UNIVERSITY OF CAPE COAST

PUBLIC PERCEPTIONS OF THE PERFORMANCE OF VOCATIONAL AND TECHNICAL GRADUATES IN SELECTED INSTITUTIONS IN CAPE COAST METROPOLIS

BY

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DECLARATION

Candidate's Declaration

I hereby declare that this dissertation 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: Clement Kofi Osei-Tutu

Supervisor's Declaration

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

Supervisor's Signature:……. Date:……...

Name: Dr. C. Akwesi

ABSTRACT

This study set out to comprehend some of the "factors that affect the effective utilization of Votec education in the service of local economic development in the Cape Coast metropolis. It has also been undertaken to unearth the public perception on the performances of vocational and technical graduates in the world of work, with special reference to some selected institutions and industries in the metropolis. The study utilized survey methodology with data collection from a sample of VOTEC users (industrialists), educators and graduates and likert-type rating scales to determine the validity of several perceptions surrounding the VOTEC education issue. The study discovered that:

1. Government was perceived as the key player in the development of Votec education and VOTEC graduate participation in the labour force.
2. Students of VOTEC were insistent that their training had inculcated in them the necessary skills, competence, motivation and self-efficiency to engage in VOTEC employment as well as self-employment.
3. However, there was a definite lack of optimism about the future of the VOTEC experiment as presently constituted.

The study concluded that while educators, graduates and employers were universally inclined to view VOTEC positively, the role of government was perceived with mixed feelings. It is recommended that the government provides the enabling environment for employers, teachers and students in the Cape Coast metropolis.

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DEDICATION

To my wife, Theresa Biney and my daughters, Clara, Mildred, Priscilla and Abena Osei Tutu

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LIST OF ABBREVIATIONS/ACRONYMS

VOTEC	Vocational and Technical Education
TVET	Technical and Vocational Education and Training
NACVET	National Coordinating Committee on Technical and Vocational Education and Training
GEA	Ghana Employers Association
AGI	Association of Ghanaian Industry
GES	Ghana Education Service
GWCL	Ghana Water Company Limited
ECG	Electricity Company of Ghana Limited
AESL	Architectural Engineering Services Limited

CHAPTER ONE

INTRODUCTION

Background to the Study

The role of vocational education in the social and economic development of both industrialized and developing countries has been increasingly recognized (Foster, 1967). Technical and Vocational Education and Training is acknowledged worldwide as the bedrock of all successful economics, fundamentally playing a major role to the successful growth of industry, the economy, to the well-being of the community and to individuals. Again, all over the world, education is accepted as the process by which individuals acquire knowledge, skills and attitudes which enable them to develop their faculties in full. It is universally accepted that one of the benefits of good education is that it enables individuals to contribute to development and improvement in the quality of life for themselves, their communities and the nation as a whole (Budu-Smith,1999).

In essence, it is a means to combat poverty and unemployment. It is therefore of utmost importance that the skilled manpower resources needed to efficiently impact on the growth of the economy are efficiently designed. However, in recent times, developments in Technical/Vocational education and training in Ghana, have been a matter of great concern not only to those in

Technical/Vocational institutions but also to the private sector and the general public as a whole(Ministry of Education,Ghana,1994).

A Chinese proverb says “Give a man a fish and you feed him a day

Teach him how to fish and you feed him for life”. (Daily Graphic, Tuesday Aug. 28, 2001 pg. 11). The bottom line is Technical/Vocational education and training is that, “Give a man a skill and you give him a livelihood for life.

Furthermore, ever since the Industrial Revolution in the late 18th century, economic progress and development have been closely identified with industrialization. The structuring of vocational and technical education systems in response to economic and social changes has existed for more than 200 years on the global scene. Traditionally, vocational education prepared students for specific jobs. However, in the post-Taylorist work environment, workers are expected to perform more broadly-defined jobs. Therefore, it is a prerequisite that a broad-based education is required. However, vocational education is expected to produce an educated, skilled and motivated workforce. The economic argument in favour of vocational and technical education is linked to the perceived need to orient the formal education system to the needs of the world of work as manifested in the J.S.S. concept. It is based on the assumption that economic growth and development are technology driven and human capital dependent. Traditional academic education has been an inadequate alternative to training sufficient numbers of workers to meet current and future demands for skilled labour.

The inadequacy is further aggravated by the claim that academically-oriented schools instill attitudes in most students toward white-collar careers, not toward the blue-collar occupation where skilled workers are in short supply. Despite a growing emphasis on preparing an educated, skilled, and motivated workforce, minimal research, if any, has existed with respect to their impact on the job market especially in the Cape Coast Metropolitan.

