducting a performance analysis to identify what skill deficiency is to be fixed by a training remedy is essential. What is the best way to perform: there may be a better or preferred way to do a task to get the best results. For instance whether there is job performance standards set by the organisation, such as Standard Operating Procedures (SOPs) or if there are any governmental regulations to consider when completing the task in a required manner? When will training take place: according to Barbazette (2004), the best time to deliver training is of great importance because attendance at training can be impacted by business cycles, holidays, and so forth.

From the deliberations on the reasons for conducting training needs assessment by the above authors, the researcher also holds the view that training needs assessment is conducted for reasons such as identifying the differences

between the expected and actual performances of employees and thereby designing appropriate training programmes to meet those needs. The researcher also believes that conducting training needs assessment will help employees concerned understand their own deficiencies which will help them define their areas of interest when it comes to implementing training programmes towards resolving those deficiencies. Thus, the reasons for conducting training needs assessment is to ensure that, there is participation from human resource development officers, management and employees when it comes to planning and conducting training programmes in an establishment. In other words, conducting training needs assessment could reveal other causes of underperformances such as lack of good and safe working conditions, employee motivation just to mention a few either than put the challenge on training.

Levels of training needs assessment

Needs can exist at any of at least three levels, considering the organisation, the job/task, and the individual. To ensure an effective HRD effort, needs must be measured on each level. As a result, three types of assessments must be conducted: organisational analysis, task analysis, and person analysis. Each level of assessment measures different aspects of the organisation. Strategic/organisational analysis suggests where in the organisation training is needed and under what conditions it will occur. Task analysis explains what must be done to perform a job or complete a process successfully. Person analysis reveals who needs to be trained, and what kind of training they need (Werner &

Desimone, 2006). A detailed explanation of these levels of needs assessment by Werner and Desimone (2006) is as follows:

Strategic/organisational analysis

Needs assessment at the level is usually conducted by performing an organisational analysis. Organisational analysis is a process used to better understand the characteristics of the organisation to determine where training and HRD efforts are needed and the conditions within which they will be conducted (Werner & Desimone, 2006). This type of analysis requires a broad or 'whole system' view of the organisation and what it is trying to accomplish. The organisational characteristics studied may include goals and objectives, reward systems, planning systems, delegation and control systems, and communication systems.

According to Werner and Desimone (2006), an organisational analysis should identify:

1. Goals: Understanding the organisation's goals and strategy provides a starting point in identifying the effectiveness of the organisation. Areas where the organisation is meeting its goals probably require training effort, but should be monitored to ensure that opportunities for improvement and potential problems are identified early. Effective areas can be used as models, and as a source of ideas for how things can be done more effectively in other areas. Areas where goals are not being met should be examined further and targeted for HRD or other appropriate HR or management efforts.

2. Organisational Resources: An awareness of the organisation's resources is particularly useful in establishing HRD needs. Obviously, the amount of money available is an important determinant of HRD efforts. In addition, knowledge of resources such as facilities, materials on hand, and the expertise within the organisation also influence how HRD is conducted.

3. Organisational Climate: The climate within the organisation is an important factor in HRD success. If the climate is not conducive to HRD, designing and implementing a programme will be difficult. For example, if managers and employees do not trust one another, employees may not participate fully and freely in a training programme. Similarly, if problems exist between senior and middle management, as has happen in many organisations during restructuring, middle managers may resist or not fully cooperate in the training effort, seriously reducing training effectiveness.

4. Environmental Constraints: Environmental constraints include legal, social, political, and economic issues faced by the organisation. Demand for certain types of HRD programmes can be affected by these constraints. For instance, knowledge of legal issues can ensure that the HRD effort is in compliance and will not itself be a source of problems. For example, equal employment opportunity goals should be considered when determining how people will be assigned to a training programme, especially if the programme is a prerequisite for entry into a particular job. Similarly, economic issues, such as increased competition, can also have a cost-cutting programme, training may be necessary

to ensure that the employees who remain will be able to perform the tasks that were performed by the laid-off workers.

Task analysis

Task analysis (sometimes called operations analysis) is a systematic collection of data about a specific job or group of jobs to determine what an employee should be taught to achieve optimal performance. Results of a task analysis typically include the appropriate standards of performance, how tasks should be performed to meet these standards, and the knowledge, skills, abilities, and other characteristics (KSAOs) that employees need to possess in order to meet the standards (Werner & Desimone, 2006).

Person analysis

Person analysis is directed at determining the training needs of the individual employee. The focus is typically on how well each employee is performing key job task, but this process may identify a wide range of both common and unique HRD needs. Someone who can observe the employee's performance on a regular basis is in the best position to conduct a person analysis. Traditionally, person analysis has involved an employee and that employee's immediate supervisor. Depending on the nature of an individual's work, that employee's peers, customers, and subordinates may also be in a position to provide information that can be used to identify person-level needs (Werner & Desimone, 2006).

The subject of training needs assessment levels has also been discussed by some authors. According to McGehee and Thayer (1961), organisational analysis being one of the levels of training needs assessment is the process used to better understand the characteristics of the organisation to determine where training and HRD efforts are needed and the conditions within which they will be conducted. Goldstein (1986) also stated that, an organisational analysis should identify organisational goals, organisational resources, climate, and environmental constraints. Each of these factors provides important information for planning and developing HRD programmes.

In the views of Moore and Dutton (1983), task analysis explains what must be done to perform a job successfully. Task analysis, sometimes called operations analysis, is a systematic collection of data about specific job or group of jobs to determine what an employee should be taught to achieve optimum performance. According to these authors, the outcomes of a task analysis may include performance standards, how tasks should be performed to meet these standards, and the knowledge, skills, and abilities and other characteristics employees need to meet the standards.

As stated by McGehee and Thayer (1961), person analysis is made up of two components: summary person analysis and diagnostic person analysis. The former involves determining the overall success of individual employee's performance, while the latter examines the resources for an employee's performance. Effective performers may be the source for ideas on how to

improve or guarantee employee performance, while analysis of ineffective performers can identify what interventions are needed to improve performance.

Training needs assessment levels can also be looked at in terms of assessment, occupational assessment and individual assessment. Assessment evaluates the level of performance. An assessment of this type will determine what skills, knowledge, and abilities an agency needs. It determines what is required to alleviate the problems and weaknesses of the agency as well as to enhance strengths and competencies. Assessment takes into consideration various additional factors, including changing demographics, political trends, technology, and the economy. Occupational assessment examines the skills, knowledge, and abilities required for affected occupational groups. Occupational assessment identifies how and which occupational discrepancies or gaps exist, potentially introduced by the new direction of an agency. It also examines new ways to do work that can eliminate the discrepancies or gaps. Individual assessment analyzes how well an individual employee is doing a job and determines the individual's capacity to do new or different work. Individual assessment provides information on which employees need training and what kind (Overmyer-Day & Benson, 2011).

In the researcher's own view, training needs assessment should be conducted at different levels as said by most of the authors above. In conducting one, it is very important to begin by looking at the institution or organisation concerned since the training to be given will benefit the institution or organisation in the short, medium or long-term. According to the researcher, analysing the

institution or organisation will enable the integration of the institution's policies, objectives and training plans with that of the individual personnel to be trained. Moreover, the research is considering another level of training needs assessment to be the analysis of the jobs to be performed by personnel. Thus, a detailed job specification will help in this regard. By doing this, it will enable personnel, management and trainers know what each job entails so as to determine what kind of human resource knowledge, skills, abilities and talents needed to perform those jobs. Furthermore, based on the analysis of the discussions by the various authors on the subject, the researcher is also considering the evaluation of the individuals' knowledge, skills and abilities to do the job now and in the future. This may unveil a level of mismatch among these levels, therefore calling for training to bridge the gaps.

Types of training needs assessment

Many needs assessments are available for use in different employment contexts. Barbazette, (2006) discussed some of the sources that can help an individual or an organisation to determine which needs analysis is appropriate for a situation. A brief description of the types of needs assessment by Barbazette (2006) is as followings.

1. Context Analysis: This involves an analysis of the business needs or other reasons for which the training is desired. The important questions being answered by this analysis are who decided that training should be conducted, why a training programme is seen as the recommended

solution to a business problem, what the history of the organisation has been with regards to employee training and other management interventions?

