UNIVERSITY OF CAPE COAST

POLYTECHNIC ACADEMIC AND ADMINISTRATORS' PERCEPTION

ABOUT THE USEFULNESS OF THE NPT (045) LEADERSHIP AND

MANAGEMENT CAPACITY BUILDING PROJECT

ROBERT APPIAH

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MANAGEMENT CAPACITY BUILDING PROJECT

BY

ROBERT APPIAH

Thesis submitted to the Institute for Educational Planning and Administration of the Faculty of Education, University of Cape Coast in partial fulfilment of the requirements for the award of Master of Philosophy Degree in Administration in Higher Education

FEBRUARY 2013

DECLARATION

Candidate's Declaration

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

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

Name: Robert Appiah

Supervisors' Declaration

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

Principal Supervisor's Signature: ……………………… Date:...………..........

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Co-Supervisor's Signature... Date:............................

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ABSTRACT

The study investigated polytechnic academic and administrators' perceptions about the usefulness of the implementation of the leadership and management capacity building project in Ghanaian polytechnics. The study targeted four public polytechnics in the northern sector which included Sunyani Polytechnic, Wa Polytechnic, Balgatanga Polytecnic and Tamale Polytechnic.

Descriptive survey design was adopted for the study. The sample for the study included purposively selected 16 middle-level polytechnic administrators and 25 academic staff who participated in Sub-Project 2 and Sub-Project 3 of the NPT(045) leadership and management capacity building training. The main instruments for data collection were questionnaire and structured interview guide. The Institutional Change Coordinators were interviewed whilst the rest of the participants in the study responded to a four scaled Likert type scaled questionnaire. The instruments were pre-tested at Kumasi Polytechnics to ascertain its validity and reliability. The pre-test result yielded a standardised Chronbach's alpha of .70.

The results revealed that majority of the respondents agreed that the training has improved their performance on the job. It further emerged from the study that there was no statistical difference between academic and administrators about their perceived usefulness of the NPT (045) training. Based on the finding of the study, it is recommended that future leadership and management capacity building training should be decentralized to enable more polytechnic staff to benefit.

ACKNOWLEDGEMENTS

DEDICATION

To my selfless wife, Ms. Sylvia Essel Dadzie and children, Atteh,

Lawer and Doe.

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CHAPTER ONE

INTRODUCTION

Background to the Study

Leadership and management issues are critical to the governance of education institutions in any society and one of the characteristics of winning organizations is their ability to create a network of leaders from within. Organizations with a network of leaders are those that are most likely to thrive in the competitive business environment in modern society. In the same way, employees who are given the opportunity to develop leadership skills are more inclined to taking responsibility for their work. As organizations seek to empower their employees, leadership development becomes crucial to help teams and individuals move forward towards accomplishing the organization's goals. Change is constant in our world, particularly in educational institutions and good leaders are needed to help people deal with change in their environment.

Tertiary education and for that matter polytechnic education is important for providing middle-level human resource needs for national development. Governments, having realized these crucial roles of polytechnic education, have put in several interventions aimed at improving polytechnic education in Ghana. According to the National Council for Tertiary Education (NCTE) (2001), the industrialized countries have recognized technical manpower development as a

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powerful agent for economic growth and acted on this recognition. The report emphasized the need for a well developed polytechnic education to support the technical manpower requirement of all sectors of the economy. Technical education, therefore, holds the key to socio-economic development in countries that are aiming at meeting the challenges of globalization and scientific advancement.

In a similar vein, Afeti (1998) asserted that technology is one of the most powerful tools that can propel societies to withstand the completion and challenges of globalization and socio-economic transformation. This kind of technological education is provided by the polytechnics. Polytechnic education, therefore, provides the opportunity for training the needed middle-level manpower requirement for both the private and public sectors of the Ghanaian economy to facilitate the desired economic growth.

Ghana has 10 polytechnics, one in each administrative region of the country. The Polytechnic Law 1992 (PNDC Law 321) gave polytechnics tertiary status to provide courses in the fields of manufacturing, commerce, science, technology, applied social sciences among others. The mandate of tertiary status given to the Ghanaian polytechnics has triggered leadership and management challenges. The expansion in polytechnic education came as a result of the 1987 education reform programme which emphasized technical education at the basic and secondary levels. Under the 1987 education reform, new secondary technical schools were established across the country. This led to large number of senior high school graduates seeking admission into the Universities and Polytechnics.

However, most staff of polytechnics were not adequately prepared to handle the challenges of leadership and management of tertiary institutions (Ankomah & Dare, 204).

Apart from top management who received some training under the auspices of the NCTE, many of the rest of Polytechnic administrators did not have the benefit of such training (Dare & Ankomah, 2004). In the view of Dare and Ankomah the manifestation of this deficiency is the mounting tension arising from lack of skills in managing personnel of polytechnics, especially the teaching staff. Dare and Ankomah further explained that even though some management personnel such as Rectors have received some training in management, such training were not designed to meet the needs of other polytechnic administrators such as Deans, Heads of departments, Liaison officers and Finance managers.

In order to address these leadership and managerial deficiencies, the Institute for Educational Planning and Administration (IEPA) of the Faculty of Education, University of Cape Coast, in 2004 submitted a proposal to the Netherland Government through The Netherlands Organisation for International Cooperation in Higher Education (NUFFIC) and the Netherlands Programme for Post-Secondary Education and Training Capacity (NPT) for funding to run Leadership and Management Capacity Building training for staff of Ghanaian Polytechnics. The name of the project was NPT/GHA 045 project and the main task of the IEPA was to coordinate training programmes in partnership with the Vrije University and the University of Twente both in the Netherlands for leadership and management capacity in all 10 polytechnics in Ghana. One of the

main objectives of the training programmes was to train top management and middle-level administrative and academic staff in leadership positions to fill the gap of leadership and management deficiencies in the 10 polytechnics in Ghana.

The project kick-started with a 3-day national conference held in May 2005 at the University of Cape Coast involving all stakeholders in polytechnic education in Ghana. The purpose of the kick-off conference was among other things to;

1. Create public awareness

2. Create opportunity for the Polytechnics themselves to identify their leadership and management strengthening needs

3. Offer IEPA an opportunity to get first hand information about priority areas to inform its curriculum review and to develop masters' programme for Polytechnic managers.

4. Receive feedback from Polytechnics on issues relating to the context and structure of the project (NPT/GHA 045, 2005, p. 5).

Speakers at the national kick-off conference were drawn from industry, government, Ghana Employers' Association, Academia and Consultants. The conference addressed issues such as the state of Polytechnic education in Ghana, leadership and change management in Polytechnics, culture context of institutional leadership, leadership in Polytechnics, role of managers, lecturers and support staff, transforming Ghana's Polytechnics through industrial attachments, creating job opportunities for Polytechnics graduates through entrepreneurial skills development, project design and management development in Polytechnics,

and building leadership and management development in Ghana. The rest were the proposed project approach, policy issues in curriculum development in tertiary institutions, and issues, levels and products in curriculum development (NPT/GHA 045).

At the end of the conference some priority needs of polytechnic education in Ghana were identified. These included conditions of service; participatory decision-making; academic staff development; maintaining discipline; supervision skills and image building. Others were interpersonal skills, change management, developing curriculum through research culture, gender and leadership. At the end of the 3-day national kick-off conference, it emerged that "since the upgrading of Polytechnics to tertiary status in 1993, one of their main mandate was to provide high quality, tertiary education in order to educate and train middle-level manpower for commerce and industry" (Nsiah-Gyabaah, 2005, p. 86). Nsiah-Gyabaah further indicated that Polytechnics had to grapple with some challenges such as "inadequate leadership skills in managing the schools, faculties and department, inadequate capabilities of polytechnic staff and lack of relevant polytechnic programmes to meet the needs of industry" (Nsiah-Gyabaah, 2005, p. 86). This view held by Nsiah-Gyabaah demonstrated that leadership and management issues are important to the governance of tertiary institutions especially those in transition.

The total project value was Two Million and Five Hundred Thousand Euro (€2,500,000.00). Apart from the various leadership and management capacity building training workshops that were organized, 10 other polytechnic

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staff and two IEPA staff were sponsored to pursue Masters and Doctor of Philosophy degrees in the Netherlands. It is therefore necessary to investigate the benefits of this huge capital investment in human resource development in Ghanaian polytechnics.

The 10 polytechnics were grouped into two sectors; namely Southern and Northern sector for administrative purposes. The Southern sector included the Accra, Cape Coast, Ho, Koforidua and Takoradi polytechnics. The Northern sector included Kumasi, Sunyani, Tamale, Bolgatanga and Wa polytechnics. Coordinators were assigned to each sector with an overall project supervisor from the IEPA who had oversight responsibility over activities of the project implementation. Similarly, two local consultants with in-depth knowledge in polytechnic education in Ghana were appointed to assist with the facilitation of the training workshops while the Dutch partners also appointed consultants to facilitate training workshops with their Ghanaian counterparts.

The overall objective of the project was to improve leadership and management of Polytechnics in Ghana through the enhanced capacity of IEPA to implement the NPT/GHA 045 project. The project ended in July 2009 with a dissemination conference held in Mankessim and Accra respectively. In order to accomplish the overall objective of the project, the main project was divided into 4 sub-projects as follows:

Sub-project 1 was named "Setting the Change Agenda", with the top management of the 10 polytechnics with the aim of interacting to analyse management issues in Polytechnic governance. These interactions lead to the

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development formulation of change agenda for each of the 10 Polytechnics. Figure shows the priority areas of the change agendas that were presented by the Polytechnics.

Table 1: Change Agenda Priorities from the Polytechnics

Polytechnics	Change Agendas
Kumasi Polytechnic*	1. More and better industrial attachments
	2. Improved physical infrastructure
	3. Staff recruitment and development
	4. Improved management & organization
	5. Improved internal communication
Sunyani Polytechnic	1. Better human resource management
	2. Curriculum development/competence based learning
	3. Management information system developed
	4. Improved financial management practices
	5. Position of the vice rector clarified
	6.

Table 1 continue

Polytechnics	Change Agendas
Tamale Polytechnic	1. Improved financial management, including income generation
	2. Improved physical infrastructure
	3. System for academic quality assurance established
	4. Staff development
Bolgatanga Polytechnic	1. Improved physical infrastructure
	2. Staff recruitment and development
	3. Improved equipments and facilities
	4. Increasing student numbers
	5. Promotion of staff
Wa Polytechnic	1. Curriculum development / competence based learning
	2. Improved physical infrastructure
	3. Improved facilities
	4. Staff development
	5. Improved academic facilities (E-library)
	6. Industrial attachments

Source: Adopted from (Massen & Azigwe, 2009) *Kumasi Polytechnic was selected for pilot study.

Sub-project 2: "Training Tracks for Middle Management" consisted of two tracks. One track consisted of a training programme for Heads of Departments (educational leaders), the other track was for administrators of polytechnics.

Sub-project 3, dealt with "Curriculum Renewal and Capacity Building of the IEPA". This sub-project involved the design and development of a Master's programme in Management and Leadership in tertiary education for administrators in polytechnics and other tertiary institutions.

Sub-project 4 handled 'Developing and ICT infrastructure'. In this sub-project a resource Centre was established at IEPA and four other Polytechnics to facilitate the use of ICT in the teaching, learning and management process in polytechnics (Honyenuga & Kouwenhoven, 2009).

Statement of the Problem

Ghana has received much international assistance to its education sector over the years. These were received in the form of technical support and grants. The NPT/GHA 045 leadership and management capacity building in Ghanaian Polytechnic was implemented to build staff capacities. The project was aimed at improving the management and leadership practices in polytechnic education in Ghana. It was an intervention to sharpen the managerial and leadership skills of middle-level management staff of the polytechnics through training workshops. The project was successfully implemented as scheduled with participants drawn from all 10 polytechnics participating in a series of workshops organized by the

project partners. Huge sums of financial resources and human capital were invested into the project with an explicit intent of bringing about leadership and management change into the Ghanaian Polytechnics.

However, three years after the end of the project, no study has been conducted to investigate the extent of transfer of training competencies to participants' work environment. That is, to ascertain the extent to which participants are making use of what they had learnt from the project. The crux of this study, therefore, was to investigate polytechnic academic and administrators' perception about the usefulness of the leadership and management capacity building project.

Purpose of the Study

The study generally sought to investigate the usefulness of the training workshops to participants. It also investigated the extent to which participants are putting the competencies they acquired through their participation in the project to use in their places of work. The study further sought to identify some of the challenges that participants were facing in implementing the new competencies they acquired. Specifically, the purpose was to explore the following:

1. participants' expectations regarding the leadership and management capacity building project

2. Participants' perceptions about the effects of the training derived from the NPT/GHA 045 project on their job performance.

3. participants' perception about the challenges in transferring the acquired competencies to their job.

4. differences in perception of between administrators and academics about the usefulness of the leadership and management capacity building training.

Research Questions

1. What were participants' expectations about the implementation of the leadership and management building project?

2. What are participants' perceptions about the effects of the leadership and management capacity training on the performance on their job?

3. What are participants' perceived challenges of transferring the acquired competencies to their job?

4. What are the perceived differences between administrators and academics about the usefulness of the training programme?

Significance of the Study

The findings from the study are expected to inform stakeholders about the outcome and usefulness of the financial and human resources that were invested into the project. The research report will also serve as a resource document to guide the preparation and implementation of future collaborative projects in the polytechnics. Finally, the work will help to expand the body of knowledge in leadership and management capacity building in tertiary institutions.

Delimitation of the Study

The study was delimited to 4 polytechnics in the Northern Sector namely, Sunyani Polytechnic, Tamale Polytechnic, Wa Polytechnic and Bolgatanga Polytechnic. It was also delimited to middle-level academic and administrative staff of the 4 polytechnics who participated in the Sub-Project 2 and Sub-Project 3 of the NPT045 leadership and Management capacity building project. Senior Management staff such as Rectors, Registrars and Polytechnic Council members who also participated in the sanitization and the formulation of the change agenda were excluded from the study. Senior Management staff were excluded from the study because they did not participate in Sub-project 2 and Sub-project 3 that were the focus of this study.

Limitation of the Study

A study of this nature was expected to face some difficulties. One of the main limitations of the study was the high staff attrition rate in some of the Polytechnics. Some of the staff who participated in the training had either left the services of the Polytechnics or gone for further studies resulting in reduction in the expected sample size. Some participants also seemed to have forgotten about some of the content of the training. This state of affairs has probably affected the validity of the data to some extent, though there was no basis to suggest that this was so serious as to have affected the overall validity of the data.

Another limitation of the study was the fact that the usefulness of training was ascertained from the perspectives of the trainees because there was no

baseline data on pre-training performance of participants. The limitations were minimized by reminding respondents about the objectives of Sub-projects 2 and Sub-project 3. The limitations were also managed by basing the usefulness of the training on the perception of the participants themselves.

Organization of the Rest of the Study

The rest of the study is organized into four chapters from two to five. Chapter Two reviews related literature on the subject under study. Chapter Three describes the research design, population of the study, sampling techniques, instruments used for data collection and the data analysis procedure. Chapter Four presents and discusses the findings of the study. This was done in line with the research questions and objectives that were posed for the study. Finally, Chapter Five provides a summary, draws conclusions and make recommendations. Also included are suggestions for further research.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This chapter reviews literature related to the subject matter of the study. Empirical and theoretical works are reviewed under themes such as development of Polytechnic education in Ghana, mandate of Polytechnics in Ghana, transfer of training, empirical review of training transfer, evaluation of training. The literature review also covers Kirkpatrick's model of training evaluation, importance of training evaluation, effects of training design on transfer and work environment transfer of training. The chapter further discusses the conceptual framework underpinning the study, concept of leadership and management, educational leadership and management, role of middle-level leadership and management, concept of capacity building, change management, creating culture of change in Polytechnics and a summary of the literature review. The understanding of the development of polytechnic education in Ghana is necessary for establishing an appropriate context for the study.

Development of Polytechnic Education in Ghana

Successive Governments in Ghana from the pre-independence era till today have all emphasized the importance of formal education as a catalyst for rapid national development. The colonial government placed premium on education, especially, technical education. This explains the establishment of

technical institutes in Ghana in the 1950s to train the needed technicians and technologists for the accelerated development of the country. It is worthy of notice that to meet the needs of the rapidly expanding railway lines and mining activities in Ghana, technical institutes were established in Accra, Takoradi and Kumasi to meet the human resource requirements of the emerging industry at the time (Nyarko, 2010). These technical institutes were upgraded to tertiary status to train middle-level manpower for industry and commence (National Council for Tertiary Education, 2001).