The study is therefore being conducted to investigate contemporary education and industrialization issues from the perspective of vocational and technical education, educators, employers and learners. It is designed to provide a base for making suggestions and recommendations for improving the effectiveness, efficiency, and quality of vocational and technical programmes and personnel development.

The results of this study can assist policy-makers, educators and business/industry personnel in developing policy as well as in planning short and long-term strategies for human resource development.

Statement of the Problem

Rapid technological changes and increased global competition have exacerbated the challenges associated with the role of vocational and technical education in the industrial sector, to enhance Ghana's competitive urge over other developing countries, has never been more critical. However, empirical research regarding the role of vocational and technical education in the industrial development of Ghana, especially the Cape Coast Metropolitan from

the perspective of vocational and technical educators and employers, have frequently not been considered in the making of our educational policies. Furthermore, placement of these graduates in the Cape Coast Metropolitan has been very discouraging with persistent claims by the industry that, the training received by these graduates does not merit their industrial requirement. Some stakeholders who employed these graduates also complained about performances of the said graduates. The situation, therefore, has been of serious concern to the trainers and users of these graduates about their performances. Among other things, the researcher wants to investigate the perception on the performance of these graduates in the job market with respect to the Cape Coast metropolis.

Purpose of the Study

The purpose of this study is to investigate the perceptions about the role expected of vocational and technical education in the industrial development of the Cape Coast metropolis in particular and Ghana as a whole.

General Objectives

The study generally sought to evaluate the role of vocational and technical education in industrial development in the Cape Coast metropolis. Specifically, the study sought to:

1. Discover the extent of the contribution of vocational and technical education to industry in Cape Coast metropolis.

2. Determine the perception driving vocational and technical education graduates on their labour market participation.
3. Determine the factors that facilitate or inhibit the development of vocational and technical education.
4. Examine the extent to which educators and employers perceive government role in facilitating development of the programme.
5. Make recommendations to stakeholders in Votec Education for effective utilization of Votec Education Skills and competence.

Research Questions

The research was guided by the following research questions:

1. To what extent does vocational and technical education contribute to the industrial development of the Cape Coast metropolis?
2. What are the perceptions of vocational and technical education graduates regarding their employability?
3. What are the factors that facilitate or inhibit the restructuring of vocational and technical education in serving the needs of the industrialisation of the metropolis?
4. To what extent do vocational and technical educators and employers believe that government is responsive to the needs of vocational and technical education in Cape Coast metropolis?

5. To what extent do vocational and technical educators and employers believe that government is responsive to its needs of business and industry in Cape Coast metropolis?

Significance of the Study

The study, it is hoped, will guide the educational planners and other stakeholders who engage these graduates at site to easily identify the problem It is also significant because the result of this study can assist policy makers, educators and business/industry personnel in developing policy as well as in planning short and long-term strategies for human resource development that confront them on the job market. The study is significant because it is expected to bring to light those perceptions in the work environment on performances on the job market. The findings of the study will be recommended to the Ministry of Education (MOE), Curriculum Unit of the Ghana Education Service (GES), some selected industries and commerce and the Cape Coast Metropolitan Assembly. Finally it will serve as a basis for further research and also to add to knowledge.

Limitation

The population for the study included all vocational and technical educators and employers in the Cape Coast metropolis. It also included students working in some industries and organizations. The findings can therefore not be generalised to cover the entirety of students and teachers in the

Central Region even though there is more than one technical institution in the region. One major limitation of this study is that interview and the questionnaire had to be rushed through or delayed because of the workload of respondents who are the staff and students of the institute and commerce and also employers. Furthermore, since data was collected with questionnaire, the problem of bias, normally associated with all research based on the use of questionnaires cannot be ruled out.

Delimitation

But for constraints of time, finance and volume of academic work on the researcher, this study could have been extended to other Technical and Vocational Institutions in the Region with similar problems. However, it is being limited to the Cape Coast Metropolitan with emphasis on Cape Coast Technical Institute and the Polytechnic since most of their products are working in the Metropolitan. It is therefore a case study, considering the research topic.

Definition of Terms

According to UNESCO/ILO, Terminology of Technical and Vocational education 1962/1974, technical and vocational education is defined thus;

The educational process when it involves, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills and knowledge, relating to occupations in various sectors and economic and social life.

Vocational Training: This is directed to developing the particular skills and related knowledge required by a specific occupation or a group of occupation.