2. User Analysis: This is an analysis dealing with potential participants and instructors involved in the process. The important questions being answered by this analysis are who will receive the training and their level of existing knowledge on the subject, what their learning style is, and who will conduct the training.
3. Work analysis: This has to do with an analysis of the tasks being performed. It includes an analysis of the job and the requirements for performing the work. Also known as a task analysis or job analysis, this analysis seeks to specify the main duties and skills level required. This helps ensure that the training which is developed will include relevant links to the content of the job.
4. Content Analysis: This type of analysis takes into consideration an analysis of documents, laws and procedures used on the job. This analysis answers questions about what knowledge or information is used on this job. This information comes from manuals, documents, or regulations. It is important that the content of the training does not conflict or contradict job requirements. An experienced worker can assist (as a subject matter expert) in determining the appropriate content.
5. Training Suitability Analysis: This is an analysis of whether training is the desired solution to performance challenges or other employment

problems. Although training may be one of several solutions to employment problems, however, it may not always be the best solution. It is important therefore to determine if training will be effective in its usage.

6. Cost-Benefit Analysis: This is an analysis of the return on investment (ROI) of training. Effective training should result in a return of value to the organisation that is greater than the initial investment to produce or administer the training.

Brinkerhoff (1986) notes that focusing only on performance deficiency in needs analysis is too restrictive and, therefore, proposes three other possible types of training needs assessments. These are: democratic, diagnostic and analytical types of needs assessment. According to Brinkerhoff (1986), democratic type of needs assessment are options for human resource development (HRD) that are preferred, selected, or voted for by employees and managers. Programmes that address these needs are likely to be accepted and desired by organisation members. Therefore, democratic type of needs assessment can be used to build support for HRD programmes. Diagnostic type of needs assessment focuses on the factors that lead to effective performance and prevent performance problems rather than on existing problems. Brinkerhoff (1986) further said that, diagnostic type of needs assessment is conducted by examining the relationship among factors that may affect performance. The last aspect Brinkerhoff discussed is the analytic type of needs assessment which has to do with intuition, insight, or expert consideration.

From the discussions on the types of training needs assessment by some authors as seen above, the researcher's own opinion about the discussion on the types of training needs assessment is that, an analysis of several factors should be taken into account when we are deliberating on the topic. Thus, there should be an analysis of the work environment, both the internal and external work environment so as to determine the issues or conditions surrounding the particular job(s) in question where training may be needed to equip personnel to carry them out. It should go beyond that to include an evaluation of the individual task that make up the job to determine which skills are needed to carry out those task successfully. Furthermore, an evaluation of personnel factors such as qualifications, skills, knowledge, experience just to mention a few are also considered when human resource development managers are to look at the types of training needs assessment. Overall, the researcher thinks that there should be a comprehensive analysis by involving management, supervisors, personnel, the work environment as well as policy and training documents.

Phases/steps of conducting training needs assessment

Conducting a training needs assessment normally involves going through some steps or phases. Rouda and Kusy (1995) have identified some steps as follows.

Step 1: Perform a "gap" analysis

According to Rouda and Kusy (1995), this very first step involves checking the actual performance of the organisation and the people working in there against existing standards. There are two parts to this:

1. Current situation: This is a determination of the current state of skills, knowledge, and abilities of the current and/or future employees of an organisation. This analysis also should examine the organisational goals, climate, and internal and external constraints.
2. Desired or necessary situation: This has to do with identifying the desired or necessary conditions for organisational and personal success. This analysis focuses on the necessary job/tasks standards, as well as the skills, knowledge, and abilities needed to accomplish these successfully. It is important to identify the critical tasks necessary, and not just observe current practices. It is also important to distinguish actual needs from perceived needs or wants.

Step 2: Identify priorities and importance

According to Rouda and Kusy (1995), the first step should have produced a large list of needs for training and development, career development, organisation development, and/or other interventions. This second step therefore involves an examination of this list in view of their importance to organisational goals, realities, and constraints. Thus, it should be determined if the identified needs are real, if they are worth addressing, and specify their importance and urgency in view of the organisational needs and requirements.

Step 3: Identify causes of performance problems/or opportunities

Now that we have prioritized and focused on critical organisational and personal needs, the next is to identify specific problem areas and opportunities in the organisation. It is worth knowing what the performance requirements are, if appropriate solutions are to be applied. It is important to ask two questions for every identified need:

1. Are the people doing their jobs effectively?
2. Do they know how to do their jobs?

This will require detailed investigation and analysis of the people, their jobs, and the organisations; both for the current situation and in preparation for the future.

Step 4: Identify possible solutions and growth opportunities.

If employees are doing their jobs effectively, perhaps they should leave well enough alone. ("If it isn't broke, don't fix it.") However, some training and/or other interventions might be called for if sufficient importance is attached to moving the employees and their performance into new directions. Another view point with regards to the phases/stages of conducting training needs assessment is as followings.

Step 1: Determine benefits of needs assessment

This part of the process will sell and help the decision makers and stakeholders understand the concept of the needs assessment. The benefits of needs assessment should be considered critically at all levels, thus the benefits to the organisation, the benefits as to the gaps that it will bridge in the skills level of the personnel as well as in the performance of the various jobs assigned to

personnel. As part of this stage, management should determine the outcomes of training needs assessment that will contribute to the mission and objectives of the organisation. Outlining benefits of needs assessment is also a way of soliciting support from management (Rouda & Kusy, 1995).

Step 2: Planning

The needs assessment is likely to be only successful when the planning is well done. This involves setting goals and objectives for the needs assessment. Once goals and objectives are in place, then, there is the need to evaluate the readiness of the organisation to conduct needs assessment as well as identifying key roles in the assessment process. This stage also includes conducting an inventory of the capacity of staff and the technology needed to conduct a meaningful training needs assessment. This stage can be concluded by clarifying success measures and programme milestones (Rouda & Kusy, 1995).

Stage 3: Conduct Needs Assessment

This stage involves obtaining needs assessment data through some of the following strategies: reviewing strategic plans, assessing human resource metrics, reviewing job descriptions, conducting surveys, reviewing performance appraisals. The data obtained is analysed, from which performance problems and issues regarding occupational, group and individuals are identified. Critical behaviours or strategies needed to affect problems or issues are described and if training is the best solution, then management determines the best training and development approaches (Rouda & Kusy, 1995).

Rossett (2002) also identified the following as the phases/stages of training needs assessment:

Step 1: Analysis

The challenge is to find the problem, to understand it sufficiently so that it can be solved. In finding the problem, questions such as the following could be asked: why aren't salespeople getting shelf space for their products? What do salespeople know and not know about customers' accounts and about selling financial packages? What is going on and why is or isn't it happening?

Step 2: Design

If the problem is one which can be solved through training or job aids, then trainers or instructional designers will establish clear and useful training intentions in this phase. At this phase, it is important to determine just exactly what behaviour and knowledge the trainees will possess as well as determining what accomplishments to be expected. Once training goals and objectives are established, decisions are made about appropriate strategies and technologies.

Step 3: Development

Working from goals and objectives, training strategies are planned and developed, at this stage, ideas are generated to make decisions about how to achieve given objectives. The development phase involves planning and executing the details of courses, in other words, there are tangible learning products developed in this stage.

Step 4: Implementation

According to Rossett (2002), this is where the training solutions that have been developed are tried out. It can be delivered through motivational seminars and training workshops or courses.

Step 5: Evaluation

Rossett (2002) mentioned that in evaluation, trainers are concerned whether the problem has been solved, whether the reason for doing all this has gone away. At this stage, evaluators seek data to judge the worth of the training effort. The researcher thinks that conducting training needs assessment through a particular process enables the process to be carried out in a systematic way. Doing things systematically enables best results to be obtained, not only that, but appropriate control measures can be established and implemented when necessary. The researcher supports the submissions by the authors above and there by concludes that the process should always start with goals and objective setting as well as the establishment of standards and control measures. This should be following by planning the various needs assessment activities as to what should be reviewed, observed, measured, who should do it, when it should be done, how it will be done as well as how long to carry out the assessment. Once an action plan is available, then the training needs assessment should then be conducted by implementing all the assessment strategies suggested in the planning stage. The assessment may unveil other performance measures, but where training is revealed as the solution to under performance, then appropriate training strategies are implemented.

Training needs assessment methods

There are several discussions about training needs assessment methods as a channel to identifying possible training needs of individuals and workers in general. The following is a look at two submissions about training needs assessment methods. Below are three suggested methods in which an organisation may use to conduct a Training Needs Assessment suggested by (Rouda & Kusy, 1995).