Countries all over the world are redefining the policies that govern tertiary education to ensure that all citizens get equal access to tertiary education. This has been necessitated by the increasing number of students seeking secondary education and the need for individual development and survival in the modern society. The demand for higher education is continually increasing and this triggered by the increasing number of secondary school leavers, mobility and the presence of other age groups looking for second opportunities to acquire further education (Owusu-Agyeman, 2006).

Between the 1960s and 70s, tertiary education was a small sector, even though at that time it was expanding primarily due to the support it received from the central government (Owusu-Agyemang, 2006). He continued that the development of tertiary education changed in the 1980's when the economic crises affected most countries across the world. The economic slow-down reduced the efficacy of the state to support tertiary education, and consequently, the hitherto protected sector showed signs of decline (UNESCO as cited in Owusu-

Agyemang, 2006). Polytechnic education all over the world is seen as another form of tertiary education which provides highly skilled manpower needed in the development of a country. Graduates from most Polytechnics are found in industries and other service sectors of the Ghanaian economy. They are usually identified by their practical and applied skills in their various professions.

Most government policy documents identify polytechnics as institutions which provide non-university professional higher education in a multi-field environment. The purpose of polytechnic reforms is to provide young people with high-level alternative education by creating a more practically and professionally oriented higher education system to exist side by side with the traditional university degrees.

In 1963, the technical institutes in Accra, Takoradi and Kumasi were re-designated as polytechnics without any legal backing. Two others at Tamale and Ho were upgraded to polytechnic status in 1984 and 1986, respectively. Cape Coast Polytechnic which was planned as a polytechnic from inception was opened in 1986 (Nsiah-Gyabaah, 2005). These six second-cycle institutions were elevated to tertiary status under the Polytechnic Law of 1992, without any upgrading in terms of facilities or staff. Later, in 1997, Sunyani Technical Institute and Koforidua Technical Institute became polytechnics and were accorded similar status. The establishment of Bolgatanga and Wa Polytechnics in 1999 and 2000 respectively was to ensure that there is a polytechnic in each of the ten administrative regions of Ghana. Government is still making every effort at equipping polytechnics to provide quality tertiary education that directly

addresses the needs of Ghanaian society. It was in this regard that PNDC Law 231 was promulgated to establish the mandate of polytechnics in Ghana.

Mandate of Polytechnics in Ghana

In 1991, government of Ghana published a white paper to reform the tertiary education system which included the upgrading of polytechnics to tertiary status (National Council for Tertiary Education, 2001). The white paper specifically indicates that the polytechnics have an important role to play in the development of middle-level manpower in the country. The polytechnics were then mandated to offer technician programmes that would lead to the award of Higher National Diploma (HND). They were also mandated to provide tertiary education in the fields of manufacturing, commerce, science, technology, applied social sciences and applied arts. The white paper further indicates that the polytechnics should provide opportunities for skills development, applied research and publication of research findings. The Polytechnic Law PNDCL 321 was then promulgated to give legal backing to the polytechnics for their new mandate. These clearly indicated that the central concern of polytechnic education is to equip students with career-oriented training in their various fields of study. This career-oriented focus of polytechnic education was largely responsible for several agitations of both staff and students in the past about their conditions of service and job placement on the job market.

Government of Ghana constituted a committee to formulated policy framework for tertiary education sector between 1986 and 1988 (Government of

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Ghana, 1998). One of the primary recommendations was that all post-secondary education institutions should be brought into a single, unified and co-ordinated system characterised by greater public accountability. Some specific recommendations in the committees report included regrouping, rationalization and upgrading of existing institutions, the establishment of new institutions, and the transfer of the oversight responsibilities of the polytechnics from the control of the Ghana Education Service to the tertiary education sector. The report further recommended the establishment of various regulatory bodies to coordinate and provide policy oversight through the establishment of proposed Education Commission and the establishment of the planning, budgeting, monitoring and evaluation unit in the Ministry of Education.

Secondly, the report recommended the establishment of a Joint Admissions and Matriculation Board, an Accreditation Board and a Technical and Professional Examinations Board. The committee recommended that the six polytechnics that were in existence as at the time were to be upgraded and their number expanded, primarily by the upgrading of the existing technical institutes. The report also recommended among other things that the qualifications held by the majority of staff of the polytechnics were inappropriate for the level of teaching expected of staff. In order to address the staffing challenges of the polytechnics, the report recommended for the upgrading of qualifications of staff so as to achieve the aims and objectives of polytechnic education in Ghana. The report therefore, proposed that the post-secondary education sector should continue to receive high-priority attention from central government and other

stakeholder in the tertiary education. The report also recommended that conditions of service for staff were not good enough to attract and retain quality staff in the polytechnics. In order to address the human resource challenges of the polytechnics, government initiated several interventions over the years one of which is the NPT 045 project. One of the objectives of the NPT 045 project was to pursue staff development to provide relevant skills and competences that could be transferred to the job to improve performance so as to improve the quality of polytechnics education in Ghana.

Review of Activities of NUFFIC and NPT

The Netherlands Oraganisation for International Cooperation in Higher Education and Training (NUFFIC) and The Netherlands Programme for Post-Secondary Education and Training (NPT) institutions based in the Netherlands. Their focus is seeks South-North cooperation with developing countries for the purposes of strengthening institutional capacity for providing post-secondary education and training.

In 2003, Ghana was selected to benefit from NPT programme and a team of stakeholders from Ghana and the Netherlands decided that the NPT in Ghana would focus on seven priority areas: namely Technical and Vocational Education and Training (TVET) in Polytechnics, Information and Communication Technology (ICT) and good governance/decentralization. The rest are rural development, teacher training, health, environmental and water management, and conflict management and resolution. Related to each priority area, projects were

initiated which started before 2004-2010 in partnership with Ghanaian institutions (Polytechnics and Universities) and their Dutch counterparts (Nijhuis, 2012).

Under the TVET initiative, Ghana won from six projects for the polytechnic. The included:

1. Strengthening agricultural engineering education and training at Wa, Ho, Tamale and Bolgatanga Polytechnics for rural development and poverty reduction.

2. Capacity building to strengthen fashion design in Accra Polytechnic in partnership with Utrecht School of the Arts.

3. Capacity Building to Improve Performance of the building construction industry in Sunyani and Cape Coast Polytechnics.

Under the good governance/decentralisation and the rural development initiative, Ghana benefited from a project to run Master of Arts (M A) degree Programme in Governance and Sustainable Development and the Institute for Development Studies (IDS), University of Cape Coast. The project was implement and Maastricht School of Management. One other sector where Ghana benefited from NUFFIC was teacher training. This project aimed at strengthening mathematics and science education in Ghana in partnership with the University of Cape Coast and The University of Education, Winneba. Furthermore, Ghana also benefited from NUFFIC initiatives in the health sector. Under the health sector project, capacity building of staff of the school of medicine and health science was implemented at the University of Development Studies.

Ghana also benefited another NUFFIC project that implanted to build capacity for environment and water management initiative. Two projects were implemented, which aimed at capacity building for sustainable development of water resources and environmental sanitation in Ghana and the sub-region. This was done in done in partnership with the Kwame Nkrumah University of Science and Technology. Another project was also focused on the Integration of the integrated natural resource management approach into university curriculum of the College of Agriculture and Natural Resources of KNUST. The last project was aimed at strengthening ICT education in partnership with partnership with the Institute for Advanced ICT Studies and the Kwame Nkrumah University of Sciences and Technology.

Transfer of Training

Staff training and re-training are critical to the sustenance of any organization in the modern society. The idea that work has become increasingly knowledge-based is a critical factor that must be considered in organisational planning. This therefore, means that investing in intangible assets, especially human capital has been regarded as a core strategy for comparative advantage in the modern business environment (Hand & Lev, 2003; Storberg-Walker, 2004).

Organizations spend huge amounts of time and money on training their staff with the aim to facilitate employees learning of job-related competencies (Cascio, 2000; Noe, Hollenbeck, Gerhart & Wright, 2006). Dolezalek (2004) stated that United States of America (US) companies spend more than $50 billion

annually on formal training activities for their employees so as to improve their skills on the job. Dolezalek further posits that investment in training activities has increased all over the world in recent years. As a result of the financial investments organizations commit to staff training, it is important to provide evidence that training efforts are being fully realized at the work environment (Cascio, 2000; Dowling & Welch, 2005). In other words, it is important for organizations to ensure that training competencies translate into desired work outcomes and increased job performance.

Many human resource practitioners agree that organizations should spend more resources on training their employees in order to improve their competence at work (Kelloway & Barling, 2000). Notwithstanding the innovations in the training transfer literature, it is an indisputable fact that effectiveness of training depends to a large extent on whether the learned outcomes were used in the workplace (Salas & Cannon-Bowers, 2001). Transfer of training occurs when the knowledge, skills and values learned are actually used on the job for which they were intended (Olsen, 1998). More precisely, Ford and Weissbein (1997) defined training transfer as the application, generalisation and maintenance of newly acquired knowledge and skills. Vast amount of training investments have been wasted owing to poor learning transfer. Researchers have attempted to reveal the determinants of the transfer process (Goldstein & Ford, 2002). Researchers in training transfer have expanded the understanding of what factors affect motivation to transfer and the subsequent transfer behaviour, proceeding from an early stage of parsimonious studies to the recent stage of integrated model

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development. Despite a veritable explosion of studies shedding light on transfer of training, it has been argued that our understanding of real transfer issues was incomplete (Burke & Baldwin, 1999).

Transfer of training needs to be considered as a multidimensional construct because different authors view transfer of training differently, attributing a variety of features to explaining it. Wexley and Latham (2002) for example suggest that transfer can be measured as a positive, negative or a zero. Positive transfer occurs when learning in the training situation results in better performance on the job. This reflects the general assumption behind most explanation of the transfer of training concept. For example, Wexley and Latham contend that negative transfer occurs when learning results in poorer performance on the job. Zero transfer, they said, occurs when learning in the training situation has no effect on the job performance. This they claimed could be attributed to lack of innovative ideas about how change can emerge from the current state of the organisation.

As research on transfer of training continued, there has been a rise in the interest in new schools of thought about learning at workplace. The various workplace learning literature focuses on the interest in the concept of the learning organization (Senge, 1990). The Organization for Economic Cooperation and Development (OECD) subsumes training transfer within the agenda of lifelong learning. In the view of OECD, lifelong learning covers all purposeful learning activities including formal, non-formal, and informal learning (Organisation for Economic Cooperation and Development [OECD], 2007).

Chances of skill application after training are likely to be greatly reduced if the trainees' intentions to utilise the learned competencies are low (Foxon, 1997). Unless skill transfer is perceived by trainees and their supervisor as crucial to job performance, training is unlikely to be effective (Rossett, 1997; Taylor, 2001). Baldwin and Ford (1988) also indicated that the concern of many employers was that once the training is complete and the employee is back in the workplace, the training is not always put into practice because of conditions prevailing at the work environment. That is to say work environmental factors are critical to transfer of training competencies. The next section reviews some empirical studies on training transfer.

Empirical Review on Transfer of Training

Research has demonstrated that training efforts are unlikely to result in positive changes in job performance unless the newly trained competencies are transferred to the work environment (Baldwin & Ford, 1988; Montesino, 2002). As a result, there have been efforts to understand the antecedents and consequences of the transfer of training process. Baldwin and Ford explained transfer of training as the degree to which trainees effectively apply the knowledge, skills, and attitudes gained in the training context to the job. This suggests that transfer of training first requires the trainee to learn new job-related competencies (Velada & Caetano, 2007). After learning and retaining the training contents, trainees had to transfer the knowledge and skills accrued to the work

context with the intention of improving their job performance over time (Noe et al., 2006).

However, it has been estimated that only about 10 percent of all training experiences are transferred from the training environment to the job (Baldwin & Ford, 1988). Wexley and Latham (2002) also reported that approximately 40 per cent of content is transferred immediately following training. Wax and Lathan further contended that this amount transferred falls to 25 per cent after 6 months and 15 per cent after 1 year. This suggests that as time passes, trainees may be unable or less motivated to retain and use the information gained in the training program. Furthermore, these suggest that much of the time and money invested in training is never fully realized, because only a small percentage of the training effectively results in permanent transfer to the workplace. As a result, understanding and improving the transfer of training process has become a primary concern for training researchers and practitioners.

Rouiller and Goldstein (1993) conducted a study using a sample of new managers, who after attending mandatory training were assigned to different restaurants from a large chain of fast-food franchises. The results of their research indicated that managers in restaurants with more positive transfer climates demonstrated significant trained behaviours and performed better on the job. The study therefore, concluded that transfer climate was a potentially powerful tool that organisations should consider and use to facilitate training transfer. Tracey, Hinkin, Tannenbaum and Mathiew (2001) replicated the same study with 505

supermarket managers from 52 stores. Tracey et al. found that transfer of training climate was directly related to post-training behaviours.

In another study, Baldwin and Majuka (1991) randomly assigned 207 trainees to one of three conditions: (a) no choice of training; (b) choice of training-but choice not received; (c) choice of training-with choice received. The results of the study indicated that after controlling for cognitive ability, those trainees who were given the training of their choice did have greater motivation to learn and transfer. On the other hand, trainees allowed to choose but whose choice of training was subsequently not delivered were less motivated and learned less than those not provided opportunity to choose.

Sogunro (1997) looked at the impact of leadership training over a period of over a 19-year. The study involved 234 adults connected to a leadership training programme offered by the Rural Education and Development Association in Alberta, Canada from 1976 to 1994. The study used questionnaires and interview guides to get information from the participants, instructors, representatives of the sponsoring organizations from the rural areas and programme administrators. The questionnaires were administered at four stages of the process: pre-workshop, end of session, post-workshop, and follow-up. Both the questionnaires and interviews were administered and conducted between two months and 19 years after participation in the leadership training. Descriptive and correlation statistics were used to determine differences among variables. The results showed that participants perceived that the training increased their knowledge, skills, and attitudes, while significant differences were found in

behaviour on the job. The study concluded that there was the need to train all employees in leadership and to create more dynamic leadership training programmes in the future.

Frese, Beimel, and Schoenborn (2003) worked with middle-level managers from a German mobile phone and construction companies. The designed a programme to teach the managers how to communicate their vision which is an important aspect of leadership skills. They looked at the specific skill of "inspirational communication of a vision" which was presented over 15 days period through an action training programme. The research design compared the trained behaviours (inspirational communication) with behaviours that were not trained (public speaking). In addition, telephone interviews were conducted 10 weeks after the training to see if the participants were using what they learned in their workplaces. The results of the study revealed that participants were better able to communicate a vision through inspirational speech, an important leadership skill.

Jones, Simonetti, and Vielhaber-Hermon (2001) examined a programme designed to help scientists learn how to lead others. The method used for data collection was feedback gathered after the sessions and on self-reports. The results from the feedback showed that managers who attended the leadership development program reported a clearer idea of their tasks and values of leadership as well as greater self-confidence, communication, teambuilding and problem-solving skills. The study concluded that the leadership development program improved self-knowledge and an understanding of leadership behaviour.

Important to this study is the conclusion that scientists can learn leadership skills and benefit from leadership training in a variety of ways. From the review of training transfer, it was observed that one of the ways of determining training effectiveness is to undertake post-training evaluation sometime after trainees have returned to their workplace. The review also revealed that work environment characteristics such support from supervisors and colleagues are necessary conditions that facilitate training transfer. To ensure the sustainability of transfer of training competencies, it necessary to evaluate training from time to time to determine its impact on job performance.

Evaluation of Training

An evaluation is a systematic determination of merit, worth, and significance of something or someone using criteria against a set of benchmark standards. An impact survey is an evaluation tool to measure the extent to which skills and knowledge learned in the programme have translated into improved behaviour. Program evaluation is therefore a systematic collection of information about the activities, characteristics, and outcomes of programmes to make judgments about the program. Training evaluation also helps to improve program effectiveness and to inform decisions about future training activities. An impact evaluation survey can be carried out as a follow-up evaluation within several months of completing a training programme to ascertain the extent of utility of the training outcomes. Despite the fact that training evaluation is so vital to

measuring effectiveness, transfer of training has been the most neglected phase of the training programmes (Analoui, 1998).