1. Employee performance appraisal

In the organisational settings, it involves each employee's manager discussing training and development needs during the final part of the performance appraisal discussions with each employee. This method suits where training needs are highly varied amongst individual employees. Typically, the manager constructs an employee performance development plan in collaboration with the employee being appraised. The plan takes into consideration:

- i. The organisation's strategies and plans
- ii. Agreed employee goals and targets
- iii. The employee's performance results
- iv. The employee's role description
- v. Feedback from internal/external customers and stakeholders, and
- vi. The employee's stated career aspirations

The employee's completed performance development plan should document the areas that require improvement, the actual development activity, resource requirements, expected outcomes and an agreed time frame in which the

development outcome will be achieved. Management may find some commonality amongst individual employees training and development needs identified in the various performance appraisals. In this case, it may pay the organisation to review and classify each of the needs and convert them into appropriate training courses (or other interventions). The next step is for management to prioritize their importance and aggregate the results so as to provide a list of courses and participant numbers against each. A delivery schedule that fits in with managers/supervisors and employees can be negotiated whilst keeping an eye on the budget.

2. Improvement project

Most, if not all, improvement projects have some employee training associated with them. Examples of improvement projects include planned and structured attempts to reduce the incidence of product defects, increase sales volume and decrease the number of customer complaints. Here, the training needs assessment begins by clarifying the measurable organisational improvement targets and the employee behaviours required to meet these targets. For example, the organisation might set a target of a 50 percent reduction in customer complaints by the end of the year. Employee behaviours required to achieve this target might be:

- i. Empathetic listening to customer complaints. This will make customers feel they are perceived as important as employees give them a proper listening ear. This creates an environment in which the customer is motivated to speak more which mostly could unveil some important issues

(e.g. issues concerning underperformance of employees) which might call for developing and implementing training programmes.

- ii. Regular follow up of complaint resolution. It is important for an organisation to adapt an accountable form of relationship with their customers where employees are rather encouraged to follow up to ensure that the customer after transacting with the organisation is traced to see whether the organisation's products are satisfying enough for the customers and even where there are complaints, then the employees should follow up with appropriate solutions to prevent the customer complaining the second time on the same issue.

To get to this point, though, the cause of the underperformance needs to be determined through a series of structured questions, if there is no one else to perform this initial diagnosis, the training professional may be called upon to do this job. A performance consulting approach can help here. With this approach, the person doing the diagnosis first asks managers to identify their problems in concrete terms. Next, possible causes and solutions are discussed and training solutions identified, where appropriate. To do this successfully, the performance consultant needs to be well-versed in process improvement methods and employee motivation theory and practice. For small projects, a simple employee performance flow chart in working with managers to help identify the cause of performance deficiencies can be used. Where training is identified as an appropriate solution or as part of the solution, a recommendation is made to work through a training needs assessment questionnaire with the appropriate

stakeholders. This will give the information needed to move to the training programme design phase.

3. Constructing a training calendar

When constructing an annual training calendar, be wary of simply asking managers what training they want delivered. Assessing training needs this way; one will most probably get a wish list with little connection to the real needs of the organisation. When the time comes for training and they and their workers are pressed for time, it may be difficult to fill seats. Training is expensive, and there is no better method for wasting training money. This is so because many managers are not skilled in identifying which of their problems can be solved by training and which ones cannot. For a training calendar to be effective, it needs to be tailored for the specific organisation's real needs. For instance ask managers what training they need. However, make sure to engage them in constructive dialogue about what their real problems are and which of them can realistically be addressed through training.

Training calendars are best suited to repeatable and regular demand, such as refresher skills training for infrequently performed technical tasks and for new recruits joining the organisation. In these cases, review what training is required on a regular basis and look at what new recruits need to be proficient at soon after they join the organisation. In constructing a training calendar, a careful look at one or more of the data sources listed below can be of help. Once a list of courses has been composed, assess demand for each course and the required frequency,

keeping an eye on the budget. Where a limited budget exists, get the management team to help assess priorities.

The data sources that you have available may include:

1. Interviews/surveys with supervisors/managers
2. Interviews/surveys with employees
3. Employee performance appraisal documents
4. Organisation's strategic planning documents
5. Organisation's/department's operational plans
6. Organisation/department key performance indicators
7. Customer complaints
8. Critical incidents
9. Product/service quality data

Furthermore, Rossett (2002) also contributed to this discussion by suggesting the following as Training Needs Assessment methods:

1. Interviewing

According to Rossett (2002), interviewing is the most prevalence tool of Training Needs Assessment. According to him, interviews are part of the needs assessments subject matter and task analysis. Interviews are used to pursue information relating to all Training Needs Assessment purposes and it is also possible that an interview might provide access to all data.

2. Observation

While observation is a useful and highly touted front end tool, Rossett (2002) research suggest that, it isn't used in Training Needs Assessment very

much at all and he therefore encouraged a rekindling of interest in the tool. According to Rossett (2002), observation can be used for pursuing all data just as other methods.

3. Facilitating groups

One cost-effective way of getting and disseminating information and garnering support is through the use of Training Needs Assessment groups. The use of groups for Training Needs Assessment is based on the belief in synergy, that the product of the interaction of many participants transcends a traditional sum of the parts. Groups are often used as a jury of experts to derive a consensus opinion on optimal and can of course be used for every other Training Needs Assessment purpose.

4. Survey through questionnaire

According to Rossett (2002), the questionnaire or survey is an excellent device for acquiring information relevant to all Training Needs Assessment purposes, hence, it should be heavily used. This can be done either being completed by the employees concerned, or be administered to the employees by the managers or supervisors of the employees where the managers or supervisors complete the questionnaire by taking responses from the employees.

Gilley and Egglund (1989) have also identified six methods that can be used in needs assessment by human resource development managers. These are discussed as follows:

1. Interviews

Interview is a method of data collection that gathers information through oral questioning (Sarantakos, 1994). Interviews are ways of talking to people to find out their perceptions of problems and their ideas about solutions. Interviews may be formal or informal, structured or unstructured. In some cases, conducting interview is the only technique used to determine the dimensions of a problem identified as having human resource implications.

2. Questionnaires

Questionnaires are usually used when the number of people from whom information is to be sought is too unwieldy for the interview method or the people are literate. The steps followed when using questionnaire as a method of data collection are similar to those employed in interviewing. Here, there are no interviewers but other assistants may be required (Sarantakos, 1994).

3. Tests

According to Gilley and Egglund (1999), various kinds of tests are administered to employees of organisations to assess capacity needs. The kinds most often used are those designed to measure performance of one kind or another. Achievement levels of individuals and groups can be assessed through testing. Entry-level skills, for instance, are easily measured. After a person has been on the job for some time, periodic appraisal may show a real need for cognitive, affective, or even psychomotor updating. As a diagnostic tool, tests help to identify specific areas of deficiencies. They may also be helpful in selecting from among potential trainees, those people who can be trained most

profitably. Furthermore, the results of the tests are usually easy to compare and report on.

4. Group problem analysis

Peil (1985) likens group problem analysis to focus group discussions. This involves bringing together people of similar characteristics to discuss issues to identify shortcomings or causes of the issue, in order to find solutions to it. According to Gilley and Egglund (1989), it permits synthesis of several points of view, it often promotes general understanding and agreement; it can build support for needed human resource capacity; and it can itself serve as a form of training. On the negative side, group problem analysis is time consuming and initially expensive and supervisors may feel too busy to participate.

5. Records and report studies

Records and reports studies are the assessment of secondary data that exist in an organisation. Many times these data are easily accessible in the form of records and reports. They cover supervisors' reports on employees and employee performance. Request for data may come from an individual's immediate supervisor or officials of the organisation. Records and reports provide excellent clues to trouble spots. They are also the best objective evidence of the results of problems. However, they normally do not show causes of problems or possible solutions. Records and reports, being historical in nature, may not reflect the current situation or recent changes.

6. Job analysis and performance review

Job analysis develops precise information about an actual job; on-the-job performance and is covered in the performance review. Jobs can easily be broken down into manageable segments for the purposes of both training and appraisal. However, these techniques are time consuming and difficult for people who are not trained in job analysis techniques. These methods of needs assessments, apart from records and report studies, are normally done with the knowledge of the person being studied. Therefore, the combination of the methods should be considered with observation being the key method, especially in the assessment of skills (Peil, 1985).

From the discussions above on training needs assessment methods, the researcher is of the view that, training needs assessment methods should involve a planned continuous process of identifying training gaps in employees through observing and working closely with employees themselves and other stakeholders so far as the employees work is concerned. Thus, while employees and managers views are important in this regard, an investigation of the present and future jobs of the employees through an interaction with their work environment is also paramount.

Training methods

According to DeSimone and Harris (1998), training methods can be grouped into two broad categories: on-the-job methods, which typically occur in the employee's normal work setting, and classroom methods, which typically take

place away from the job. According to them, this categorization is not definitive however, because some training methods have multiple applications.

1. On-the-job training (OJT) methods

On-the-job training (OJT) is, and has been for years, the most widely used training technique in organisations. Almost all employees are exposed to some form of it. The assumption underlining OJT is that the new employee can learn the job by watching an experienced employee do the job, by talking with the employee about important elements of the job while the employee performs those job elements, and by working with the actual machines, materials, or raw products that are the focus of the job. With this kind of training, too, success is largely dependent on the skills and motivation of the trainer. Reliance on the trainer can be a weakness of OJT unless the trainer is both skilled at training and motivation. Some companies do OJT without much thought or preparation and in such cases it often fails. In fact, some companies use OJT in place of carefully planned training programmes. By contrast, companies that choose employees to serve as trainers based on their potentials to be good teachers, train the trainers in the proper methods of instruction, provide incentives for their work as trainers, and match up trainers with trainees based on their potential to work well together are more apt to have successful training programmes (Wexley & Latham, 1991)

On-the-job training (OJT) involves conducting training at a trainee's regular work-station (desk, machine, and so on). This is the most common form of training; most employees receive at least some training and coaching on the job. Virtually any type of one-on-one instruction between co-workers or between

the employee and supervisor can be classified as OJT. However, much of this training is conducted informally, without structure or planning or careful thought. Research suggests that informal OJT leads to increased error rates, lower productivity, and decreased training efficiency (Jacobs & Jones, 1995). Furthermore, Rothwell and Kazanas (1994) found that structured OJT programmes are generally conducted by an assigned trainer who is recognized, rewarded, and trained in correct instructional techniques.

2. Classroom training methods

DeSimone and Harris (1998) defined classroom training method as those conducted outside of the work setting. According to them, a classroom can be any training space set away from the work site. From the above discussions, the researcher views On-the-job (OJT) training as a training method which takes place within the organisation where the trainee learns by acquiring experience through practicing and observing the day to day activities of the organisation. The classroom training method is the situation where the trainee is sent outside the organisation for the purpose of learning, which can take any kind; workshops, seminars, field training, educational institutions (both academic and professional institutions).

Training techniques

Training is intended to increase the expertise of trainees in a particular area. When thinking about what training technique(s) to use, it is useful to consider the current level of expertise that trainees possess. The following are some of the

existing training techniques that can be used by trainers. Orientation training and new employee socialization

Though not always treated as a formal training technique, the socialization of new employees is usually the first element of training that new employee's experience. Organisational socialization is the process by which an individual acquires the attitudes, behaviour, and knowledge needed to participate as an organisational member. This is done both formally and informally (Van & Schein, 1979).

The socialization process for new employees can be very important in that it determines their first impression of the organisation, supervisors and co-workers. This is also the time when new employees learn the formal and informal rules, procedures, and expectations of the organisation or work group. A recent study of new-employee training found that employees who experienced an orientation programme that focused on the history, values, principles, and structure of the organisation were indeed more aware of the goals, values, history, and people of the organisation than those who did not experience the training. They were also more committed to the organisation (Klein & Weaver, 2000).

Coaching

Coaching is the process by which supervisors provide subordinates with advice and information about current performance and discuss ideas and goals about improving that performance (Whetten & Cameron, 2002). In short, it is a training and motivational technique used to improve performance. According to Wexley and Latham (1991), coaching serves the following functions:

- i. It lets subordinates know how well others think they are doing jobs.
- ii. It encourages subordinates and supervisors to work together in developing a plan for performance improvement.
- iii. It improves communication and collaboration between supervisors and subordinates.
- iv. It establishes a framework for developing both short-and long-term career goals.

Many organisations invest considerable resources in teaching their managers how to conduct effective and useful coaching sessions.

Audiovisual techniques

One of the fastest-growing areas in training is the use of audiovisual or multimedia presentations as the basis for training programmes. In the past, these techniques have involved films, slides, and videotapes. But as we enter the new millennium, video disc presentations, CD presentations and computer presentations using power point and other sophisticated software are competing to the fore. Many large consulting firms that specialize in training, such as Development Dimensions International (DDI), have invested extensively in elaborate multimedia training programmes. Though not as fancy, videotapes are still quite popular; in fact, they are often used in organisations for behavioural modelling (Silverman, 1991).

Audiovisual techniques are believed to be at least as effective as and often more effective than traditional live lectures. The flexibility they allow-in terms of re-showing segments, pausing at various segments, repeating earlier segments and

stopping the presentation prior to showing the correct approach-make them particularly appealing. Some procedures, such as medical operation, would be impossible during a live lecture but quite feasible using audiovisual means (Wexley & Latham, 1991). Not surprisingly, trainees often report greater interest in and satisfaction with training that is conducted through multimedia presentations than with training of the live-lecture variety. Even in universities across the country, there is a strong push to transform live-lecture courses into courses that are more multimedia based. This push is fuelled by the belief that students are more interested in and pay more attention to the multimedia courses.

Programmed instruction

Self-instructional materials such as programmed texts have been produced for training purposes since the 1950s (Goldstein & Ford, 2002). Programmed instruction (PI) of this variety presets information to the learner while using learning principles to reward and motivate. The first step in programmed instruction is to present material broken down into small elements. Second, these elements are arranged in a logical sequence from simple to complex. Third, following completion of each element, a short test is administered to see if the learners have mastered the materials at some criterion level. Finally, the learners are given immediate feedback. If they answer questions incorrectly, they are given additional information to think about and then asked to revisit those questions until a performance criterion is met. If they answer questions correctly, they are asked to skip this additional information and to move on to the next stage of the PI.

One obvious advantage of this approach is that trainees can work at their own pace: those who are quite skilled don't have to waste time waiting for everyone else to catch up, whereas those who are not as skilled can take as much time as they need. Overall, research indicates that PI techniques result in shorter training times than other techniques and that PI training groups learn at least as much as, and often more than, trainees in control training groups (Goldstein & Ford, 2002). One drawback to PI, however, is the exorbitant cost incurred during the development of the instructional materials. Developing and writing the materials, as well as setting up programme so that each answer provided by the trainee begins a "tree structure" that leads to certain information and a subsequent stage in the process can be very time consuming.

Computer-assisted instruction

Computer-assisted instruction (CAI) stems largely from the PI approach just discussed, but with one difference: trainees interact with a computer. The computer is the medium through which information is presented to them and by which their performance is monitored. The computer provides information and then asks questions to determine what the trainees have learned and not learned. Given the computer's storage and memory capacity, both information and questions can be presented on the basis of the trainees' responses to previous questions. Thus fast learner can move through the training programme quickly and slower learners can move at a more deliberate rate with additional practice and tests as needed.

In these tutorials, the computer “walks” the learner through examples and asks the learner to perform certain tasks: if these are done incorrectly, the computer then provides feedback and additional practice. Although this individualized approach to training has great potential, careful evaluations of it are lacking. Clearly this technique needs to be a major focus of training research in the new millennium (Goldstein & Ford, 2002).

Sensitivity training

This is a controversial approach to training managers, sensitivity training has variously been referred to as T-group training, laboratory training, and encounter group training. The basic idea behind it is to increase people’s awareness of how they behave towards others and how they are treated by others. The technique uses combination of exercises such as sessions on anger reduction, building trust, and reducing conflict. Typically, a T-group consists of 10-12 trainees along with a trainer who is usually not an organisation employee. To minimize distractions and encourage individuals to be open and frank in their discourse, the training takes place far away from the work site. It usually lasts for several days, occasionally extending to a couple of weeks.

Sensitivity training is largely focused on interpersonal skills. Its goals include but are not limited to the following:

- i. Increasing trainees understanding of how and why they act the way they do towards others.
- ii. Helping trainees understand why others act the way they do towards them.

- iii. Teaching trainees how to listen.
- iv. Increasing trainees' tolerance and understanding of others' behaviours.

This approach has been controversial for several reasons. First, the sessions can become quite intense, and individuals often say things that they wish they hadn't. Second, individuals find out things about themselves or others that they wish they hadn't had to face. Thirdly, there is very little theoretical foundation for sensitivity training as a way to improve individual performance on the job. Finally, there is little or no evidence that sensitivity training results in any positive transfer back to the job. Sensitivity training was very hot approach in the 1960s, when it reflected the spirit of the times, but it has been less frequently used in recent years (Wexley & Latham, 1991).