Recent research shows that some organizations do not routinely measure the impact of training on job performance (Kraiger, McLinden, & Casper, 2004). Kraiger, McLinden, and Casper further discovered that among organizations that participated in the American Society for Training and Development Benchmarking Services, 75 per cent measured training reaction, 41 percent measured learning, 21 percent measured behaviour and only 11 percent measured organizational results. Kraiger, et al. attributed lack of expertise as one of the main reasons why evaluation of transfer of training was not usually conducted in organisations. The results therefore, means that very little is done to ensure that knowledge and skills acquired from training are transferred to the work environment regardless of the huge financial resources that are committed into such training projects.

Studies conducted by (Arthur, Bennett, Edens, & Bell, 2003; Bunch, 2007; O'Leonard, 2008) reported that billions of dollars are spent by organizations on employee training and management development programmes annually. They maintained that the cost of training was estimated at between $55.8 billion to as much as $200 billion annually in the United States of America. The capacity of organizations to learn, adapt, and change is a critical component of competitiveness in today's business sustenance. Managers must therefore continue to emphasize processes that help companies become learning organizations. With this emphasis on learning and skill development, employers

hope that expenditures on staff development will yield a favourable return on their investment.

However, little is done to assess the impact of this training on the behaviour and performance of employees. Studies suggest that many training and development activities are implemented on blind faith in the hope that they will produce results (Arthur *et al.*, 2003). Rarely do training programs assess needs, establish specific objectives, or evaluate impact beyond the reaction level. Only a small portion of training budgets is spent to determine the effect of training on job performance (Bersin, 2006).

One of the more optimistic estimates suggests that not more than 15% of learning were transferred to the job (Cromwell & Kolb, 2004). Other studies of training transfer rates found an average of only 10%–40% range (Baldwin & Ford, 1988; Ford & Kozlowski, 1997). Therefore, it is important to explore ways to encourage transfer of learning to achieve greater training impact. It is in this regard the Kikpatrick's model for evaluating training effectiveness become relevant in this review. Figure 2 presents the four levels of Kirkpatrick's model for evaluating training effectiveness.

Kirkpatrick (1994) identified four levels of evaluating training effectiveness. He indicated that reaction is the first level in the evaluation process and is defined as how well the trainees were satisfied with a particular training programme.

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          ┌─────────────────────────────────┐
Level 1   │            Reaction             │
          └─────────────────────────────────┘
                          │
                          ▼
          ┌─────────────────────────────────┐
Level 2   │            Learning             │
          └─────────────────────────────────┘
                          │
                          ▼
          ┌─────────────────────────────────┐
Level 3   │            Behaviour            │
          └─────────────────────────────────┘
                          │
                          ▼
          ┌─────────────────────────────────┐
Level 4   │             Results             │
          └─────────────────────────────────┘
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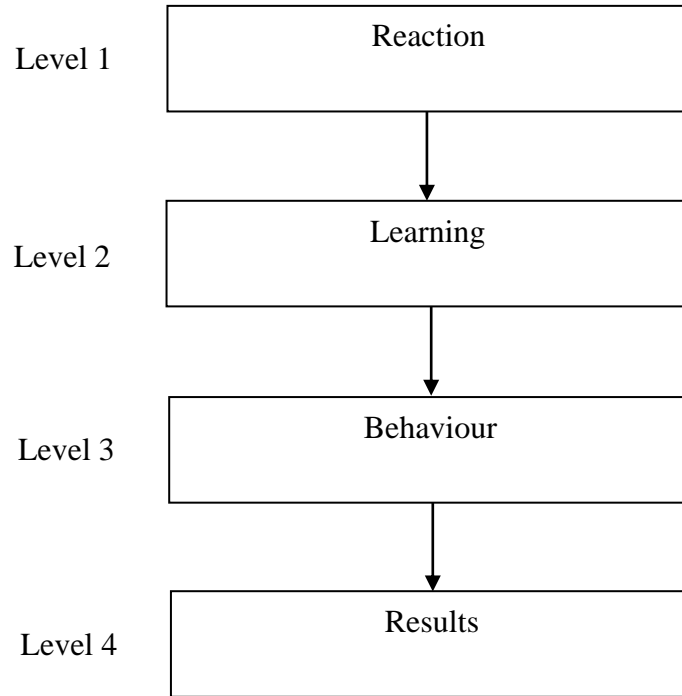
Figure 2: Kirkpatrick Four Levels of Training Evaluation Model

Source: Adopted from Kirkpatrick (1994)

Kirkpatrick continued that evaluating reaction is important for three reasons such as:

1. giving valuable feedback and suggestions for improving future training programmes.

2. tells trainees that the trainers are there to help them do their job better and that they need feedback to determine how effective they are.

3. provides quantitative information to managers and those who are concerned about the programme as well as to establish standards of performance for future training programmes (p. 27).

In the view of Kirkpatrick (1994), for trainers to get maximum benefit from reaction measurement, trainers should design forms that would quantify the reaction to training, encourage written comments and suggestions which can be useful in the redesign of the training course, develop acceptable standards for instructors and to measure reactions against standards.

Kirkpatrick (1994) identified learning as the second stage of training evaluation. He explained learning as "the extent to which trainees change their attitudes, improve their knowledge and increase their skills as a result of attending training" (p. 42). Kirkpatrick stressed that evaluating learning is important because no change in behaviour can be expected unless learning objectives have been accomplished. He further suggested the use of control group (if practical), using a paper-and-pencil test to evaluate the learned knowledge and skills before and after the programme. In his view, this can aid trainers to take appropriate action to strive for greater effectiveness in future programmes.

Furthermore, Kirkpatrick (1994) found behaviour as the third level in the training evaluation process. Kirkpatrick defined behaviour as "the extent to which change in behaviour has occurred because the trainee attended a training programme" (p. 52). Level three attempts to measure how much transfer of knowledge, skills, and attitudes occurs after the training. He stressed that it is important to see whether the knowledge and skills learned in the training programmes were transferred to the job. However, Kirkpatrick cautioned that no evaluation should be attempted until trainees had an opportunity to use the new learning experience in the work setting. He explained that evaluating the

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behaviour level can be done by using surveys or through interviewing one (or more) of the trainees, their immediate supervisor, their subordinates and others who are knowledgeable about their behaviour.

Finally, (Kikpatrick, 1994) discussed results as the fourth level training evaluation. He explained that a result is "what occurred as a consequence of the trainees attending a training programme" (p. 63). He used this fourth level to relate the results of the training programmes to organisational objectives. These include increased production, improved quality, decreased costs, increased sales and higher profits. Kirkpatrick stressed that the final objectives of a training programme needed to be stated according to the organisational objectives for optimal return on investment. He suggested guidelines to evaluate results to include using a control group to eliminate factors other than training that could have caused the changes observed in employees' job performance.

According to Kirkpatrick (1994), there is a natural flow between the levels in his model of training evaluation. He contended that reaction could lead to learning; learning could lead to behaviour change; and change in behaviour could lead to positive organisational results. As the model depicted only four variables, the effect of trainees' motivation to transfer training to the job was not an overt consideration of Kirkpatrick. However, it is likely that motivation was an assumption underpinning the model. Kirkpatrick (1994) further explained that 'without learning, no change in behaviour would occur' (p. 51).

These correspond with studies which revealed that change in behaviour occurs when trainees are motivated to use competencies they acquired from

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training to improve their performance on the job (Holton, 1996). Other studies also found that external variables outside the training classroom affect behavioural change of trainees (Baldwin, Magjuka & Loher, 1991). These external factors have been identified as the transfer climate, workplace design and personality characteristic variables. Self efficacy and readiness to participate in training could also affect behaviour change (Holton, Bates, Seyler & Carvalho, 1997; Rouiller & Goldstein, 1993). It is therefore necessary to evaluate training programmes after trainees have returned to their workplaces to ascertain how the training is being transferred to the job. Such evaluation can also provide feedback for trainers for possible changes in future training activities.

Importance of Training Evaluation

Training evaluation is a necessary factor in training design and implementation. The present climate of heightened globalization and competition among businesses has brought a paradigm shift with a on intellectual asset. Increasingly, knowledge has become the key to organisational competitiveness in most human endeavours. The ability of organisations to develop and use the skills of their workforce is critical to the sustenance of the modern educational institutions. Training requires substantial allocation of financial, human and time resources. New forms of business and management structures are required to effectively exploit intellectual assets leading to a renewed focus on the development of human resources (Donovan et. al., 2001). Bramley and Newby (as

cited in Dahiya and Jha, 2011) identified five main purposes of training evaluation as follows;

1   Feedback: linking learning outcomes to objectives, and providing a form of quality control

2   Control: using evaluation to make links from training to organisational activities, and to consider cost effectiveness

3   Research: determining relationships between learning, training, transfer to the job

4   Intervention: in which the results of the evaluation influence the context in which it is occurring and

5   power games: manipulating evaluative data for organisational politics (p. 52).

Sims (as cite in Dahiya, and Jha, 2011) contended that the goal of evaluation is to improve the training programme, provide feedback to the programme planners, managers and participants and to assess employee skills levels. Training is evaluated because evaluation is one way in which trainers can assess their effectiveness. From an administrative point of view, training is evaluated to justify the time and money spent on training delivery. Evaluation can also be a device to measure the long term reactions and effects such as what learning or behavioural change has occurred as a results of the training (Bristol, Cleancy, Geethuis & Holmes, 2002).

Bristol, Cleancy, Geethuis and Holmes (2002) continued that training programme is incomplete until the method and results are evaluated. One key to

obtaining consistent success with training programs is to have a systematic approach to its measurement and evaluation. Recognition of the training methods and measurement techniques are crucial for the organization's training success. It must however, be noted that evaluation must be conducted as the programme unfolds as well as when the outcome of the programme is being utilised. Thus, an evaluation data can be obtained prior to training, during training, immediately after training, or at a specified time after the end of training.

Effects of Training Design on Transfer

Learning experience can have an influence on the transfer of training if the contents of the training represent the specific task that the organization want trainees to perform at the workplace. This means that the learning experience would have an effect on the transfer of learning because that is the time when the learning content and the learner interact formally (Bates, 2003). Bate further argued that training design, in essence, describes the principles and methods used by instructional designers to ensure that learners retain the information taught and use the knowledge and skills at the workplace. Training design is meant to influence the transfer of learning to the work situation (Holton, 2003; Tannenbaum & Yukl, 1992). Training programme with a solid grounding in adult learning principles can support the transfer of learning and the transfer of training, whereas a poorly designed training program can have the opposite effect. It is also recognized that training contents that are not grounded in the realities of the workplace can cancel any effect of having a well-designed training programme.

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Thus, relevant training content plays a critical role in the transfer of learning and the transfer of training (Antonacopoulou, 1999; Holton, 2003; Montesino, 2002). They further agreed that the design and content of the training programme are important factors in facilitating the transfer of learning and the transfer of training. The means that trainees are more likely to transfer the training content to the work context when they perceive that the training programme was designed and delivered in such a way that maximizes the their ability to transfer the training to the job. Consequently, when trainees have previous knowledge and practice on how to apply the newly learned knowledge and skills to the job they can better transfer training competencies to the work environment.

Bates (2003) asserted that managers and supervisors play a critical role as transfer agents when they use their managerial skills and abilities to support and influence employee learning transfer. Bate's argument supports the view that training design should aim at generating the outcomes for which the training is intended. The argument implies that training activities should bring return on investment to the organisations who participate in the training. It is also believed that management support before and after training can have a positive impact on the transfer of learning (Baldwin & Magjuka, 1991). It can then be said that for training to have any effect on trainees' output, there is the need for a positive support from institutional management. Management is likely to support a training programme when it is involved in the designing of the training programme. A good work environment then becomes critical for effective transfer of training.

Work Environment and Transfer Training

Work environment refers to the real work condition under which trainees are required to utilize their competences after receiving training. There are many variables in the work environment that can affect transfer of training. They include the organisational climate, support from colleagues, subordinates and management staff of the institution. Transfer of training literature has emphasized the importance of the work environment on the transfer of training (Baldwin & Ford, 1988; Eseryel, 2002). Baldwin and Ford argued that supervisory support and organizational climate are key variables that may influence the transfer of training process. Eseryel further indicated that 'elements of the post-training environment can encourage (e.g., rewards, job aids), discourage (e.g., ridicule from peers), or actually prohibit the application of new skills and knowledge on the job (e.g., lack of necessary equipment)' (p. 420). Eseryel additionally demonstrated that three organizational signals influence trainees' intentions to apply what they have learned to their jobs. Eseryel found that:

1   when trainees receive relevant information before the training programme,

2   recognized that they would be held accountable for learning, and

3   perceived training as mandatory, trainees show greater intention to transfer learning back to their jobs (p. 57).

Ford, Quinones, Sego, and Sorra (1992) asserted that trainees who perform similar jobs may have opportunity to apply newly trained skills on the job. However, for some trainees, their work environment limits their ability to transfer what they learned. Ford, Quinones, Sego, and Sorra concluded that

trainees who perform similar jobs may experience significantly different opportunities to apply recently trained skills on the job. Thus, for some trainees, their work environment limits their ability to transfer what they learned. Moreover, these trainees will probably exhibit greater skill decay than those who get a greater chance to practice what they learned Pentland (as cited in Tracey, Tannenbaum & Kavanagh, 1995).

Secondly, a continuous-learning work environment is one in which knowledge and skill acquisitions are supported by social interaction and work relationships (Tracey, Tannenbaum & Kavanagh, 1995). By working together in a highly interactive work context, organizational members gain an understanding of each others' tasks and responsibilities and clearly recognize the interrelationships among jobs. Cooperation and cohesion among employees, managers, teams, functional units, and so on, are encouraged and supported such that they become institutionalized Rosow and Zager (as cited in, Tracey, Tannenbaum & Kavanagh, 1995).

The need to update and enhance knowledge, skills and attitudes is vital, particularly in this changing work environment. New employees need training in order to facilitate understanding of new tasks, technologies, organisation rules and regulations and procedures. On the other hand, the old employees need to update their knowledge and skills thereby giving them real "life-long learning" (Berman, Bowman, West, & Wart, 2001). Many organisations, therefore, spend much money on training, believing that training will improve their employees' performance and hence the organisation's productivity (Yamnill & McLean,

2001). Yamnill and McLean further mentioned that the employee's immediate supervisor has the greatest direct influence on the learner's behaviour in applying what was learned in training on the job. If the supervisor ignores, punishes, or discourages skill use, they are not going to use the skills they have learned. The unsupported employee continues to repeat old behaviours. That could lead both managers and employees come to view training as a waste of time (Brinkerhoff & Monteino, 1995).

Work environment factors affecting training transfer can be separated into two categories known as work system factors and people factors (Rainey, 1983). Work system factors include items related to culture such as open communication and resistance to change and match between training goals and organizational goals (Richey, 1990). Ford *et al.* (1992) and Montesino (2002) indicated that people-related factors include support from supervisors and co-workers and availability of a mentor. The further argued that although numerous work environment factors can influence training transfer, research increasingly emphasizes the important role that managers and peers play in the transfer process. Although many factors influence transfer, the period after training seems to be most critical in facilitating transfer. Wexley and Baldwin (1986) found that participative goal setting brought about larger levels of maintenance behaviour two months after training. Gist, Bavetta and Stevens (1991) contented that goal setting could be used as a post-training intervention to improve skills learned in interpersonal communications.

Broad and Newstrom (1992) identified the top three barriers to training transfer as lack of reinforcement on the job, interference from the immediate work environment; and a non-supportive culture for the change. Broad and Newstrom also determined that managers play the most significant role in resolving the problems of transfer of training. Kotter (1990) found that the most powerful force of inhibiting transfer was the lack of involvement by top management. Managers hold the primary responsibility for the number one barrier to transfer, which is lack of reinforcement on the job. Kotter contended that without management reinforcing and supporting what was learned during training, employees would easily fall back into their old routines. Furthermore, supervisors/managers may need training themselves to learn how to support the transfer of skills for their subordinates (Broad & Newstrom, 1996).

Gumuseli and Ergin (2002) opined that managers and supervisors play a critical role as transfer agents when they use their managerial skills to support and influence employees' learning transfer to generate the expected outcomes. Gumuseli and Ergin, in their study, found that managers exerted no influence on the transfer of learning but they have influence on the transfer of learning to the work environment. This finding suggests that post-training support by managers can have great influence in the transfer process. That is to say that a supportive work environment before, during and after training intervention can influence trainees' motivation to learn and transfer the acquired skills to the work environment (Richmond & Roach, 1992). It can therefore, be inferred from the argument of Richmond and Roach that what happens at the workplace can either

enhance or discourage desire to transfer training competencies to the polytechnics. Some of the trainees' characteristics that enhance transfer include cognitive ability, locus of control, achievement motivation, motivation to learn and to transfer and self-efficacy (Velada & Caetano, 2007). Velada & Caetano's argument suggests that what happen before, during and after implementation of a training programme are necessary conditions that facilities transfer of training.

It is for these reasons that the framework developed by Ford and Balwin (1988) becomes relevant in the context of this study. The framework shows the importance of training inputs on training outcomes and conditions of transfer as presented in Figure 1. Figure 1 show how pre-training conditions, training design and post training work environment affect transfer and maintenance of learned competencies.

The conceptual framework in Figure 1 highlights the importance of training inputs on training outcomes (learning and retention) and conditions of transfer (generalisation and maintenance). According to the framework of Baldwin and Ford (1988), there are several input factors such as the training design and implementation that affect transfer of learning to workplace and sustenance of the acquired skill and knowledge.
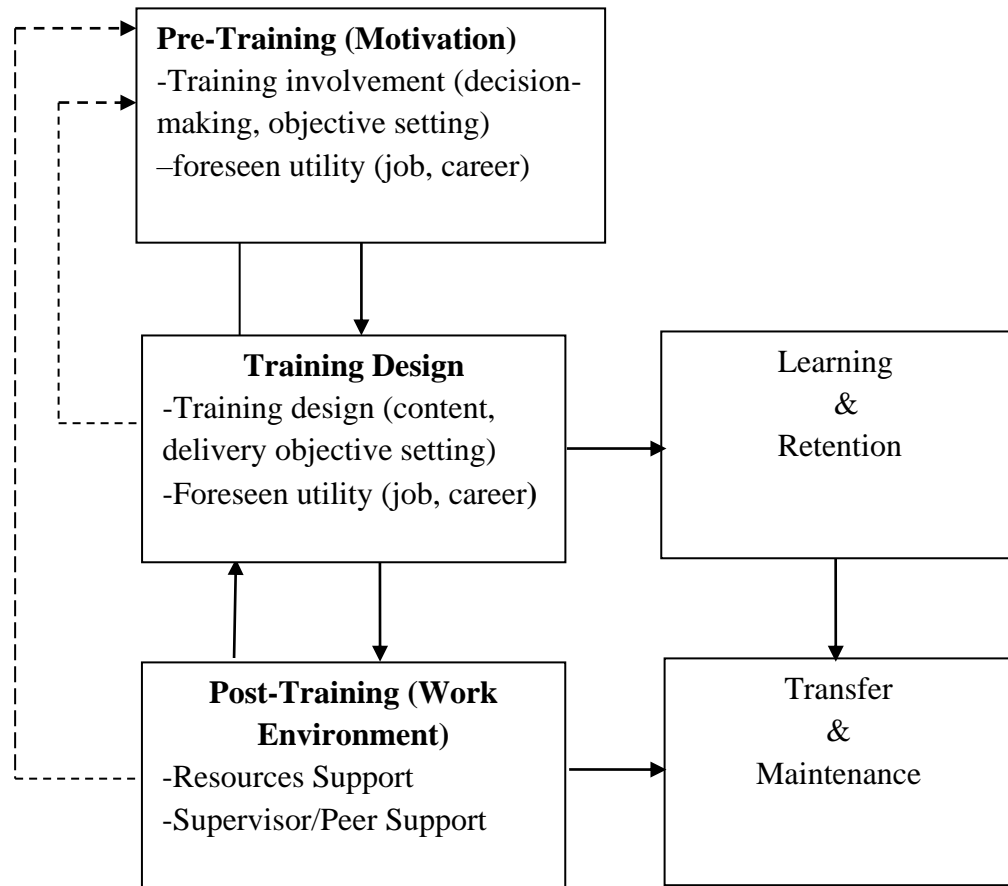
Figure 1: Conceptual Framework for Training Transfer

Source: Adopted from Baldwin and Ford (1988)

The model of Ford and Balwin illustrated the linkages between training inputs and training transfer. The framework was based on the concept that the impact of training is governed by various pre-conditions such as trainee characteristics, training design and implementation of the training itself. The model also indicates that characteristics of the work environment play a critical role in the transfer of the training competencies. The model reveals that training-input factors and training outcomes have both direct and indirect effects on the conditions of transfer. Training-inputs, however, have direct effects on the

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training output (ie. learning and retention). For transfer to occur, training materials must be learned and retained. The essence of the model is that the conditions for satisfactory transfer of learning include both the generalisation of learning to any work setting and the maintenance of learning over an extended period of time.

Pre-conditions under trainee characteristics comprise individual's motivation, personality and ability. The training design and administration process should ensure that the design of the training is in accordance with the individual and the organisational needs, adopt adult learning principles that are appropriately sequenced. The nature of the work environment determines the level of motivation of the trainee to pursue training and to transfer the learning to their work. Encouragement and support of supervisors for trainees to undertake relevant training and attitude towards the application of the learning by supervisors, colleagues and subordinates are essential factors for transfer of training. For every training model to be effective, leadership and management are critical skills that are indispensable. The next section examines these concepts in details

Concept of Leadership and Management

Leadership and management are synonymous concepts that are used on daily basis in almost all human interactions, business and services delivery activities. The success or failure of any organisation depends to large extent on the quality of its leadership and management competence. The terms 'manager' and 'leader' are often used interchangeably. Some authors however suggest that

the two concepts refer to different functions and have their own sets of characteristics (Kanter, 1994). Others argue that the two concepts are mutually exclusive and diametrically opposite (Bennis, 1999). Bennis pointed out that managers are appointed by organisations and are given formal authority to direct the activity of others to fulfil organisational goals, while leaders are appointed formally by an organisation or may emerge informally as 'the people's choice'. In view of this fact, leaders should be adequately prepared to achieve the objectives of their organisations.

Traditional leadership scholars developed theories that were concerned with the peripheries of leadership, such as traits, personality characteristics, and whether leaders are born or made (Eddy & VanDerLinden, 2006). Leaders are people who influence others because they willingly do what they request (Kotter, 2006). A leader can be a manager, but a manager is not necessarily a leader (Zaleznik, 2004). If a manager is able to influence people to achieve results then he/she is demonstrating leadership (Bennis & Nanus, 2005).

Early researchers seemed to be more interested in the components of leadership and what leaders needed to know to be influential rather than focusing on understanding the essential nature of what leadership is (Horner, 1997). To some scholars, leadership implies taking the organisation or some part of it in a new direction, solving problems and being creative and building organizational structures and improving quality (Bennis & Thomas, 2002; Yukl, 1999). Others also contend that leadership is the ability to influence people toward the achievement of common goals and the process whereby leaders and followers

relate to one another to achieve a purpose (Lambert, 1995). This suggests that management and leadership must be considered as distinctive strategies, mindsets and responses that organisational actors need to exercise anytime they are involved in business interactions. Neither of the two concepts is an explicit identity oriented approach to the management/leadership question. Both concepts move us nearer to seeing the relationship between management and leadership as a complex intersection of self, social and contextual constructions (Carroll & Lester, 2008). Despite their different functions and attributes, leadership and management are not antithetical, but complementary sets of skills that are required for organisational success. Leadership and management are qualities that exist in a mutually reinforcing relation with each other (Ahn, Adamson & Dornbusch, 2004).

Levine (2000) also viewed leadership as the need to focus on moving people and organisations forward by increasing the competency of staff and the co-operation of teams in order to improve the organisation. A leader's task is to continuously challenge bureaucratic practices that reduce enthusiasm and personal initiative among staff. A great leader, therefore, is the one who has vision and the capacity to inspire followers (Duodu, 2001). Duodu Further opined that leadership is the process of influencing group activity toward institutional goal attainment. This means that leadership is an input into organisational goal and interpersonal influence that aims at improving productivity and individual fulfilment.

Management on the other hand, allows for the achievement of organisational objectives. Management is usually concerned with getting

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objectives achieved through other people. Management is viewed more with reference to planning, organising, directing and controlling the activities of staff members (Agyenim-Boateng, Atta, & Baafi-Frimpong, 2009). Bateman and Snell (1999) support this view by arguing that managers deal with the day-day complexities of the organisation while true leaders initiate effective change. They continued that management requires structures in the organisation such as staffing with competent people and monitoring activities. Managers however, go beyond factions by inspiring other staff members to attainment of institutional vision.

In the view of Rue (2000), leadership and management are not necessarily the same but complementary to each other. Conceptually, separating leadership and management helps to show that the two terms are interrelated. While leadership may be viewed as dynamic effort that translates vision into action, creating change and developing new policies, management is concerned with supporting status quo to provide stability and balance in the workplace for relative comfort. It is also important to note that leadership and management are identical concepts which are complementary to each other. Polytechnic academic and administrators therefore, need to see themselves as leaders who are indispensable in the governance of tertiary educational institutions. It is for these reasons that educational leadership and management skills become relevant in the context of review.

Educational Leadership and Management

Educational and leadership management have borrowed from theorist of scientific management, human relations, transformational leadership, and

organisational learning during the 20th century (Heck & Hallinger, 2005). Educational management literature was considered as specialized areas of the management literature that contains the bulk of leadership studies (Pounder, 2001). Some have declared that educational leadership is a unique form of organisational leadership which is not found in commercial organisations (Bensimon, Neumann & Birnbaum, 1991). In the view of Ogawa and Bossert (1995) educational leadership has been recognized as an activity that can occur in various places within educational institutions without necessarily focusing on formal leadership roles.

Educational leadership represents a progression of thinking from disciplines such as sociology, psychology as well as business and industry (Bush, 2002). General leadership theories consist of a range of attributes or dimensions that have been developed from educational leaders which are based on functional roles, the individual, and culture dynamics (Gunter & Ribbins, 2002). Cheng (2002) also added another dimension to educational leadership which provides direction and expert advice on developments of learning, teaching and curriculum. Cheng emphasizes the relevance of management in education when diagnosing educational problems for professional development which leads to teaching improvement. Cheng described educational leaders as professionals who use both research and practical innovations with support from teachers and other support staff to further student learning. He continued that the relationship between educational leadership and teaching and learning forms a unique framework in which leadership must function for education to succeed.

In addition to being diligent and mindful, educational leaders must also be persistent in the development of adaptive confidence in learners and other members of the professional learning community by moving individual efficacy towards collective efficacy (Walker, 2006). New conceptions of educational leadership look at leadership as a process in which leaders are not seen as individuals in charge of followers, but more as members of a community of practice (Horner, 1997).

Similarly, leadership has been conceptualized as a web in which there is structure but also an ever-evolving shape (Clegg & McAuley, 2005). The leader at the centre of the web works on building consensus and valuing the parts of the web by building on relationships (Eddy & VanDerLinden, 2006). Eddy and VanDerLinden also identified five essential components that characterize leadership in the knowledge society. These components are moral purpose, an understanding of the change process, ability to improve relationships, knowledge creation and sharing and coherent decision-making. This implies that the educational leaders are agents of cultural change and critical thinkers.

In spite of the strong need for management and leadership capacity building in the polytechnics, not enough attention is paid to the development of a capable management workforce through training and on-the-job learning. Organization of workshops appears to be the main avenue which academic managers in the polytechnics receive training. Such workshops, however, are infrequent. For example, curriculum development and human resource management workshops are seldom held as a means of improving the leadership

and management competencies of polytechnic staff (Nijhuis, Bakah, & Akomaning, 2009). Understanding the roles of middle-level leadership and management is significant to the attainment of the objectives of polytechnic education in Ghana.

Roles of Middle-Level Leadership and Management

Middle-level leadership and management personnel play critical roles in the implementation of organizational policies. In Ghanaian Polytechnics for example, middle-level management personnel are responsible for the day-to-day implementation of academic and administrative decisions in the Polytechnics. They include academic and administrative heads of departments. In the view of Lapp and Carr (2006), the traditional view of middle-level management job as simply listening to and interpreting the strategic plans of senior management is obsolete in contemporary business. Hancock and Hellawell (2003) also asserted that the concerns of the middle-level managers included the management of tension between long-term and short-term organizational objectives. Middle-level managers must be seen as pivots which hold both the top and bottom members of the organisation together for attainment of objectives (Russell, 2001). Middle-level leaders and managers are therefore expected to adjust to their complex roles as subordinates, equals and as superiors (Huy, 2001). Huy further explained that middle-level managers should have the ability to shift quickly and frequently from one role to another in the organisation.

King, Fowler, and Zeithaml (2001) describe these pivotal roles of middle-level managers and leaders as acting as the "synapses within a firm's brain" (p. 95). This implies that the middle-level manager must work with senior management staff to create a sense of shared organisational identity by fostering the linkages that are required for intensive knowledge transfer which eventually lead to organizational success.

To overcome the complex roles of middle-level managers of polytechnic education, various programmes and projects have been initiated to enhance competence of polytechnic managers. Worth mentioning are the following;

1. Introduction of Competency Based Education (CBE)

2. Competency Based Training (CBT)

3. Integration of Information Communication Technology (ICT) in the curriculum

4. Provision for staff training and development, and

5. Design of Bachelor of Technology curricula (Nijhuis, Bakah, Akomaning, 2009, p. 86).

These initiatives were attempts toward improving the quality and managerial competence in polytechnic education in Ghana. This was due to the fact that some middle-level polytechnic managers were not adequately prepared for their leadership and managerial roles before the migration to tertiary status. As a result, middle-level managers were constrained in their authority because of the centralized organizational structure of Ghanaian polytechnics (Nijhuis, Bakah, Akomaning, 2009). Nijhuis *et al.* further contended that, although middle-level

polytechnic managers are responsible for implementing decisions taken by top-management, they lacked the requisite skills to do so. Capacity building then becomes necessary in achieving the needed competencies for middle-level polytechnic managers.

Concept of Capacity Building

The term capacity has many different meanings and interpretations depending on who is using the term and in what context. Enemark and Williamson (2004) define capacity building as the process by which individuals, groups, organizations, and societies develop the abilities of people so as to enable them perform assigned functions. They continued that when people's capacities are build, they would be able to solve problems that confront them as well as set and achieve objectives in their organisations. This definition has three key implications for human resource development in Ghanaian polytechnics. First, it implies that capacity building is a continuing process; secondly, it emphasizes the fact that capacity building involves empowerment of individuals and organizations; and, thirdly, it requires that the overall social context be considered in designing capacity development strategies for institutions.

The concept of capacity building is closely related to education, training and human resource development. According to Groot and van der Molen (2000) capacity building is the development of knowledge, skills and attitudes of individuals and groups of people. Capacity building is also relevant in the design, management and maintenance of institutional operational structures that are

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meaningful to the organisation. Capacity building involves individual and organizational learning which builds social capital and trust by developing knowledge, skills and attitudes that goes a long way to create organizational culture for achieving results (Enemark & Williamson, 2004). They further opined that solving problems and creating adaptive procedures for surviving in the long term are all features of capacity building. It can therefore, be argued that the concept of capacity building should be viewed in a wider context to include the ways and means by which the overall goals of the institutions are achieved. The field of education and staff development and training are aspects of capacity building. Capacity building is a comprehensive process, which includes the ability to identify constraints and to plan and manage development processes of the institutions. It involves both the development of human resources and institutions in a supportive policy environment. These require good leadership who are themselves well grounded in their areas of expertise in the institution to set standards for their staff. This means that both managers and staff must have clear expectations of the work that needed to be accomplished. Staff must be encouraged to perform well and be held responsible and accountable for results. In such an environment reward is based on merit while bad performance is sanctioned (United Nations Development Programme [UNDP] as cited in, Enemark & Williamson, 2004).