Behaviour modelling

Since interpersonal skills and working with others are such important competencies for managers, managerial training techniques such as sensitivity training have often focused on improving these competencies. Behavioural modelling is one technique that seems well suited for improving them. It is based on Albert Bandura's (1986) work on social imitation on social learning theory.

This theory has been successfully applied to training for the last 20 years. An especially good example of the use of behaviour modelling or organisational training is provided by Latham and Saari (1979), who developed nine training modules to train managers how to interact effectively with their subordinates. The modules focused on such things as socializing a new employee, motivating a poor

employee, overcoming resistance to change and dealing with a problem employee. The trainees met for two hours for each of nine weeks. The training format included (1) an introduction to the topic; (2) a film that demonstrated a manager modelling effective behaviours, which were highlighted in earlier and later films as well; (3) a group discussion effectiveness of the model; (4) practice in playing the desired behaviours in front of other trainees and the trainer; and (5) feedback from the training class regarding the effectiveness of each trainee's role play.

Latham and Saari (1979) assigned half the supervisors to the training condition and half to a control condition that did not involve the behaviour modelling training. (The latter group did eventually received the training, but not until this segment of the study was completed) the training resulted in positive trainees reactions, better scores than the control group on a learning test given a few months after the training, and better on-the-job performance than the control group when measured one year later. Clearly, the behaviour modelling had a significant impact on the employees who experienced this training.

Case study

This approach was developed at the Harvard Business School and involves a very simple technique. Trainees are provided with a written description of an organisation's problem. With this method, each trainee generates a course of action to arrive at some solution. All trainees then come together as a group and discuss the case, sharing insights and responding to others' opinions and ideas. The trainer is simply the facilitator in that he or she provides information to the

group and maintains movement in the group by asking questions as needed. This approach demonstrates that answers are seldom clear-cut and that there are many perspectives to every problem. In addition, it provides a vehicle by which trainees can compare their own thought processes and critical-thinking skills to those of others.

Critics argue that the approach is not capable of teaching any general principles and that the process is too unstructured to be a very useful learning tool, and that participants become bored with this traditional approach rather quickly.

Management games

This last technique is somewhat similar to the case study approach. Managers are given a brief introduction that includes some background about a fictional company, the situation, organisation problems, and the organisational goals. The managers are presented with this contrived organisational situation and placed within that situation. They are asked to make managerial decisions, and these decisions subsequently affect the situation and context.

Management games are usually set up to be competitive in the sense that managers are organized into teams and the teams develop their own ideas, procedures, and solutions. As decisions are made on a round, it begins with new and additional decisions to be made by the various teams. Although the games are designed to model an entire organisation, they can often be categorized on the basis of their functional purpose (Wexley & Latham, 1991). Thus, there are many types of management games, such as marketing, finance, production management,

and quality-management games. These games are often well received by trainees because they are interesting to participate in and are perceived as relevant and realistic. They are also effective in helping employees understand the complexities and interdependence of the different departments within organisations.

Although there has been little empirical evidence of management games, some critics argue that trainees often become so interested in the competition that they also sight off the general principles that the game was designed to teach (Goldstein & Ford, 2002). Of course, as with simulators, the effectiveness of management games is clearly linked to their fidelity, that is, how realistic they are and how well they reflect the knowledge, skills, abilities and others (KSAOs) necessary to do the job.

Lecture method

According to DeSimone and Harris (1998), the lecture method involves the oral presentation of information by a subject expert to a group of listeners. The lecture is one of the most popular training techniques. According to them, one of the reasons the lecture method is so popular is that it is an efficient way of transmitting factual information to a large audience in a relatively short amount of time. They said, when use with visual aids, such as charts, maps, and handouts, the lecture can be an effective way to facilitate the transfer of theories, concepts, procedures, and other factual materials.

According to Robbins (1998), most training takes place on the job. This preference can be attributed to the simplicity and, usually, lower cost of on-the-

job training methods. However, on-the-job training can disrupts the workplace and result in an increase in errors as learning proceeds. Also, some skill training is too complex to learn on the job. In such cases, it should take place outside the work setting.

Popular on-the-job training methods include job rotation and understudy assignments. Job rotation involves lateral transfers that enable employees to work at different jobs. Employees get to learn a wide variety of jobs and gain increased insight into the interdependency between jobs and a wider perspective on activities. New employees frequently learn their jobs by understudying a seasoned veteran. In the trades, this is usually called an apprenticeship. In white collar jobs, it is called a coaching, or mentor relationship. In each, the understudy works under the observation of an experienced worker, who acts as a model whom the understudy attempts to emulate (Robbins, 1998).

There are a number of off-the-job training methods that managers may want to make available to employees. The more popular are classroom lectures, videos, and simulation exercises. Classroom lectures are well suited for conveying specific information. They can be used effectively for developing technical and problem-solving skills. Videos can also be used to explicitly demonstrate technical skills that are not easily presented by other methods. Interpersonal and problem-solving skills may be best learnt through simulation exercises such as case analysis, experiential exercises, role playing, and group interaction sessions. Complex computer models, such as those used by airlines in the training of pilots, are another kind of simulation exercises, which, in this case, are used to teach

technical skills. So, too, is vestibule training, in which employees learn their jobs on the same equipment they will be using, only the training is conducted away from the actual work floor. Off-the-job training can rely on outside consultants, local college or trade school faculty, or in-house personnel (Robbins, 1998).

Summary of the chapter

From the above discussions, the purpose of conducting a needs assessment cannot be overlooked. This is on account that it is to validate the hypothetical judgment with actual training needs to ensure that solutions addresses the most needed subjects and effectively focuses the appropriate resources, time and effort toward targeted solutions. Training needs assessment is to identify the gap between the model situation and the actual situation and the way in which it can be bridged. As the gaps are identified, they are evaluated to determine the manner in which the gaps can be bridged. Some situations will indicate training needs, some may need non-training solutions (e.g., financial aspects, institutional strengthening, providing the right tools etc.). The results of training needs assessment will highlight the subjects needed to bridge the gap, to help in the preparation of training modules and facilitate in the development of training Programmes.

CHAPTER THREE

METHODOLOGY

Introduction

The methodology describes the methods and procedures used in conducting the research. The section involves the following: research design, source of data, the study population, the sample size and sampling procedure of the study, instrumentation and data collection methods, administration of questionnaire and data processing and analysis techniques.

Study institution

Bolgatanga polytechnic was established in (1999) and started operations in (2001) with a mandate as stipulated in the law establishing polytechnics; to deliver quality HND products that are career-focused, hands-on to problem solving and responsive to the needs and demands of society, employers and professional bodies. The Polytechnic began with five employees and the first Acting Principal. The Polytechnic has acquired a permanent site at Sumbrungu near Bolgatanga and put up modern structures befitting the status of a tertiary institution with the assistance of Ghana Education Trust Fund (GETFund). The staff population has progressively increased to two hundred and twenty

(Bogatanga Polytechnic, 2014).

Vision

The vision of the Polytechnic is to become a centre of academic and professional excellence for teaching, learning, and research and community service employing state of the art technology

Missions

The mission of the Polytechnic is to provide career-focused skill-based education, research and training with emphasis on hands-on experienced and entrepreneurship development.

Academic programmes

The Polytechnic currently runs eleven (11) tertiary programmes (Accountancy, Marketing, Procurement and Logistic Management, Secretaryship and Management Studies, Agric Engineering, Statistics, Civil Engineering, Ecological Agriculture, Hotel Catering and Institutional Management, Industrial Art and Building Technology) leading to the award of Higher National Diploma (HND). A new programme Bachelor of Technology in Accounting with Computing (In collaboration with Kumasi Polytechnic) has also been introduced for the 2014/2015 academic year. (Bogatanga Polytechnic, 2014).

The Polytechnic also runs four non-tertiary programmes (DBS Accountancy, DBS Marketing, DBS Secretaryship and Management Studies and

DBS Procurement and Logistics Management) for the award of Diploma in Business Studies (DBS).

Research design

For this study, the descriptive design was employed. It is a type of research design that produces a 'snapshot' of a population at one or more point in time and concerns with the present status of a phenomenon. Descriptive design was used because it is comparatively quick and cheap to conduct and administer. It also enables researchers to identify the proportions of people in particular groups and controls the effects of subjects participating twice (Krejcie & Morgan, 1970). Although this design has some loopholes such as difficulty in getting respondents to answer questions thoughtfully and honestly, it is considered the best for the study since it deals with interpreting the relationship among variables and describing their relationships (Gay, 1992).