Enemark and Williamson (2004) contended that at the group and individual level of capacity building addresses the need for individuals to function efficiently and effectively within the entity. Human Resource Development (HRD)

which is an aspect of capacity building deals with assessing the capacity needs and addressing the capacity gaps through adequate measures of education and training. Capacity building at this third level is considered the most critical. The dimension of capacity at the individual level will include the designing of education and training programs to meet the identified gaps within the skills base and of staff members in the organization. However, it is important to understand that capacity building is not a linear process. Capacity building should be seen as a comprehensive methodology aimed at providing a sustainable outcome through assessing and addressing a whole range of relevant issues within the organizational set up.

Mitchell and Sackney (2001) developed a model that focuses on building leadership capacity within the education sector. The model consists of three pivotal capacities that need to be built to ensure professional learning of school leaders. They included personal capacity, interpersonal capacity, and organizational capacity.

Building personal capacity requires an individual to address the factors that impact on their professional practice. This is a necessary process because new knowledge is built on a foundation of existing knowledge and belief systems. Deconstructing one's own professional knowledge and practice allows for the possibility of constructing new knowledge. Thus deconstruction is a necessary reflective process that leads naturally to the active phase of reconstruction (Mitchell & Sackney, 2001; Bandura, 2001). The processes of coaching and other personalized learning formats engage individuals in reflective process for

developing and utilizing cognitive processes, internal resources, and states of mind (consciousness, craftsmanship, efficacy, flexibility, interdependence) as a means of building capacity to achieve goals and enhance self-directed learning (Costa & Garmston, 2002).

Interpersonal capacity is connected to a leader's need to build interpersonal relationships within the work setting (Leithwood, Jantzi & Steinbach, 1999). Interpersonal capacity requires that leaders attend to others within the school, purposefully build relationships (Leithwood, Jantzi & Steinbach, 1999). Organizational capacity addresses the need for educational organizations to be structured in such a way as to allow for the building of personal and interpersonal capacities. Structural arrangements need to bring individual educators into close professional contact with one another in order for professional learning to take place. Organizational capacity deals with building organizational structures and systems that support and value personal learning as well as facilitating and encouraging collective learning (Mitchell & Sackney, 2001).

Organizational capacity is an enabling and flexible structure within which professional learning can readily occur. Although most of the polytechnics have made efforts to step up staff development and to strengthen the link with industry since they were upgraded to tertiary status, much still needs to be done (Nsiah-Gyabaah, 2005). Apart from upgrading staff academically, management and teaching staff need to be prepared professionally to exercise control over the execution of their duties and leadership roles. This is one major aspect of staff

development that has received little attention in the Ghanaian Polytechnics. Academic managers have to conceptually understand the aspects and dimensions of educational leadership and have to develop the required management and leadership skills. Capacity building activities such as seminars, workshops, and short courses must be organized at the polytechnics to provide good opportunities to train and educate polytechnic academic managers. Interaction between middle managers needs to be stimulated as well to enhance knowledge sharing among staff. The next section examines the concept of change management and its relevance to the educational process. The reason is that the NPT045 project was aimed at training polytechnic staff to cope with the challenges of managing change in Ghanaian polytechnics.

Change Management

We live in an era where so many things are changing every day than anybody can expect. In the educational sphere, change is inevitable because of the high social expectations of the education sector. The basic reality of the 21st century is that organization leadership and managers are faced with unrelenting demands for change (Jorgensen, Owen, & Neus, 2008). They further argued that companies in most industries are continuously challenged to respond to and anticipate change in the form of competition, technology, economic, and social conditions. Change has therefore become a normal trend in everyday life (Jorgensen, Owen, & Neus, 2008).

Change management has been defined as "the process of continually renewing an organization's direction, structure, and capabilities to serve the ever-

changing needs of external and internal customers" (Moran & Brightman, 2001, p. 111). In view of Burnes (2004) change is an ever-present feature of organisational life, both at the operational and strategic level. Therefore, there should be no doubt regarding the importance of organisations and its ability to identify where it needs to be in the future, and how to manage the changes required to getting there.

Lewin (1951) was one of the early researchers in the area of change management, particularly with his examination of the social responses to change and the psychological processes experienced by those involved with change. Lewin described organisational change as been the dynamics between the driving forces of change which are often led by managers and the competing forces of resistance from employees. He provided a foundation for assessing the behaviour of individuals experiencing organisational change and provided a pre-cursor to notions of employee participation, involvement and empowerment in the organisation (as mechanisms to address resistance to change). Lewin (1951) was primarily interested in how organisations responded to change and not necessarily what constituted change in itself.

Lewin (1951) contended that there has been a surge of interest in change management. Three key definitions are presented here to illustrate the common focus of the change process. Schalk, Campbell and Freese (1998) like Lewin also defined change in "the sense of how it puts the organisation in the centre of the phenomenon" (p. 157). Shalk et al. described change as the deliberate introduction of novel ways of thinking, acting and operating within an organisation as a way of surviving or accomplishing certain organisational goals.

This definition views change as a planned process that occurs within an organisation which acts as a catalyst for new behaviours. The definition therefore does not take account of the triggers which lead to change or the management of employees through that process. Similarly, Lines (2005) described the process as ''a deliberately planned change in an organisation's formal structure, systems, processes or product-market domain intended to improve the attainment of one or more organisational objectives'' (p. 10). The key features of the definition focus on planning and the success of the outcomes to the organisation.

Hendry (1996) provided a further approach to the definition of change, which identified three focal issues that are critical in the process of workplace change. Hendry suggest that workplace change arises out of changes in the development and operation towards the strategic direction of the organisation. He continued that workplace change arises due to product or process innovations either internal or external to the workplace. The third relates to continuous improvement which views workplace change as an evolutionary process arising from changes within the workplace (p. 637). These definitions focus on organisational planning and delivery of benefits. They point to the overall managerial focus on improving the organisational bottom line. However there is interplay between individual and organisational change which contributes to the overall success of the change program.

Consequently, organisational change cannot be separated from organisational strategy (Burnes, 2004). Due to the importance of organisational change, its management is becoming a highly required managerial skill (Senior,

2002). Senior further suggested that against the backdrop of increasing globalisation, deregulation, and the rapid pace of technological innovation, a growing knowledge workforce in the presence of shifting social and demographic trends, few people would dispute that the primary task for management today is the leadership of organisational change. The early approaches and theories to organizational change management suggested that organizations could not be effective or improve performance if they were constantly changing (Rieley & Clarkson, 2001). It was argued that people need routines to be effective and able to improve performance (Luecke, 2003). However, it is now argued that it is of vital importance to organizations that people are able to undergo continuous change (Burnes, 2004; Rieley & Clarkson, 2001).

Luecke (2003) suggested that continuous change can become a routine in its own right. Luecke further reported perceived change as a normal and natural response to internal and environmental conditions. Luecke places much emphasis on the specific forces that can set a change process in motion. He distinguishes between external forces (forces in the macro-environment of the organisation) and internal forces (forces from within the organisation. External Forces include includes the following;

1. Political issues which can be of international, national or regional nature such as a decline in world markets, new labour legislation, a new national curriculum and affirmative action.

2. Competition such as new schools in the region, merging of schools.

3. New technologies which could include information technologies, new organisational and communication (p. 192).

Economic factors where a wide range of factors could influence the operations of a school. For example, inflation could have such a detrimental effect on regional and local community that a school may lose its additional funding from the community and parents might not be able to keep up with payment of school fees anymore. According to Luecke (2003), there are several internal forces that may have an effect on the change process in an organisation:

1. The changing nature of the work force is important. For example, changing values and lifestyles of employees, dissatisfaction with working conditions, more cultural diversity and new entrants with inadequate skills.

2. New visions and goals which may be the result of the appointment of a new headmaster.

3. Internal pressures to stay relevant include the urge to be effective, to survive and not have lower enrolment figures and increase the quality of results (p. 192).

The effect of all these forces of change should be interpreted by the responsible agent of change and change leaders should be sensitive to read all the changes and design a change programme that will take note and incorporate the forces. Since the need for change often is unpredictable, it tends to be reactive, discontinuous, ad hoc and often triggered by a situation of organisational crisis (Burnes, 2004; Luecke, 2003). Although the successful management of change is accepted as a necessity in order to survive and succeed in today's highly

competitive and continuously evolving environment (Luecke, 2003). Balogun and Hailey (2004) reported a failure rate of around 70 per cent of all change programmes initiated. It was suggested that this poor success rate indicates a fundamental lack of a valid framework of how to implement and manage organisational change. What is currently available to academics and practitioners is a wide range of contradictory and confusing theories and approaches (Burnes, 2004). Burnes continued that mostly personal and superficial analyses have been published in the area of change management. According to Doyle (2002) there is evidence to suggest that with only a few exceptions existing practice and theory are mostly supported by unchallenged assumptions about the nature of contemporary organisational change management. Edmontsone (2008) supported this observation by stating that any of the change processes over the last 25 years have been subject to fundamental flaws, preventing the successful management of change.

Creating a Culture of Change in Polytechnics

Polytechnics in Ghana have and are still going through changes so as to achieve their mandate. There is, therefore, the need to continuously activate a culture of change among staff at all levels especially those who are responsible for institutional policy implementation. Breaking of organizational traditions, familiar rules and operating procedures are of course, not easy. Indeed, the power of custom and status quo are forms of resistance to organisational change (Thompson, 1994). At the same time, a change-facilitative culture recognizes that more traditional approaches to change may remain appropriate in certain

circumstances. It is imperative, therefore, that all organizational members become better informed about the advantages and limitations of different approaches to change. It is also prudent for all members of the organization to comprehend the broader context for the change itself as they develop a shared framework for thinking and talking the need for change. In essence, the organization must strive to create a shared purpose supported by a common language about change. As part of this process, managers at all levels should be encouraged to embrace a stakeholder orientation that emphasizes learning and information sharing. Organisational managers must encourage questions, experiments, value alternative viewpoints and tolerate mistakes in the interest of learning (Edmondsone, 2008).

A related macro-level factor that affects organizational change capacity involves the organization's approach to strategy. In contrast to the traditional approaches, Lawler and Worley (2006) emphasised the importance of making use of strategic planning at the organisational level. Although a high-change capacity organization certainly requires a shared purpose to provide overall direction, strategies for achieving that shared purpose can change quickly based on scenarios involving future markets, competitors, and opportunities. Combined with the type of change-facilitative organizational culture discussed previously, this dynamic approach to strategizing encourages the organizations to keep pace with external changes that are critical to business success. Organizations must create a shared understanding through which their members are;

1. encouraged to think dynamically and systemically so that strategies can change quickly,

2. are supported in their efforts to think about future markets, competitors, and opportunities, and

3. are prompted to factor future scenarios into today's decisions. In general, an underlying goal is to create and communicate a change-friendly identity, internally and externally.

Unfortunately, organizations are all too frequently constrained by infrastructures, cultures, and strategies that are based on a need for control and predictability rather than on the needs of a rapidly changing environment. Companies and managements, however, can no longer afford to rely on ad hoc approaches that are always controlled from above. In essence, creating "self sabotaging traps" that undermine their ability to effectively bring about needed changes in their organizations (Edmondsone, 2008; Jorgensen, Owen & Neus, 2008). The key is to encourage and support managers to broaden their change implementation repertoire by developing a common understanding of the dynamics of organizational change. These can be achieved by building a change-supportive infrastructure, and creating and nurturing a change-facilitative culture. Abrahamson (2000) referred to this approach as change without fatal pain, paving the way for change that succeeds.

London (2001) explored the impact of change in an Australian health setting and identified the importance of the change process in considering the place of the individual in the organisation. He observed that "the adoption of new

work practices or behaviours is more likely to be accepted if the benefits of change can be demonstrated to the people affected by the change" (p. 133). In making this observation, London brought together the elements of organisation and individual with a view to winning over change recipients as part of the process of change. Clearly, there is a small body of work which suggests that employee acceptance of change is likely to have a major impact on the organisational success of change.

Summary of Literature Review

Review of existing literature indicates that though, polytechnic middle-managers are responsible for implementation of decisions from top-level polytechnic management, they lacked the requisite leadership and managerial capacity to do so. It emerged that Polytechnic managers need more leadership and management skill, to enable them use existing opportunities for educational and curriculum improvement in the Polytechnics. This was due to the fact that most middle-level Polytechnic staffs were not adequately prepared for these leadership and management competencies required as heads of academic and administrative departments. Polytechnic middle-level managers are also constrained in their authority because of the centralized organizational structure of governance in the polytechnics.

Notwithstanding the strong need for management and leadership capacity building in the polytechnics, less attention was paid to the development of a capable management workforce through training and on-the-job learning.

Training workshops appears to be the main avenues through which academic managers in the Polytechnics received some staff capacity building intervention. There is therefore the need to develop a comprehensive capacity building that aims at providing a sustainable outcome through assessing and addressing a whole range of relevant institutional needs of the Polytechnics. Although most of the polytechnics have made efforts to set up staff development and to strengthen the link with industry since they were upgraded to tertiary status, much still needs to be done (Nsiah-Gyabaah, 2005). Apart from upgrading staff academically, management and teaching staff need to be prepared professionally to exercise control over the execution of their duties and leadership roles.

It has further emerged from the literature review that corporate organisations spend huge sums of money on staff training in order to facilitate employee job related competencies. However, these staff development training activities do not translate in increased productivity in most cases due to non-untilization of competencies. The review also demonstrate that training transfer occurs when knowledge, skills and values learned are actually used to use on the job for which they were intended. Despite the importance of training evaluation, it is the most neglected aspect of all training activities. Anoloui (1998) reported that organisation do not evaluate the impact of training on job performance. It means that very little is done to ensure that knowledge and skills from training are transferred to the work environment despite the financial resources that are committed to such training project.

The capacity of polytechnics to learn, adapt and change is critical to their substance and competitiveness. The leadership and management capacity building project, like all other staff development project was implemented to enhance the leadership and management competencies of polytechnic staff. The polytechnic staff who participated in the leadership and management capacity building project were expected to transfer the competencies they acquired from the training to their job. Evaluation of training can be done prior to training, during training, immediately after training, or at a specified time after the end of training. The gap identified in the review was the fact that there had not been any post-training evaluation of the NPT project to find out how participants are making use of the competences they acquired from the training. Therefore, this study sought to among other things, investigate participants' perception of the extent of the knowledge that staff who participated in the training programme have transferred to the workplace.

CHAPTER THREE

METHODOLOGY

The purpose of the study was to investigate perceptions of polytechnic academics and administrators about the usefulness of the implementation of the management and leadership capacity project in polytechnics in Ghana. The study covers four polytechnics in the northern sector of Ghana. This chapter describes the methods that were used for the study. It describes the research design, population, sampling techniques as well as the data collection instruments and the data analysis procedure.

Research Design

A descriptive survey design was adopted as the most appropriate design for this study. Fraenkel and Wallen (2000) contended that the descriptive survey describes existing conditions without analyzing relationships among variables. Creswell (2008) also postulated that a descriptive design is used to determine individuals' opinion about a policy issue or programme. Since the study was aimed at finding answers to some questions on the present practices of leadership and management among middle-level management personnel of polytechnics in Ghana, the descriptive design was considered appropriate.

There are however, some challenges in the use of the descriptive survey. These include the challenge of ensuring that the questions would generate the

right responses to accurately answer the questions. Another challenge of the descriptive design is getting respondents to answer questions thoughtfully not with and honestly and getting sufficient number of questionnaires completed and returned so as to generate meaningful analysis (Kumekpor, 2002).

These weaknesses notwithstanding, the descriptive survey, was chosen because it has the potential to provide useful information from a cross-section of the respondents (Fraenkel & Wallen, 2000). Fraenkel and Wallen further contended that the descriptive survey is appropriate for examining a problem and evaluating trends in both small and large scale for meaningful generalization.

Population

The target population for the study consisted of 52 middle-level polytechnic academic staff and administrators from four polytechnics in the northern sector who participated in Sub-Project 2 and Sub-Project 4 of the NPT (045) leadership and management capacity building project. They included Deans, heads of academic departments and heads of administrative units from Sunyani Polytechnic, Wa Polytechnic, Tamale Polytechnic and Bolgatanga Polytechnic.