Target population

The target population for the study comprised academic staff of the Bolgatanga Polytechnic. The academic staffs were 106. This category of staff was considered for investigations by virtue of the positions and roles they play in formulating and implementing academic staff development programmes in the polytechnic. The researcher also thought that, this category of staff was better placed and positioned to provide relevant information for the study.

Sampling procedure and the sample

All the 106 academic staff were selected to participate in the census survey. Neuman (2000:42) states that “one principle of sample size is that the smaller the population, the bigger the sampling ratio has to be for an accurate sample. Larger populations permit smaller ratios. For small populations (under 1000) a researcher needs a large sampling ratio (about 30 percent)”. The above informed the inclusion of all the 106 academic staff of Bolgatanga Polytechnic in the study due to their small size.

Instrument

The main data collection instrument was a questionnaire (see Appendix A). The questionnaire was divided into five sections. The section A of the questionnaire illustrated the goals and significance of the study, the rights of the participants, and some instructions on how to answer the questions. This was followed by items on demography. The sections B, C, D, and E, were structured along the following headings: training policies adopted by Bolgatanga Polytechnic for its academic staff; conditions under which academic staff are given training; the training needs of academic staff; and the methods of conducting training needs assessments for the academic staff.

The use of the questionnaire was preferred because it ensured a wider coverage and enabled me to approach the respondents. This minimized the problem of no-contacts which other methods face. The questionnaire was also used in the study because in comparison to other methods, it is characterized by

its impersonality. In other words, the items are the same for all respondents, anonymity is respected, and there are no geographical limitations to its implementation. Although questionnaires have potential low response rate, it is relatively economic method in both cost and time, and it allows time to carefully check the content of the items that are likely to yield more accurate information (Walliman, 2005). This was an important consideration in the study which seeks reliable information from the respondents. According to Patton (2002), researchers can get the right responses from respondents when they use questionnaires.

The items in sections B, C, D, and E were structured along the lines of the Likert scale. This is because it enabled the respondents to indicate the degree of their beliefs in a given statement. It is also easy to construct, administer, and score (Kimmon, 1990). Thus, the statement on the Likert scale were structured on a five-point scale which required the respondents to indicate the extent to which they agree or disagree ranging from Strongly Disagree (SD), Disagree (D), Undecided (U), Agree (A), and Strongly Agree (SA).

Validity and reliability of the instrument

After constructing the questionnaires, its validity, reliability and layout were taken into consideration. The aim was to avoid any weakness before producing the final version for implementation. Examination of the validity was aimed at making sure that the adopted instrument measured what it is supposed to measure (Cohen & Manion, 1994).

After that the questionnaires were reviewed by specialists in Measurement and Evaluation and by my supervisors. The aim was to reveal any ambiguities, threatening items and other problems which needed to be solved before trying out the questionnaires. Their constructive and informative responses were used to improve the questionnaires and to produce the final form of the questionnaires was approved by my supervisor.

Pilot-testing of instrument

Pilot-test of the instrument for the study was conducted in the Tamale Polytechnic. Tentative questionnaire on 50 potential staff with similar characteristics as those of the actual study were administered. Pilot-testing the instrument was aimed at ensuring that the questionnaires were suitable to elicit the responses from the respondents, to check the clarity of the items and to identify, restructure and re-phrase any ambiguities that existed. It was also meant to ensure that administration procedures were effective. The outcome of the pilot-test provided very beneficial feedback before the implementation. Besides, the layout of the questionnaire was revised in terms of ensuring the consistency of font size and line spacing. A reliability co-efficient of .80 was achieved. The instrument was therefore deemed reliable since according to Fraenkel and Wallen (1996), “For research purposes, a useful rule of thumb is that reliability should be at .70 and preferably higher” (p. 17).

Field work

After the questionnaires had been tested for validity and reliability, they were administered to the targeted sample. The questionnaires were distributed to the targeted sample between 1st and 15th September, 2013. The questionnaires were distributed in person in order to explain the goals of the study; direct the staff attention to their rights during the course of the study; and clarify the instructions for answering. The questionnaires were distributed and retrieved that same day in order to ensure validity of the questionnaires. For a successful collection and sorting of the questionnaires, each questionnaire was given a serial number. The questionnaires returned were 98. This represented a return rate of 92.5 percent.

Data analysis

The data was organized into various themes and categories (five sections) based on the research questions and the objectives of the study such that each section provided answers for each of the research questions. Prior to coding and tabulating the questionnaires for analysis, all the items were checked. This helped the researcher to check to see if instructions had been followed uniformly and whether all items had been responded to. The responses to the questionnaire were then coded by assigning numbers to the various categories of responses for the purposes of analyses.

A short list was also prepared from a master of responses for the open-ended items in order to get the key responses that were given by the respondents.

This was followed by a preparation of a sheet showing the coding scheme. This provided a guide for the interpretation of the variables in the analysis. After that the data were transferred to a broadsheet (Statistical Product for Service Solution, version 16) and finally analyzed using the SPSS. Percentages and tables were employed to present the outcome.

CHAPTER FOUR

RESULTS AND DISCUSSION

Introduction

This chapter deals with the presentation of results and discussion of the data collected. Descriptive statistics was used in presenting the results. Frequencies and percentages were employed. These were presented in tabular form. There is general discussion of the results at the end of each section aimed at answering the research questions.

Demographic characteristics of respondents

The demographic data covered age, work experience, and education qualification. The respondents were asked to indicate their sex. The researcher was also interested in the age distribution of the staff in order to find out the different training needs assessment programmes that could be given to workers of different age.

The age distribution of the respondents indicates that majority (29.6%) of the Bolgatanga Polytechnic staff were aged from 31 – 35 years, while 15.3 per cent were aged from 36 – 40 years. The implication is that different training need assessment programmes should be provided to cater for individual differences among the different age group.

The researcher was also interested in finding out the working experience of the respondents since the experience and the length of service of an employee determine the kind of training programmes employers should provide (Lobdel, 1997). The views of the respondents are shown in Table 1.

Table 1: Number of years of working of staff

Years	Frequency	Percentage
1 – 5	17	17.3
6 – 10	49	50.0
11 – 15	18	18.4
16 years and above	14	14.3
Total	98	100.0

Source: Field Survey, 2012

Working experience of staff of Bolgatanga Polytechnic as shown in Table 1 shows that 17 (17.3%) had worked between 1 – 5 years in Bolgatanga Polytechnic. This was different from 49 (50.0%) respondents who had worked between 6 – 10 years. It is further revealed in Table 3 that there were 18 (18.4%) staff had worked between 11 – 15 years, while 14 (14.3%) had 16 and more years working experience. Since majority of the respondents had more than 10 years experience, it implies that different training need assessment programmes should be provided especially for those who have been working in Bolgatanga Polytechnic for more than 10 years. This will enable them to keep abreast with the dynamics of technology.

Educational qualification of respondents

The respondents were also asked to indicate their educational qualification. The outcome of their views is shown in Table 2.

Table 2: Educational qualification of respondents

Years	Frequency	Percent
MSc/M. Phil/M.A	87	88.8
PhD	11	11.2
Total	98	100.0

Source: Field Survey, 2013

Table 2 shows that while 21 (21.4%) respondents were MSc holders, 66 (67.3%) had M.Phil/M.A. Also, 11 (11.2%) were PhD holders. The outcome implies that the respondents had the required knowledge and understanding concerning the study and therefore contributed immensely to the study under investigation. Training policies adopted by Bolgatanga Polytechnic for its academic staff.

Training policies adopted by Bolgatanga Polytechnic for its academic staff

Research Question One was formulated to solicit responses on the Training policies adopted by Bolgatanga Polytechnic for its academic staff. The outcome of the views of the staff has been presented in Table 3.

Table 3: Training policies adopted by Bolgatanga Polytechnic

Responses	Agree		Undecided		Disagree		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Organising in-service training for staff	37	37.8	30	30.6	31	31.6	98	100
Organising workshops for staff	40	40.8	30	30.6	18	18.4	98	100
Organising seminars for staff	55	56.1	20	20.4	23	23.5	98	100
Sponsoring staff on sandwich/distance/fulltime programmes	59	60.2	3	3.1	36	36.7	98	100

Source: Field Survey, 2013

Results from Table 3 indicates that while 37(37.8%) respondents agreed that organising in service training for staff is a training policy adopted by Bolgatanga Polytechnic for its academic staff, 31(31.6%) respondents disagreed. Also, 40 (40.8%) respondents agreed that as a training policy, the Polytechnic organises workshops for its staff. On the contrary, 18 (18.4%) respondents disagreed to organising workshops for staff as a training policy adopted by Bolgatanga Polytechnic for its academic staff.