Sample and Sampling Procedure

The sample for the study was a census of all 41 respondents of the target population who were at post at the time of the study. The sample included the four institutional change coordinators of the four polytechnics. The institutional change coordinators were in the study because of the roles they played in the

implementation of the NPT (045) project. In all, 25 academic staff and 16 administrators participated in the study. Table 2 shows the distribution of the sample by institutions.

Table 2: Distribution of the Sample by Polytechnics

Polytechnic	Administrative Staff	Academic Staff	Total
Sunyani	5	8	13
Wa	3	5	8
Tamale	5	6	11
Bolgatanga	3	6	9
Total	**16**	**25**	**41**

Table 2 shows that the highest number of respondents was drawn from the Sunyani Polytechnic. This means that all 13 staff from Sunyani Polytechnic who benefited from the training and were at post at the time of the study. In Tamale Polytechnic, 11 of them were present at the time of the study. The situation was different at Wa Polytechnic and Bolgatanga Polytechnic. In Wa Polytechnic for example, only eight of the participants were at post while nine were present in the Bolgatanga Polytechnic. The reasons assigned these were that some of the participants had travelled for further studies and others had also left the services of the polytechnics.

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Instruments

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The main instruments for data collection were the questionnaires and interview guide. The questionnaires were designed to collect information from

participants while the interview guide was used to collect information from the institutional change coordinators. The main questionnaire contained both close-ended items and open-ended items to solicit for information from respondents. It was divided into six sections with each section dealing with each research question. In addition to the main questionnaire, a checklist was also added to solicit participants' expectations about the implementation of the training and their perceived achievements after the implementation of the training (Appendix A).

Section A of the questionnaire (Appendix B) solicited background information on respondents. It covered issues such as name of institution, position in the polytechnic and gender of respondents. Section B solicited information on participants' perception about the effects of the leadership and management capacity building training on the performance of their job. This section contained eight items on a Likert-type scale. Respondents were requested to indicate in terms of how they "Strongly Agree, Agree, Disagree and Strongly Disagree" to each of the statements on the Likert-type scale.

Section C explored information on respondents' perception about the effects of the training on their specific job skills. Nine items on a Likert-type scale ranging from "Strongly Agree, Agree, Disagree and Strongly Disagree" were used in this section to gather the information. Section D dealt with participants' perceived challenges of transferring the acquired competences to their job. This section contained nine items on a Likert-type scale. In this section, respondents

were requested to indicate by ticking how they "Strongly Agree, Agree, Disagree and Strongly Disagree" to the items in this section.

Section E sought information about relevance of the project to participants' training needs. There were eight Likert-type items in this section. Finally, Section F solicited information from respondents about their satisfaction about the mode of delivery of the NPT (045) training. There were eight items in this section. In each case, respondents were requested to show by ticking the extent to which they "Strongly Agree, Agree, Disagree or Strongly Disagree with each of the items on the questionnaire. In each case, provision was made for respondents to make further comments where necessary.

In addition to the questionnaire, a semi-structured interview guide was also used to solicit information from institutional change coordinators. The interview guide contained background information as name of polytechnic, position in the polytechnic and gender of respondents. The interview guide contained 11 questions that were related to research questions that guided that study and activities of the in the NPT (045) project. The essence of using the interview was to obtain detailed information from the institutional change coordinator who served as facilitators of the NPT (045) project in their polytechnics.

Pre-Testing of Instruments

Kumasi Polytechnic was randomly selected through the lottery method for pre-testing of the instruments. The instrument was pilot-tested to ascertain the reliability and validity before the main data collection. In determining the validity

and reliability of the research instruments, two senior lecturers at the Institute for Educational Planning and Administration (IEPA), University of Cape Coast who were also my supervisors were consulted. They assessed the items and made comments that helped to improve the items in the instruments. The instruments were piloted in November, 2011. The results of the pre-test generated a standardized Cronbach's alpha coefficient of .70 for all items in the questionnaire. George and Mallery as cited in Agbevanu (2010) provided the following rule of thumb for alpha coefficient: " >.9 – Excellent, >.8- Good, >.7 – Acceptable, > .6- Questionable, >.5- Poor, and <.5 – Poor (74). The closer alpha reliability normally ranges between 0 -1. However, there is no lower limit to the coefficient. This therefore, means that the closer the alpha is to 1.0 the greater the internal consistency of the items on the scale (Gliem & Gliem as cited in Agbevanu, 2010). Based on the recommendation of George and Mallery as cited in Agbevanu (2010), the standardised alpha of .70 of the questionnaire is considered acceptable.

Data Collection Procedure

I obtained a letter of introduction from the IEPA and the project supervisor and delivered to the institutional change coordinators in the four polytechnics indicating the purpose of the study. I also obtained a list of contact addresses and telephone numbers of all participants of the project from the project secretary at IEPA to enable me contact the participants. In each of the polytechnics, I contacted the Institutional Change Coordinator and discussed my research project and sought for assistance to enable me contact the respondents. The change

coordinators were also very helpful by taking me round to meet some of the participants when necessary. I gave out the questionnaires and went back to collect them within a day and maximum of two days in few cases. In all, I spent three days in each polytechnic to administer and retrieve the questionnaires. After giving out the questionnaires, I arranged for a convenient interview time with the Change Coordinator within the three days I spent at the polytechnic. The interviews were recorded on tapes with the permission of the respondents. After each interview session, I played back the tape for the respondents to hear in order to ensure that what was on tape was exactly what they said. This process was repeated in each of the four polytechnics until the data collection was completed.

Data Analysis

For effective statistical presentation and interpretation of the data, the responses retrieved from respondents were coded for identification purposes before analysis. The interviews were transcribed and grouped into themes. The Statistical Package for Service Solution (SPSS) Version 16 software was used to analyse the responses of the questionnaires. Statistical indicated represented in percentages and standard deviations were used to analyse Research Questions 1, 2 and 3.

In the case of Research Question 4, the Mann-Whitney U was calculated for items in sections B, C, D, E and F to find out whether there are perceived differences between academic staff and administrators about the usefulness of the NPT (045) training. The Mann-Whitney U was considered appropriate for

answering Research Question 4 because of the Mann-Whitney's ability to answer questions concerning differences between groups with small sample size (Nachar, 2008). The Mann-Whitney U can also be used when the measured variables are expressed in an ordinal scale. It is also the commonly used non-parametric test in the social sciences (Kasuya, 2001). In short, the Mann-Whitney U statistical test is an excellent alternative to parametric tests such as the t-test.

The interviews were transcribed and organized into themes to further explain the discussion of the quantitative data. At the end of each interview, the recorded tapes were played for respondents to listen to ensure that the records contain exactly what they said. During the transcription of the interviews, the tapes were played at very slow pace to ensure that the transcripts were consistent with what was captured on the tapes. The outputs of the interview transcripts were used to either support or buttress the discussion of the quantitative data. The discussion of the results of the analysis were organised in line with the research questions that guided the study.

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents and discusses the results of the study. It focuses on the relevance of the training to participants' training needs, participants' perception of the effects of the training on their present job performance and participants' satisfaction with the mode of delivery of the training. The chapter also discusses effects of the training on participants' specific job skills, challenges that respondents are facing in transferring the acquired competencies to their job and participants' perception about the usefulness of the training.

Composition of Respondents

Table 3: Distribution of Respondents by Polytechnics

Name of Polytechnics	Frequency	Percentage (%)
Bolgatanga Polytechnic	9	22.0
Sunyani Polytechnic	13	31.7
Tamale Polytechnic	11	26.8
Wa Polytechnic	8	19.5
Total	**41**	**100.00**

Table 3 shows the number of respondents from each polytechnic who participated in the study. Table 3 indicates that 13(31.7%) of the polytechnic middle-level academic and administrative staff who participated in Sub-project 2 and Sub-project 3 of the NPT (045) training from came from Sunyani Polytechnic whilst 11(26.8%) were staff of Tamale Sunyani Polytechnic. The results also

showed that 9(22.0%) of respondents were staff of Bolgatabga Polytechnic. The Wa Polytechnic recorded the lowest number of respondents with 8(19.5%) of the sample. The actual number of the respondents who participated in the study constituted 41(78.9%) of the target population of 52.

Position of Respondents in the Polytechnics

The study also sought data on the respondents' position in the polytechnics for purposes of discussing the results. The idea was that participants' position might influence their perceptions about the usefulness of the NPT(045) training. The results are presented in Table 4.

Table 4: Position of Respondents in the Polytechnics

Name of Polytechnics	Frequency	Percentage (%)
Academic	25	61.0
Administrators	16	39.0
Total	**41**	**100.0**

Source: Field Data, 2012

Table 4 also reveals that more than half of the respondents 25(61.0%) were academic staff whilst 16(39.0%) were administrative staff of the four polytechnics who participated in the study. The reason for the high number of academic staff was due to the fact that the three participants from each polytechnic who benefited from the Information Communication Technology training (ICT) were considered as academic staff. This implies that majority of the respondents were academic staff. The study further obtained information on the gender distribution of respondents. The results are shown in Table 5.

Table 5: Distribution of Respondents by Sex, Job Titles and On-the-Job Experience

Name of Polytechnic	Status		Sex		Job Experience		
	Academic	Administration	Male	Female	1-5	6-10	10+
Bolgatanga Polytechnic	5(55.0)	4(45.0)	8(88.8)	1(11.2)	7(77.7)	2(22.3)	0(0.0)
Sunyani Polytechnic	8(61.5)	5(38.5)	12(92.3)	1(8.7)	0(0.0)	1(7.7)	12(92.3)
Tamale Polytechnic	6(54.5)	5(45.6)	10(90.9)	1(9.1)	2(18.2)	0(0.0)	9(81.8)
Wa Polytechnic	5(62.5)	3(37.5)	8(100)	0(0.0)	2(25.0)	5(62.5)	1(2.5)

Table 5 sought to find out the distribution level of respondents by sex, job titles and on-the-job experience. Table 5 shows that the out of the nine respondents who participated in the study from Bogatanga Polytechnic, 5(55.0%) were academic staff while 4(45.0%) were administrators. The result also shows that majority 88(8.8%) were male. Table 5 further shows majority of the participants from Bolgatanga had worked in the polytechnic between 1-5 years. Also, 8(61.5%) academic staff and 5(38.8%) administrators participated in the study from Sunyani Polytechnic. Majority, 12(92.3%) of the participants were males. Furthermore, majority of the participants from Sunyani Polytechnic had 10 years or more job experience with the polytechnic. In the case of Tamale Polytechnic, 6(54.5%) academic staff and 5(45.6%) administrators participated in the study out of which majority 10(90.9%) of them were male. Only 5(62.5%) academic staff and 3(37.5%) administrators all 8(100.0 %) came from Wa Polytechnic. Out of this number, 5(62.5%) had between 6- 10 years job experience. Overall, most 22(53.7%) of the participants had 10 years or more on-the-job experience while 11(26.8%) also had between 6-10 on-the-job experience. Table 5 further indicates that 8(19.5%) of the participants had between 1-5 work experience in the polytechnics and majority 38(92.7%) of the participants were males.

Research Question 1(A): What were participants' expectations about the implementation of the leadership and management building project?

This research question sought responses about participants' expectation about the implementation of the NPT(045) leadership and management capacity building project. Means and standard deviations were calculated to describe participants' expectations about implementation of the project. The results were presented on a scale of Low = 1, high = 2 on an expectation checklist. Means that are less than 1.5 implies low expectations whilst means greater than was 1.5 indicates high expectation about the implementation of the project. The results are shown in Tables 6.

Table 6 shows that most respondents had low level expectations that the implementation of the training was going to improve their career prospects (Mean= 1.49, .51). The results also shows that participants had low expectation that the training will enable them transfer the learned competencies to my job (mean=1.39, SD= .49). In the same way, the results shows that participants had low expectation that the training will give them any skills that they could share with their colleagues at work (mean=1.49, SD= .51).

Table 6: Participants' Expectations about the Implementation of the NPT (045) Project

Statements	Mean	SD
I expect the training to:		
Improved my career prospects	1.47	.51
Enable me transfer the learned competencies to my job	1.397	.49
Enable me learn something new to improve my work	1.50	.51
Improved my leadership skills	1.60	.49
Give me skills that I can share with my colleagues	1.47	.51
Improved my communication skills	1.47	.51
Improved my decision-making skills	1.40	.50
Improved my team building and team work skills	1.40	.50
Improved my research skills	1.30	.47
Enhanced curriculum development skills	1.41	.48
Overall expectation before training	1.44	.50

N= 41

The results also revealed that participants expected the training to improve their communication skills (mean=1.49, SD= .51). Similarly, participants' overall expectation about the implementation of the training was (Mean=1.45, SD=.33) which indicates that majority of respondents had low level of expectation about of the training. These findings were consistent with the expectancy theory, which indicates that individuals are motivated when they believe that the efforts invested in training programme will result in mastery of the training content and result in

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good performance on the job (Vroom as cited in Westly, 2005). The result is also consistent with Holton's (1996) view that training programmes that have expected utility or exhibits payoff to both the organisation and to trainees would result in greater motivation to transfer of learning to the job.

Research Question 1(B): To what extent were participants' expectations about the implementation of the leadership and management building project achieved?

This aspect of research question 1 sought to explore the extent to which participants' expectation about the NPT(045) leadership and management capacity building project were achieved. Means and standard were calculated on items on the expectation checklist to describe participants' level of achievements of participants' expectations. The results are presented on a scale of Low = 1, high = 2 on an expectation checklist. Means that are less than 1.5 implies low achievement whilst means greater than was 1.5 indicates high perceived achievement. Table 7 present the results that emerged from the study.

Table 7 shows that responses to the statement "training to improve my career prospects" scored the highest (mean=2.37, SD=3.0) SD=3.18). The results also shows that respondents also believed that the training has improved their research skills (mean=2.29, SD=3.18). The results further indicates that the training had enabled participants' to transfer the learned competencies to their job

(mean=1.98, SD=.06). Additionally, the results reveals that participants believed that the training had enabled them learn something new to improve their work (mean=1.90, SD=.30). Respondents also admitted that the training has improved their leadership skills (mean=1.93, SD=.26). It also emerged from the results that participants had achieved improved decision-making skills after the training (mean=1.90, SD=.30).

Table 7: Extent of Perceived Achievements of the Expectations of the NPT (045) Project

Statements	Mean	SD
The training:		
Improved my career prospects	2.37	3.00
Enable me transfer the learned competencies to my job	1.98	.16
Enabled me learn something new to improve my work	1.90	.30
Improved my leadership skills	1.93	.26
Gave me skills that I can share with my colleagues	1.83	.38
Improved my communication skills	1.93	.26
Improved my decision-making skills	1.90	.30
Improved my team building and team work skills	1.90	.30
Improved my research skills	2.29	3.18
Enhanced my curriculum development skills	1.83	.38
Overall achievement of expectations	1.93	.85

Field Data, 2012, N=41

Participants further indicated that the training had improved their curriculum development skill (mean=1.83, SD=.38). The overall mean of perceived achievement of expectation was (mean=1.98, SD=.85) showing a higher extent of achievement of expectations. The implication, therefore, is that participants' expectations had been met at the end of the training.

Research Question 2: What effects has the leadership and management capacity building project had on participants' job performance?

This research question sought to find out the perception of middle-level polytechnic management staff about effects of the NPT training on participants' present job performance. The essence of a training programme in an academic institution is to equip trainees with the relevant competences and skills to improve organizational performance. Items on Sections C and D on the questionnaire were used to answer this research question. The results were presented with means and standard deviation for discussion. The results were calculated on a scale of 1-1.5= strongly disagree; 1.6-2.5= disagree; 2.6-3.5= agree; and 3.6-4.0= strongly agree. The results are shown on Table 8.

Table 8 shows that majority of respondents agreed that they can make informed job-related decisions after the NPT training (mean=3.39, SD = 0.54). This confirms the view held by Velada and Caetano (2007) that transfer of training requires the trainee to learn new job-related skills and apply them on the competencies on the job.

Table 8 further shows that most respondents agreed that there was improvement in their leadership and management competencies after the training (mean = 3.39, SD = 0.59). This supports the assertion that training

efforts are unlikely to result in positive changes in job performance unless the

newly trained competencies are transferred to the work environment (Baldwin

& Ford, 1988; Montesino, 2002).

Table 8: Participants Perception about the Effects of Training on their

Present Job Performance

Statement	Mean	SD
I am able to make informed job-related decision after the training	3.39	0.54
There is improvement in my leadership and management competencies	3.39	0.59
The training has helped improved my performance on the job	3.34	0.53
Now I am performing my task with little supervision	3.34	0.69
The training exposure has broadened my knowledge and skills on the job	27	0.50
The training provided me new ways of thinking about my job	3.27	0.50
Now, I am able to complete assigned task well ahead of schedule	3.20	0.56
Overall	3.34	0.56

Table 8 further shows that majority of the respondents agreed (mean =

3.34, SD = 53) that training has improved their performance on the job. This

finding confirms the statement by one respondent that "The project had a positive impact on work and general performance. In terms of management of resources, utilization such as papers and machines and consumables has reduced drastically. These areas that were well hammered at the workshop have helped to reduce the cost expenditure on these consumables" (Respondent D, Polytechnic Z, interviewed on March 5, 2012). On a related issue, it emerged that most participants were able to perform assigned tasks with little supervision (Mean = 3.34, SD = 0.69). This corroborates Cascio (2000) and Dowling and Welch (2005) argument that as a result of the financial investments organizations make in training, it is important to provide evidence that training efforts have resulted in desired work outcomes such as increases in job performance.

Montesino (2002) also demonstrates that training efforts are unlikely to result in positive changes in job performance unless the newly trained competencies are transferred to the work environment. Table 8 further reveals that most respondents agreed that NPT training had exposed participants to new ways about thinking about their job (Mean=3.31, SD=0.37). It, therefore, implies that majority of respondents agreed that the NPT training had a positive effect on participants' job performance in the Polytechnics.

In order to further understand the effects of the training on participants' job performance, the study also explored the effect of the training on some specific skills of the training modules that were delivered in Sub-Project 2 and Sub-Project 4. Mean and standard deviation were calculated on the scale of 1-1.5= strongly disagree; 1.6-2.5= disagree; 2.6-3.5= agree; and 3.6-4.0=

strongly agree for items in Section S of the questionnaire. The results that emerged from study are presented in Table 9.

Table 9: Effects of Training on Participants' Specific Job Skills

Statement	Mean	SD
My skills in managing and leading research have improved	3.29	0.64
I can easily adapt to and manage change issues effectively	3.24	0.58
The training has resulted in improvement in my teaching and learning skills	3.05	0.55
My competence in curriculum and course development has improved	3.12	0.60
My competence in student assessment has been enhanced	3.15	0.65
Resource utilization in my department has improved	3.05	0.63
My supervision skills have improved (industrial attachment)	2.89	0.68
My skills in using ICT for teaching and research have improved	3.20	0.56
Overall effects of training on specific job skills	3.12	0.61

2012, N=41

Table 9 shows that majority of respondents agreed (mean = 3.29, SD = 0.64) that their skills in managing and leading research has improved after the

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training. On the issue of whether the training has improved participants use of information, communication technology (ICT), majority of respondents with a mean score of 3.24 agreed that their skills in using ICT for teaching and research have improved. This is consistent with Levine's (2000) assertion that leadership need to focus on moving people and institutions forward by increasing the competency of staff and the co-operation of teams in order to improve the organization. The result of the interviews with the Institutional Change Coordinators of all the four Polytechnics also supports this argument. For instance, one respondent said that "ICT is now mostly used in lesson presentation and students are made to research and collect information on the internet. Students use internet for their research project. Internal communication improved because of the use of ICT facilities in the polytechnic". In a related response another participant explained that:

> The establishment of directorate of ICT for the Polytechnic serves as a rapid response unit to handle all ICT related problems in the institution. Internet connectivity was extended to all offices at the administration. Use of local personnel from the Polytechnic to network all units in the polytechnic has reduced the cost of expenditure on the institution. The availability of the internet has helped both academic and administration staff to engage in research and publications. Even though, the internet was not yet extended to the lecture rooms, most lecturers who are

computer literate use power point. Academic staff/lecturers are also able to process and submit their examination results on-line to the chief examiner (Respondent B, Polytechnic 1, interviewed on February, 22, 2012).

This suggests that the effectiveness of training depends ultimately on whether the learned outcomes are used in the workplace as observed by Salas and Cannon-Bowers (2001). The finding further confirms Oslen's (1998) view that transfer of training occurs when the knowledge, skill and values learned are actually used on the job for which it was intended.

Moreover, Table 9 reveals that majority of respondents agreed that they can now design new programmes for consideration by the polytechnic academic board of (mean = 3.20 SD = 0.60). This was further emphasized by the comments of respondents that "...We have been able to design a new programme in logistics and procurement management and the team which went for the training was very instrumental in the design of this particular programme". The respondent also indicated that "all programmes that are running in the polytechnic were designed by ourselves so I can say there have been some change in that direction" (Respondent D, Polytechnic 4, interviewed on March 5, 2012). Another respondent stated that:

Yes, when came back from the trained, we came, we were able to introduce able to design a programme in B.Tech in Accounting. We submitted the document to our Dean who presented to the academic board. The academic board suggested the documents should be prepared in detail. The program was accepted by the academic board but yet to receive accreditation. We then submitted a very nice curriculum in B.Tech which was approved but waiting for accreditation for the NAPTEX (Respondent A, Polytechnic 4, interviewed on March 5, 2012). It can therefore, be concluded that respondents agreed that the NPT training had contributed to their job performance in the polytechnics (overall mean =3.12, SD= .61). One respondent commented that "the training can therefore be said to be very useful to participants" (Respondent D, polytechnic 4, interviewed on March 5, 2012).

Research Question 3: What are participants' perceived challenges of transferring the acquired competencies to their job?

This research question sought to explore participants' perceived challenges in transferring what they had learned from the training to their job. The rationale for analysis was that the essence of training activity is to equip participants with the requisite skills that would enable them to perform their task better than before. Training therefore, becomes useless if participants are not able to transfer the competencies they have acquired from training to their

job environments. Means and standard deviation were calculated and presented on a scale of 1-1.5- strongly disagree; 1.6=2.5= disagree; 2.6-3.5= agree; and 3.6-4.0= strongly agree for discussion. Table 10 presents the results that emerged from the study.

Table 10: Participants' Perceived Challenges of Transferring the Acquired Competencies to their Job

Statements	Mean	SD
I did not get support from my supervisor to implement what I have learned from the training	2.49	0.75
My colleagues did not support me to transfer the training to the job	2.05	0.50
I personally did not attempt anything new after the training	1.83	0.80
I cannot recall what I have learned from the training	1.59	0.55
I do not have the requisite materials to implement what I have learned	2.29	0.78
I have not been able share what I have learned from the training with my colleagues	2.95	0.50
I have not been able to transfer fully what I have learned from the training to my job	2.90	0.66
Administrative procedure(bureaucracy) in the polytechnic do not allow for transfer of learned competencies	2.63	0.80
There is lack of motivation for training transfer in the polytechnic	2.85	0.76
Overall transfer challenges	2.40	0.68

N=41

Table 10 shows that participants have not been able to share what they have learned from the training with my colleagues (mean 2.95, SD= 0.50). The results further indicated that respondents have not been able to fully transfer what they have learned from the training to job (mean=2.90, SD=0.66). This was consistent with the comment of respondent that "...apart from those who benefited from the training, we could not transfer the training to other staff of the polytechnic due to lack of interest by top management" (Respondents D, Polytechnic 4, interviewed on March 5, 2012). This supports the view that cooperation and cohesion among employees, managers, teams, functional units, and so on, should be encouraged and support trainings such that they can become institutionalized to support training transfer (Rosow & Zager as cited in, Tracey, Tannenbaum & Kavanagh, 1995).

Another challenge was lack of motivation to transfer training competencies to the polytechnics (mean=2.85, SD=.76). This implies that most respondents agreed that there were lack of motivation to transfer training to their work places in the polytechnic. For instance, a respondent submitted that "I raised the issue of the need to organized training for staff who did participate in training at academic board but the Rector did not show much commitment and when I persisted I realised it may bring some confrontation so I stopped" (Respondent D, polytechnic 4, interviewed on march 14, 2012). These results implies that even though, polytechnics management exhibited high commitment to support participants from their institutions during the training, very little was done to ensure that the learned competences were shared with other staff who did not take part in the training. This finding is

further consistent with Baldwin and Ford (1988) who argued that supervisory support and organizational climate are key variables that may influence the transfer process. The results also confirmed Bate's (2003) that managers and supervisors play a critical role as transfer agents when they use their managerial skills and abilities to support and influence employee learning transfer.

Table 10 further indicates that administrative procedures (bureaucracy) in the polytechnic do not allow for transfer of the learned competencies (mean= 2.63, SD=.80).This corroborates Eseryel's (2002) who argued that "elements of the post-training environment can encourage, discourage or even prohibit the application of new skills and knowledge on the job" (p. 20). The finding also confirmed the belief that management support before and after training can have a positive impact on the transfer of learning (Baldwin & Magjuka, 1991). Regardless of the extent of trainees' motivation before training, during training and after training, trainees cannot fully transfer their learning if organisational environment barriers exist. This finding is consistent with Tannebaun and Yukl (1992) who noted that aspects of the post-training environment can encourage, discourage, or even prevent the application of new learning on the job. However, given the responses in Table 9, it can be concluded that participants faced some challenges in the transfer of training to their polytechnics (Means= 2.40, SD= 0.68).

Research Question 4: What are the perceived differences between administrators and academics about the usefulness of the training programme?

This question sought to investigate perceived differences between academic staff and administrators about the usefulness of the leadership and management capacity building project. In order to answer this research question, a Mann-Whitney U-test was calculated for items in sections B, C, D, E and E to evaluate if there were any differences in the view of academic staff and administrators about their perceived usefulness of the training. The Mann-Whitney U-test was considered appropriate because of its ability to answer questions concerning differences between groups. It also has the greatest advantage for small sample size (Nachar, 2008). The Mann-Witney U can also be used when the measured variables are presented in an ordinal scale. It is also the commonly used non-parametric test in the social sciences (Kasuya, 2001). In short, the Mann-Witney U statistical test is an excellent alternative to parametric tests such as the t-test. The results are shown in Table 11.

Table 11: **Mann-Whitney U test of Difference between Academic Staff and Administrators Perceived Usefulness of the NPT (045) Training**

Positions	N	Sum of Ranks	Mean Rank	Z	p
Academics	25	517	23.17	- .47	.64
Administrators	16	344	15.54		

Source: Field Data, 2012   N = 41

The scores for academics and administrators were rank ordered and a Mann-Whitney U test was conducted to compare perceived differences about the usefulness of the NPT(045) training. With N=25 for academic and N=16 for administrators, the results indicate no statistical difference between positions, $z = -.47$, $p > .05$ with the sum of the ranks being equal to equals 517 for academics and 344 for administrators. This implies that both polytechnic academics and administrators perceived the leadership and management capacity training to be useful. This finding addressed the gap indicated by Nijhuis, Bakah and Akomaning (2009); Dare and Ankomah (2004) that some middle-level polytechnic managers were not adequately prepared for their leadership and managerial roles before the migration to tertiary status.

Other Findings

Every training activity has some objectives which mostly factored into the designing of such training. In the same vein, participants of any training programme also expect the training to meet their training needs. The study explored participants' perception about the relevance of the project at meeting their training need. The results were presented on scale of 3.6-4.0=strongly agree; 2.6-3.5=agree; 1.6-2.5=disagree; and 1.0-1.5=strongly disagree. The items in this section were presented with means and standard deviation for discussion. The results are shown in Table 12.

Table 12 shows that that respondents strongly agreed (mean = 3.63, SD = 0.49) that the training sessions were relevant to participants current job. This

finding further emerged in interviews with the change coordinators. For instance one respondent reiterated that:

> NPT was very useful in terms of structure respondent and contents. Looking at what the poly was going through at that time I can say that the training was useful and time by interns of human capacity building I can say that we really benefited a lot from the training. We thought that after training it would have been extended to benefit a lot more staff of the poly but that didn't happen. One other good thing about the NPT was how it brought all Polytechnics together for them to work as a team or a unit. I must say that the implementation of the change agenda could not continue end of the project even though we were and aggressively committed to see its implementation that has not really happened (Respondent D, Polytechnic 4, interviewed on March 7, 2012).

Another respondent further explained that:

> I think the project was excellently carried out; training was very relevant to the fact that it exposed participants to the different types of leadership styles at the polytechnic. As an HOD, I got to realize that there are many ways of working with the lectures and helped me to use different leadership style in my department Respondent C, Polytechnic X, interviewed on February 21, 2012).

Table 12: Relevance of Project to Participants' Training Needs

Statements	Mean	SD
Participants were involved in the designing of training programmes	2.61	0.74
The objectives of the training were discussed with participants	3.22	0.52
The training workshops were relevant to my job	3.63	0.49
Training has improved my career prospects	3.37	0.58
I believe that the learned competencies could be applied on the job	3.46	0.55
I did not learn anything new in the training	1.32	0.57
I cannot recall what i have learnt in the training	1.61	0.59
Given the opportunity, I would have opted for different training	2.05	0.84
Overall relevance of training	2.85	0.62

Source: Field data, 2012, N=41

These findings confirm Dolezalek (2004) who posits that investment in training activities has increased all over the world in recent years. Cascio (2000), and Dowling and Welch (2005) also add that as a result of the financial investments organizations make in training, it is important to provide evidence that training efforts are being fully realized on the job.

On the issue of whether the learned competencies could be applied on the job a (mean = 3, 46, SD = 0.55) was obtained. This means most of the

respondents agreed to the statement that the learned competencies from the training could be applied on their job. Table 12 further reveals that respondents agreed that the training has improved their career prospects (mean = 3.37, SD = 0.58). This shows that most participants agreed that the NPT training has improved their career prospects.

The results in Table 12, however, reveal that respondents disagreed that they did not learn anything new during the NPT training. (Mean = 1.32, SD = 0.57). It also emerged from the data in Table12 that participants disagreed that they cannot reveal what they have learnt in the training. This implies that despite the time lapse between the terminal period of the project and the time of the study participants could still remember what they had learnt in the NPT training. It can, therefore, be concluded that majority of middle-level polytechnic academic staff and administrators who participated in the NPT (045) project agreed that the training was relevant to their training needs. In response to the issue of whether participants believed the NPT training has improved their performance on the job, the result indicates it did (Mean = 3.34, SD = 0.48).

The study further explored participants' satisfaction with the mode of delivery of the leadership and management capacity building training. The reason was that delivery of a training programme is critical to acquisition of learning experiences and the transfer of the training competences to the work environment. The results are presented on scale of 3.6-4.0=strongly agree; 2.6-3.5=agree; 1.6-2.5=disagree; and 1.0-1.5=strongly disagree with means and standard deviation for discussion. The results are presented in Table 13.

Table 13 shows a (mean =3.46, SD=0.50) for the statement "the training sessions were very interactive". This means that majority of the respondents agreed to the statement. This implies that respondents agreed that the training delivery was interactive and provided opportunity for team work among participants.

> The training delivery was very participatory and interactive.
> All participants worked as a team in the form of workshops,
> group work, assignments and presentations. Change
> coordinators were given assignment which they had to work
> on and present at the next workshop. This provided
> opportunity for team work for the participants from the
> various Polytechnics. This made the whole programme very
> interesting and practical (Respondent A, Polytechnic 1,
> interviewed on February 21, 2012).

Table13 also shows that participants agreed that the resource persons were competent in their delivery (mean=3.41, SD=0.50). A respondents report that "most of the facilitators from the University of Cape Coast were very good in how they handle their presentations. Facilitators had adequate knowledge and were very good with their various presentations on the whole" (Polytechnic C, Respondent 3, interviewed on February 29, 2012).   This supports the argument that relevant training content plays a critical role in the transfer of learning and the transfer of training (Antonacopoulou, 1999; Holton, 2003; Montesino, 2002). They further agreed that the design and

content of the training programme are important factors in facilitating the transfer of learning and the transfer of training.