Also, 55 (56.1%) respondents agreed that Bolgatanga Polytechnic organises seminars for staff while 23(23.5%) respondents were of contrary

opinions. Finally, results from Table 5 show that while 59 (60.2%) respondents supported the view that the Bolgatanga Polytechnic sponsors staff on sandwich/distance/fulltime programmes, 36 (36.7) of the respondents disagreed.

Training needs of academic staff for current and future job assignments

The respondents were also asked to indicate the training needs of academic staff. Table 4 highlights the distribution of respondents' views regarding the training needs of academic staff.

Table 4 shows that while 55 (56.1%) of respondents agreed to training related needs as training needs of academic staff, 20(20.4%) of respondents disagreed to training related needs as training needs of academic staff. Also, while 60 (61.2%) of respondents agreed that researching and publication related needs are training needs of academic staff, 18 (18.4%) respondents held contrasting view to researching and publication related needs as training needs of academic staff. Seventy (71.4%) respondents agreed that another training needs was seminar presentation needs while 15 13(13.3%) of respondents disagreed to seminar presentation need as a training need of academic staff.

It is further indicated in Table 6 that while 75 (76.5%) respondents agreed to technological related needs as training needs of academic staff, 10 (10.2%) respondents disagreed.

Table 4: Training needs of academic staff

Responses	Agreed		Undecided		Disagreed		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Teaching related needs	55	56.1	23	23.5	20	20.4	98	100
Researching and publication related needs	60	61.2	20	20.4	18	18.4	98	100
Seminar presentation related needs	70	71.4	15	15.3	13	13.3	98	100
Technological related needs	75	76.5	13	13.3	10	10.2	98	100
The need for people to move to lectureship positions	80	81.6	10	10.2	8	8.2	98	100

Source: Field Survey, 2013

Finally, 80 (81.6%) respondents agreed to the need for people to move to lectureship positions as a training need of academic staff. This was contrary to the views of 8 (8.2%) respondents who disagreed to the view.

Methods employed by management in conducting training needs assessment

Research Question Three was designed to elicit responses from respondents on the methods of conducting training needs assessment for staff of Bolgatanga Polytechnic. The outcome of the views of the staff has been presented in Table 5.

Results from Table 5 show that 82 (83.7%) respondents agreed that one method of conducting training needs assessment is through employee performance appraisal while 6 (6.1%) respondents disagreed.

Also, while 80 (81.6%) respondents agreed that management employs improvement project to conduct needs assessment, 8(8.2%) respondents disagreed to improvement project methods.

Furthermore, 78 (79.6%) respondents agreed to that constructing training calendar is one of the methods of conducting needs assessment. This was contrary to the views of 10 (10.2%) respondents disagreed. Seventy (71.4%) respondents agreed that management of the Polytechnic employ report and report studies methods to conducting needs assessment, while 10(10.2%) respondents disagreed.

Also, 70 (71.4%) respondents indicated that training needs assessment in the Polytechnic is conducted through job analysis and performance review methods. This was contrary to the views of 13 (13.3%) who disagreed.

Table 5: Methods employed by management in conducting training needs assessment

Responses	Agreed		Undecided		Disagreed		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Employee performance appraisal	82	83.7	10	10.2	6	6.1	98	100
Improvement project	80	81.6	10	10.2	8	8.2	98	100
Constructing training calendar	78	79.6	10	10.2	10	10.2	98	100
Report and report studies	70	71.4	18	18.4	10	10.2	98	100
Job analysis and performance review	70	71.4	15	15.3	13	13.3	98	100
Group problem analysis	85	86.7	4	4.1	9	9.2	98	100

Source: Field Survey, 2013

Finally, while 85(86.7%) respondents agreed that needs assessment is conducted through group problem analysis, 9(9.2%) disagreed.

Benefits of training and development on staff

In order to solicit the views of the respondents on the benefits of training needs assessment, Research Question Four was formulated. The views of the respondents have been presented in Table 6.

With regard to the impacts of training needs assessment on staff, Table 6 shows that while 65 (66.3%) supported the view that training needs assessment helps to identify organizational goals and its effectiveness in achieving these goals, 15 (15.3%) disagreed. This is in line with the assertion Schuler (1987) when he stated that the major purpose of training need assessment is useful in identifying organizational goals and its effectiveness in achieving these goals. Training need assessment, according to him, enables employees to be more productive.

While 70 (71.4%) of the respondents were also of the view that training need assessment helps identify gaps or discrepancies between employee skills and the skills required for effective job performance, 10 (10.2%) disagreed. Smith (2006) shares the same idea with majority of the respondents. According to Smith, productivity increases while training need assessment takes place. He also states that, staff who receive formal training can be 230 per cent more productive than untrained colleagues who are performing the same role.

Table 6: Benefits of training need assessment

Conducting a needs assessment is useful in identifying:	Agreed		Undecided		Disagreed		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Organizational goals and its effectiveness in achieving these goals	65	66.3	28	28.6	15	15.3	98	100
Gaps or discrepancies between employee skills and the skills required for effective job performance	70	71.4	18	18.4	10	10.2	98	100
Problems that many not be solved by training.	90	91.8	4	4.1	4	4.1	98	100
Conditions under which the training and development activity will occur	66	67.3	12	12.2	20	20.4	98	100
The basis for evaluating the effectiveness of the training programme	80	81.6	8	8.2	10	10.2	98	100

Source: Field Survey, 2013

In similar view, 90 (91.8%) respondents agreed that needs assessment helps to identify problems that many not be solved by training. In contrast to the above, 4 (4.1%) respondents thought otherwise. Mathis and Jackson (1991) in their views maintain that effective staffs training need assessment helps to discover diverse problems before the actual training and development programmes are introduced and immediate and long terms solutions are provided.

Also, 66 (67.1%) respondents were also in agreement to the fact that needs assessment helps identify conditions under which the training and development activity will occur. Twenty (20.4%) respondents had contrasting opinions to that fact. To support this idea, Bukley and Caple (1995) stress that employees may gain greater knowledge in discovering suitable atmosphere to conduct training and development.

Identifying the basis for evaluating the effectiveness of the training programme was also the view of 80 (81.6%) respondents who agreed while 10 (10.2%) of the respondents did not agree. In a related view, Acheampong (2006) maintains that training need assessment helps to evaluate training and development programmes effectively in order to reduce accidents and waste of resources and enhance employees' abilities and skills to handle work-related equipments carefully.

Challenges of staff training and development

The major focus of Research Question Five was to solicit from the respondents some of the challenges they face during the organisation of training

need assessment for employees. The outcome of their views has been presented in Table 7.

The respondents 58 (59.2%) held that one major challenge employers encounter during needs assessment is that it requires a skilled observer. This was different from the views of 22 (22.4%) respondents who disagreed. In support of this outcome, Debrah (2002) claimed that some firms are not providing the training need assessment that their employees need, but instead poach employees from other firms due to the lack of experience personnel to conduct the training need assessment. This view also confirms the findings of Debrah (2000), whose study of the manufacturing sector in South East Asia revealed that the manufacturing sector needs knowledgeable and competent HRD personnel such as professional internal trainers with the expertise to train and develop employees within organisations. This implies that employers may have to focus on the recruitment of expert HRD professionals to take on the role of developing human expertise in their organisations and managing the various specialized HRD function such as training and development, performance management, career development and the management of organisational development and change.

Table 7: Challenges of staff training need assessment

Statement	Agree		Undecided		Disagree		Total	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Requires a skilled observer.	58	59.2	18	18.4	22	22.4	98	100.0
Employees' behavior may be affected by being observed. In addition, it is time consuming.	54	55.1	14	14.3	30	30.6	98	100.0
Provides limited information especially when questionnaires are used	68	69.4	10	10.2	20	20.4	98	100.0
Time constraints can limit the length and detail of information obtained from needs assessment.	75	76.5	8	8.2	15	15.3	98	100.0
Lack of management support	85	86.7	5	5.1	5	5.1	98	100.0

Source: Field Survey, 2013

Table 7 also shows that while 54 (55.1%) respondents indicated that employees' behavior may be affected by being observed. In addition, it is time consuming impedes training and development, 30 (30.6%) had different opinion from the majority. Hansen (2003) has reported that the artificial climate created by observation during training need assessment negatively affect employees who end up feigning their attitudes.