Table 13: Participants' Satisfaction about the Mode of Delivery of the NPT Training

Statemen	Mean	SD
The training session were very interactive	3.46	0.50
The training facilitators were competent	3.41	0.50
The training provided the opportunity for sharing best practices from other polytechnics	3.37	0.66
The learning materials were relevant to the contents of the programme	3.27	0.45
I had no difficulty coping with training workshops	3.22	0.61
There was adequate administrative support for each training workshops	3.07	0.57
The delivery of the training was suitable to my learning preference	3.00	0.55
The contents of the 'change Agenda' were incorporated in the training	2.95	0.63
I received feedback from training facilitators	2.76	0.70
Duration of the training workshops were adequate	2.68	0.57
The training session interfered with my official work schedule in the polytechnic	2.44	0.74
The training workshops were more theoretical and did not address real challenges in the polytechnics	2.15	0.82
Overall satisfaction with training delivery	2.70	0.57

Source: Field data, 2012, N=41

It also emerged from the interviews that:

Another important result that emerged from the study was the fact that majority of respondents agreed (mean=3.37, SD=0.6) that the training provided an opportunity for sharing of best practices from other polytechnics. The results in Table 13 further shows participants agreed that their change that 'change agendas' were factored into the training (mean=2.95, SD=0.63). These results were consistent with the findings that training participants' satisfaction with the training instructors, instructional methods and activities, learning objectives and logistical supply has been identified as training design variables that influence transfer of training. Topics and content, planned action and transfer, and course materials have also been mentioned as training design factors that affect transfer (Pershing & Pershing, 2001). Brinkerhoff and Gill (1992) for example reports that the most influential factors affecting transfer of learning in the workplace is a match between the training content and trainee's job functions.

However, participants disagreed that the training workshops interfered with their official work schedules in the polytechnics (Mean=2.44, SD=0.74) indicating that most participants disagreed to the statement. Respondents also disagreed to the statement that "the training workshops were more theoretical and did not address real challenges in the polytechnic" (Mean=2.15, SD=0.82). The results that emerged from the study suggest that participants were satisfied with the mode of delivery of the NPT training because it offered participant opportunity for team work (mean=2.70, SD=57).

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

This chapter provides a summary of the study and conclusions that were drawn from the findings. The chapter also made some recommendations based on the conclusions for providing leadership and management capacity building training in the future. Areas for further research were also provided to guide future studies.

Summary of the Study

Tertiary education and for that matter polytechnic education is important for providing middle-level human resource needs for national development. Governments having realized these crucial roles of polytechnic education have put in several interventions aimed at improving polytechnic education in Ghana. The purpose of the study was to explore polytechnic academic staff and administrators' perception about the usefulness of the NPT(045) leadership and management capacity building project. The 10 polytechnics in Ghana were grouped into two sectors namely northern sector and southern sector for the purpose the project implementation. The study covered four polytechnics from the northern sector namely Sunyani Polytechnic, Tamale Polytechnic, Wa Polytechnic and Bolgatanga Polytechnic participated in the study. Kumasi Polytechnic, also in the northern sector was selected through the lottery method

for pilot-testing of the research instruments. The study was guided by the following research questions:

1. What were participants' expectations about the implementation of the leadership and management building project?

2. What are participants' perceptions about the effects of the leadership and management capacity training on the performance on their job?

3. What are participants' perceived challenges of transferring the acquired competencies to their job?

4. What are the perceived differences between administrators and academics about the usefulness of the training programme?

In order to provide theoretical and empirical framework for the study, related literature was reviewed. The literature review was focused on themes such as development of polytechnic education in Ghana, mandate of Polytechnics in Ghana, transfer of training, empirical review of training transfer, evaluation of training. The literature review also covers Kirkpatrick's (1994) model of training evaluation, importance of training evaluation, effects of training design on transfer and work environment transfer of training. The chapter further discusses the conceptual framework of Balwin and Ford (1988) on training transfer. Other themes that featured in the review were concept of leadership and management, educational leadership and management, role of middle-level leadership and management, concept of capacity building, change management among other.

A descriptive survey design was adopted for the study. This was because the focus of the study was to find out how polytechnic middle-level managers

perceived the leadership and management capacity building to their job performance. All 41 middle-level polytechnic academic staff and administrators who were at post and participated in Sub-project 2 and Sub-project 4 of the NPT (045) leadership and management capacity building project were selected for the study. The sampling procedure was a census of all the accessible population. The instruments for data collection were checklist for evaluating participants' expectations and perceived achievements, questionnaire for participants and a structured interview guide. The results of the interviews were used to further explain the quantitative results. The results of the questionnaire which was pilot-test in two polytechnics yielded Cronbach's alpha coefficient of .70 which was considered acceptable based the recommendations of George and Mallery as cited in Agbevanu (2010).

Summary of Key Findings

The following findings emerged from the study;

1. Majority of respondents had low level expectation before the implementation of the NPT project (mean=1.44, SD=.50). However, the study found that participants perceived the training had met their expectations (mean=1.97, SD=.85).

2. Participants agreed that training had improved their performance on the job (mean=3.31, SD=.56). The results also indicated that most participants agreed that the training had contributed to specific competences that they needed to perform their job (mean=3.12, SD=.61). For instance, majority of respondents agreed that the training

has improved their leadership and management competences. Others indicated that agreed that the training exposure had broadened their knowledge and skills on the job.

3. Majority participants disagreed that there were challenges in transferring the acquired competences to their job. This was indicated by an overall mean and standard deviation of (mean=2.4, SD=.68). However, others respondents reported that they had not been able to share what they have learned with colleagues (mean=2.95, SD=.50). Some of the challenges were perceived lack of motivation and bureaucratic procedures in the polytechnics.

4. In terms of perceived differences between academic staff and administrators about the usefulness of the project, the study found no statistical difference

   (z = -.47, p> .05). This shows that both polytechnic academic staff and administrators perceived the leadership and management capacity building project to be useful.

5. Majority of participants agreed that the NPT project was relevant to participants' training needs (mean=2.85, SD=.61). For instant, majority of respondent strongly agreed that the training workshops were relevant to their job. Furthermore, the study revealed that participants were satisfied with the mode of delivery of the NPT training (mean=2.70, SD=.57). For instant majority of respondents agreed that the training workshops were interactive and also provided

opportunity for sharing best practices from other polytechnics. The results also show that the resource persons were competent.

6. Another key benefit of the leadership and management capacity building project was that all the four polytechnics that participated in the study have established quality assurance units after the implementation of the project.

Conclusions

Based on the findings from the study, it is concluded that polytechnic middle-level management staff who participated in the leadership and management capacity building project perceived the training to haven met their expectations because it had met their training needs. It can also be concluded that participants perceived the training to have improved their performance on the job because of the competences they acquired through the training. This means that the training appeared to have met polytechnic middle-level staff's training needs.

Even though majority of respondents indicated that they did not face any challenge on transferring training competences to their job, bureaucratic procedures and lack of motivation seemed to affect transfer of the training competences. It can further be concluded that academic staff and administrators appeared to have found the leadership and management capacity building project to be useful regardless of their positions in the polytechnic. Finally, the results of the study appeared to suggest the generally participants were satisfied with the mode of delivery of the NPT training.

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project. Participants felt that there should have been a project monitoring team to follow up on the extent of the training transfer in the Polytechnics. It can therefore, be concluded that participants were not satisfied with the sustainability arrangement of both the Polytechnics and the project team.

Recommendations

The following were recommendations are made to improve the implementation of future projects and improve the performance of participants based on the finding he emerged from the study:

1. Future leadership and management capacity building training should be decentralized to enable more polytechnic staff to benefit. Decentralizing staff capacity building would reduce the financial commitments terms of accommodation and maintenance of participants.

2. Future training programmes should include a budget line for post-training monitoring and sustainability activities. It is recommended that the participating institutions should be made to bear part of this sustainability budget as a means of making them to be committed to utilization of training competencies.

3. Implementing institutions should organise periodic workshops for participants to ensure that the gains from the training are consolidated for long term benefits. This can be achieved through sharing of best practices by the polytechnics through training workshops.

Suggestions for Further Research

It is also suggested that a purely qualitative approach should be used to investigate this topic. This would go a long way to improve the generalization of the findings of this study. Such a design can yield deeper explanation to some of the issues that emerged from the study.

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APPENDICES

APPENDIX A

Expectations and Achievements Checklist for Respondents

Dear Participant,

Pease kindly indicate your expectations about the implementation of the leadership and Management Capacity Building Project in Ghana Polytechnics and your perceived achievement after the implementation of the project by checking [√] the space provided.

Thank you.

Expectations before Training			Achievements after Training	
High	**Low**		**High**	**Low**
[ ]	[ ]	Training to improve my career prospects	[ ]	[ ]
[ ]	[ ]	Enable me transfer the learned competencies		
		to my job	[ ]	[ ]
[ ]	[ ]	To learned something new to improve my		
		work	[ ]	[ ]
[ ]	[ ]	To improve my leadership skills	[ ]	[ ]
[ ]	[ ]	Give me skills to share with my colleagues	[ ]	[ ]
[ ]	[ ]	Improved communication skills	[ ]	[ ]
[ ]	[ ]	Decision-making skills	[ ]	[ ]
[ ]	[ ]	Team building and team work	[ ]	[ ]
[ ]	[ ]	Research skills	[ ]	[ ]
[ ]	[ ]	Curriculum development skills	[ ]	[ ]

Questionnaire for Polytechnic Academic Staff Administrators who participated in the Leadership and Management Capacity Building NPT (045) Project in Ghanaian Polytechnics

Dear Respondents,

This questionnaire is intended to solicit information on participant's perception about the impact of the implementation of the leadership and management capacity building project **(NPT/GHA045)** in Ghanaian polytechnics. It would be very much appreciated if you could provide your candid impression about the training programmes in which you participated in the context of its relevance, mode of delivery and the extent of transfer of the competencies acquired onto the job, possible challenges encountered in implementing competencies acquired.

Thank you in anticipation for your co-operation.

SECTION A: Background Information

1. Name of Institution:
   ....
2. Position: Academic [   ]   Administration [   ]

3. Gender: Male   [   ]   Female   [   ]

SECTION B: Participants' Perception about the effects of the Training on Present Job Performance

Please indicate the extent to which you agree or disagree to each of the statements on the effects of the NPT/GHA045 project on your job performance by ticking {√} the appropriate responses. The Likert-type scale is

presented as Strongly Agree = SA, Agree = A, Disagree = D and Strongly Disagree.

N0	Statements	SA 4	A 3	D 2	SD 1
3	I am able to make informed job-related decision after the training				
4	There is improvement in my leadership and management competencies				
5	The training has helped improved my performance on the job				
5	Now I am performing my task with little supervision				
7	The training exposure has broadened my knowledge and skills on the job				
8	The training provided me new ways of thinking about my job				
9	Now, I am able to complete assigned task well ahead of schedule				

Others (please state):...
....
....
....
....

SECTION C: Participants' Perception about the effects of the Training on Specific Job Skills

Please indicate the extent to which you agree or disagree to each of the statements on the effects of the NPT/GHA045 project on specific job skill by ticking {√} the appropriate responses. The scale is presented as Strongly Agree = SA, Agree = A, Disagree = D and Strongly Disagree = S.

N0	Statements	SA 4	A 3	D 2	SD 1
10	My skills in managing and leading research have improved				
11	I can easily adapt to and manage change issues effectively				
12	The training has resulted in improvement in my teaching and learning skills				
13	My competence in curriculum and course development has improved				
14	My competence in student assessment has been enhanced				
15	Resource utilization in my department has improved				
16	My supervision skills have improved (industrial attachment)				
17	My skills in using ICT for teaching and research have improved				

Others (please state):..

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SECTION D: Participants' Perceived Challenges of Transferring the

Acquired Competencies to their Job

Please indicate the extent to which you agree or disagree to each of the statements on the perceived challenges in transferring the acquired competences to their job by ticking {√} the appropriate responses. The scale is presented as Strongly Agree = SA, Agree = A, Disagree = D and Strongly Disagree = S.

N0	Statements	SA 4	A 3	D 2	SD 1
18	I did not get support from my supervisor to implement what I have learned from the training				
19	My colleagues did not support me to transfer the training to the job				
20	I personally did not attempt anything new after the training				
21	I cannot recall what I have learned from the training				

N0	Statements	SA 4	A 3	D 2	SD 1
22	I do not have the requisite materials to implement what I have learned				
23	I have not been able share what I have learned from the training with my colleagues				
24	I have not been able to transfer fully what I have learned from the training to my job				
25	Administrative procedure(bureaucracy) in the polytechnic do not allow for transfer of learned competencies				
26	There is lack of motivation for training transfer in the polytechnic				

Others (please state):..

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SECTION E: Relevance of Project to Participants' Training Needs

In this section, you are requested to indicate how relevant you think the project had been in terms of meeting your training needs by ticking {√} the appropriate responses. The statements are presented as:

Strongly Agree = SA, Agree = A, Disagree = D and Strongly Disagree = S.

N0	Statements	SA 4	A 3	D 2	SD 1
27	Participants were involved in the designing of training programmes				
28	The objectives of the training were discussed with participants				
29	The training workshops were relevant to my job				
30	Training has improved my career prospects				
31	I believe that the learned competencies could be applied on the job				
32	I did not learn anything new in the training				
33	I cannot recall what i have learnt in the training				
34	Given the opportunity, I would have opted for different training Overall				

Others (please state):..

....

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SECTION F: Participants' Satisfaction about the Mode of Delivery of the

NPT Training

In this section you are required to indicate your satisfaction with the mode of delivery of training by ticking {√} the appropriate responses. The statements are presented as:

Strongly Agree = SA, Agree = A, Disagree = D and Strongly Disagree = S.

N0	Statements	SA 4	A 3	D 2	SD 1
35	The training session were very interactive				
36	The training facilitators were competent				
37	The training provided the opportunity for sharing best practices from other polytechnics				
38	The learning materials were relevant to the contents of the programme				
39	I had no difficulty coping with training workshops				
40	There was adequate administrative support for each training workshops				

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N0	Statements	SA 4	A 3	D 2	SD 1
41	The delivery of the training was suitable to my learning preference				
42	The contents of the 'change Agenda' were incorporated in the training				
43	I received feedback from training facilitators				
44	Duration of the training workshops were adequate				
45	The training session interfered with my official work schedule in the polytechnic				
46	The training workshops were more theoretical and did not address real challenges in the polytechnics				

Others (please state):...

....

....

....

....

APPENDIX C

Interview Guide for Institutional Change Coordinators of the Leadership and Management Capacity Building Project in Ghanaian Polytechnics

Dear Respondents,

This interview guide is intended to solicit information from institutional change coordinators' perception about the impact of the implementation of the leadership and management capacity building project (**NPT/GHA045**) in Ghanaian polytechnics. It would be very much appreciated if you could provide your candid impression about the training programmes in which you participated in the context of its relevance, mode of delivery and the extent of transfer of the competencies acquired onto the job, and possible challenges encountered in implementing competencies acquired.

Thank you in anticipation for your co-operation.

SECTION A: Biographic Data

1. Name of institution: ....

2. Position: Academic [   ]   Administration [   ]

3. Gender: Male   [   ]   Female   [   ]

4. What is your **general impression** about the implementation of the

    NPT/GHA045 project?

    a. Relevance of training to institutional needs

    b. Quality of facilitators

    c. Mode delivery of training

    d. Training schedule/timing

e. Participation/involvement of training design

5. What **change** have you identified in your institutions after the project?

   a. Student enrolment

   b. Research and publications

   c. Use of ICT

   d. Student-personnel service

   e. Programme design

   f. Resource utilization

   g. Internal communication etc.

6. In what ways is Polytechnic **management supportive** to the

   NPT/GHA045 activities?

   a. Provision of funding for workshops

   b. Release of vehicles for workshops

   c. Forum to share training competences

   d. Willingness to implement change agenda

7. Are you still recognized as an institutional change coordinator?

8. If your answer to question 9 is yes, what **challenges** do you face as an

institutional change coordinator?

   a. Unwillingness to accept new change

   b. Bureaucratic practices

   c. Funding for NPT activities

9. If your answer to question 9 is no, why are you no longer recognized

as the institutional change coordinator?

a. What challenges are you facing in implementing competencies acquired

10.   What **strategies** have the polytechnic put in place to sustain the gains from the NPT045 project?

    a.   Implementation of change agenda

    b.   Sharing of best practices with colleagues

    c.   …..other polytechnic

    d.   Links with project coordinators/consultants (IEPA, Dutch partners etc)

11.   What **recommendations/suggestions** would you offer for future organization of leadership and management capacity building projects?

APPENDIX D