It could also be realised that, 68 (69.4%) respondents were of the view that needs assessment provides limited information especially when questionnaires are used. Twenty (20.4%) on the other hand did not support the idea. According to Armstrong (2000), and Sadler-Smith (2004), training need assessment provides limited information because respondents tend to give superficial information.

Moreover, 75 (76.5%) respondents agreed that time constraints can limit the length and detail of information obtained from needs assessment. However, 15 (15.3%) had different views and thought with regards to the challenge at hand. This confirms the views of Hill (2004) when he states that the numerous processes of training need assessment serve as a major barrier to training need assessment.

Finally, the results show that while 85 (86.7%) respondents stated lack of management support as a challenge to needs assessment, 5 (5.1%) disagreed. McCracken and Wallace (1999) shared this view when they asserted that lack of support and the expertise to perform the various HRD responsibilities has also been identified as another challenge to employee training need assessment.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

Introduction

This chapter provides a summary of the results of the data analysed. It focuses on the outcome of the views of the respondents on the research questions. It also draws conclusions concerning the analysis of data collected and the research questions. It finally makes further recommendations for practice. The recommendations are also based on the outcome of the data collected and analysed.

Summary

Research question one sought to examine training policies are adopted by Bolgatanga Polytechnic for its academic staff. The study used census survey to solicit the views of academic staff of Bolgatanga Polytechnic. Structured questionnaires were administered to all the 106 academic staff of Bolgatanga Polytechnic concerning issues of staff training and development policy and training needs assessment. The study used Statistical Product for Service Solution (SPSS) version 16.0 to analyse the data.

The outcome of the study revealed that organizing in-service training for staff, organizing workshops for staff, seminars for staff as well as sponsoring staff on sandwich/distance/fulltime programmes were the main training policies adopted by Bolgatanga Polytechnic.

With respect to research question two which examined the training needs of academic staff for current and future job assignments, the outcome of the study revealed teaching related needs, research and publication needs, seminar presentation needs as well as the need for people to move to lectureship position as the main training needs of academic staff.

Research question three sought from the respondents the methods employed by management of Bolgatanga Polytechnic in conducting training needs assessments for the academic staff. The study discovered employee performance appraisal, improvement projects, report and report studies as well as job analysis and performance review as the most used methods of conducting training needs assessment.

Research question four sought from the respondents the benefits of training needs assessment in the Bolgatanga Polytechnic. It was discovered that training need assessment helps in identifying organizational goals and its effectiveness in achieving the goals. It was also discovered that it helps to identify gaps between employee skills and the skills require for effective job performance, as well as forming the basis for effective evaluation of the training programme.

Finally, research question five sought from the respondents the challenges of training needs assessment in the Bolgatanga Polytechnic. The study revealed that the major problem confronting training need assessment was lack of manpower and expertise to conduct training need assessment. The respondents also indicated time constraint and lack of managerial support as other problems confronting training need assessment.

Conclusions

It can be concluded that the use of different training methods helps address challenges confronting training in relation to staff. Again, the usage of a wide range of training methods ensures that all the trainees become well equipped with the necessary skills and knowledge after the training programme. This also caters for the individual differences among trainees.

It can also be concluded that the provision of several training needs such as the need for people to move to lectureship positions and technological related needs enhance better development of staff of Bolgatanga Polytechnic.

Also, training need assessment requires considerable planning, organization, and commitment. Properly conducted in-service training particularly at the worksite level, directly leads to enthusiastic and engaged staff effectively to their work.

Finally, training need assessment is not effectively conducted in Bolgatanga Polytechnic due to lack of expertise and knowledgeable HRD to conduct training need assessment. Even when training need assessment is conducted, the information provided are sometimes limited especially when questionnaires are used. This results in the provision of inadequate training need assessment programmes to staff.

Recommendations

Since it was revealed that training need assessment was essential in ensuring retention, staff programmes should include skills and knowledge that relate specifically to Bolgantanga Polytechnic. Also, human resource

managers should be given up-to-date information on how to provide training need assessment.

Training need assessment should also be a holistic process that encompasses varied methods and starts from the staff's first contacts with the Polytechnic. In addition, training need assessment should always include an evaluation of the training programmes. Also, staff's ideas, views and suggestions should carefully be taken into account when developing training need assessment programmes.

Finally, since lack of manpower and expertise to conduct training need assessment was discovered to be a major problem of conducting training need assessment, measures such as employing more experts and providing refresher courses should be put in place in order to ensure successful training need assessment programmes.

Areas for further studies

It is suggested that this topic should be replicated in other government and non-governmental institutions in Ghana. Also, a study regarding the provision of in-training for new staff should be conducted by other researchers.

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APPENDIX
UNIVERSITY OF CAPE COAST
INSTITUTE FOR DEVELOPMENT STUDIES
QUESTIONNAIRE FOR MANAGEMENT STAFF

This questionnaire is designed to enable the researcher fulfil an academic requirement for the award of an MA in Human Resource Development. Its aim is to solicit your responses in gathering relevant information on the topic: Training Needs Assessment of Academic Staff of Bolgatanga Polytechnic. Your candid responses and views shall therefore be treated confidentially. Thank you for your co-operation.

Code:

Date:

SECTION A: BACKGROUND INFORMATION

1. Gender of respondent. a) Male b) Female
2. Age of respondent. (a) 21 – 30 years (b) 31 - 40 years
(c) 41 – 50 years (d) 51 – 60 years (e) 61 years and above
3. Academic qualification. a) Diploma b) Graduate c)
Postgraduate d) Specialist e) Other (Specify)
.....
4. Do you hold any professional qualification in addition to the one mentioned in item 3 above? a) Yes b) No
5. What is your designation in the polytechnic?
a) Rector b) Vice Rector c) Registrar
d) Assistant Registrar (Academic) e) Assistant Registrar
(Personnel)

f) Other (Specify).....

6. What are your job responsibilities?

.....
.....
.....

7. How long have you being working in the polytechnic?

- a) 1-3 years
- b) 4 – 6 years
- c) 7 – 9 years
- d) 10 – 13 years
- e) 14+ years

SECTION B: STAFF TRAINING AND DEVELOPMENT POLICY

8. Do you have staff development policy in the Polytechnic?

- a) Yes
- b) No

9. If no, why?

10. If yes, what does it entail?

- 1. Organizing in-service training for staff
- 2. Organizing workshops for staff
- 3. Organizing seminars for staff
- 4. Sponsoring staff on sandwich/distance/fulltime programmes
- 5. Other(s), specify

Note: (You can select more than one option where necessary)

11. How did you come by it?

.....
.....
.....

12. What does your outfit seek to achieve in relation to the staff development policy?

- a) Upgrading staff qualifications
- b) Upgrading the knowledge and skills of staff
- c) Facilitate the transfer of training between the polytechnics
- d) Other(s), specify

13. Do you think the polytechnic is achieving its objectives in relation to its staff training and development policy as per the responses in question (12) above?

- a. Yes
- b) No

14. Give reasons for your response.

.....

SECTION C: TRAINING NEEDS ASSESSMENT

No	Statement	SA	A	U	D	SD
36	Teaching related needs					
37	Researching and publication related needs					
38	Seminar presentation related needs					
39	Technological related needs					
40	The need for people to move to lectureship positions					

Others please, specify.....

SECTION D

Methods employed by management in conducting training needs assessment

No	Statement	SA	A	U	D	SD
36	Employee performance appraisal					
37	Improvement project					
38	Constructing training calendar					
39	Report and report studies					
40	Job analysis and performance review					
41	Group problem analysis					

Others please specify.....

SECTION E

BENEFITS OF TRAINING NEED ASSESSMENT

No	Statement	SA	A	U	D	SD
36	Organizational goals and its effectiveness in achieving these goals					
37	Gaps or discrepancies between employee skills and the skills required for effective job performance					
38	Problems that many not be solved by training.					
39	Conditions under which the training and development activity will occur					
40	The basis for evaluating the effectiveness of the training program					

Others please specify.....

SECTION E

Challenges of staff training need assessment

No	Statement	SA	A	U	D	SD
36	Requires a skilled observer.					
37	Employees' behavior may be affected by being observed. In addition, it is time consuming.					
38	Provides limited information especially when questionnaires are used					
39	Time constraints can limit the length and detail of information obtained from needs assessment.					

Others, please specify.....