Technical Education: Is that type of education designed at upper secondary and lower tertiary levels to prepare middle-level personnel (technicians, middle management, etc) and at a university level to prepare engineers and technologists for higher management position. (Technical education includes general education, theoretical, scientific and technical studies and related skilled training).

Vocational Education: Is a type of education designed to prepare skilled personnel at a lower level of qualification for one or group of occupations, trades or jobs. Vocational education usually provided at the upper secondary levels includes general education, practical training for the development of skills by the chosen occupation and related theory

Perception: Keen natural understanding – something noticed and understood.

Evaluation: Refers to the act or result of appraising the quality, worth or efficiency of any aspect of educational processes in terms of whether the desired and planned goals are being achieved.

Vocational Education and Training: All programmes in school or out of school that prepare for specific trade, i.e. training of skilled workers and employees.

Education: All actions and influences directed to developing and cultivating a person's mental ability, knowledge, skills, attitudes and behaviour in such a way

that the individual's personality may be developed to the fullest possible extent, so as to be of positive value to the society in which he lives.

Education System: The overall structural organization through which education of all types and all levels is provided to the population.

Employment: Any remunerative work, whether for any employer or as self-employed person.

Job: Term referring to the particular occupational function or the specific work engaged.

Labour Market: The processes through which the relation between supply of and demand for labour is determined.

Skilled Worker: A person who has acquired the full qualification required for performance of a recognized trade or other occupation.

Recruitment: This refers to finding qualified people to fill various vacancies that exist in an organization.

Organisation of the Study

The study is structured into (5) five chapters. Each chapter is divided into a number of subsections, which relate to the title of the chapter.

The first chapter, an introduction to the study, highlights such relevant aspects as, background of the study, statement of the problem, purpose; objectives of the study, hypothesis/ research questions and the significant of the study. Chapter Two (2) deals with a review of related literature – it gives an overview of the theoretical framework and empirical works of some earlier

writers, and the literature on vocational and technical education and its role in industrial development.

Chapter Three (3) of the study deals with the methodology of the research design of the study. This chapter begins with an introduction followed by a description of the type of study and population and sample for the study. The Research Instrument and methods of data collection are also described in this chapter. Chapter four (4) of the study deals with the results or findings. It begins with an overview of the methodology employed for the study. A description of the presentation and methods of analysis of the data collected followed by a summary of the findings. The final chapter of the study is the conclusion. It presents a summary of the research problem, methods and results. These are followed by the interpretation of the results in relation to the available literature. The conclusion drawn from the study, recommendations, suggestions for practice and further research end this chapter.

CHAPTER TWO

REVIEW OF RELATED LITERATURE

This aspect of the dissertation deals with the theoretical and the conceptual framework and what other people have written about the perception of Technical/Vocational students, which has gradually developed to the present age of technological advancement. The literature review also sought to provide framework for establishing the importance of the study with other findings and share with the reader the results of other studies that are closely related to this study (Borg & Gall, 1989). This chapter focuses on the purpose, role and policy of VOTEC, and its historical background in Ghana.

Purpose of Technical/Vocational Education

Vocational and technical education and training is, by definition, vocational in intent. Its purpose is unashamedly instrumental; it is about acquiring skills to be used at work. This contrasts with the broader purposes of school education and university education, where education is often seen as an end in its own right. It would thus be quite wrong to characterize school education and university education as non-instrumental. The dominant paradigm guiding public policy for many years has been human capital theory (Harbison, 1973), in which individuals acquire skills—human capital—and then obtain a

return on that investment through higher employment rates and higher-paying jobs. This model underpins the Higher Education Contribution Scheme (HECS) in the UK, by which university students pay substantial tuition fees on a deferred, income-contingent basis. The idea is that students contribute to the cost of acquiring human capital and then repay the debt when their subsequent income reaches a threshold.

However, the instrumental nature of university education is not as clear cut as in vocational education and training (VET). Certainly, the professional fields of medicine, law, accounting, teacher education, nursing, and engineering are largely vocational in nature and there is an expectation that a high proportion of their students will become doctors, lawyers, accountants, nurses, teachers and engineers. Other fields by contrast are far less vocational in nature and provide a much more generic training, the most obvious examples being the humanities and pure sciences. The social sciences and the applied sciences fall somewhere in between. This is not to say that the non-vocational fields are not valuable preparation for work. For many years, an economics degree was the favoured background for Australian public servants engaged in policy work because it provided a certain way of analysing the world. Similarly, the British civil service was reputed to have favoured Oxbridge graduates with classics degrees.

Perhaps VET should be seen in the same way, as providing not only specific vocational skills but also generic employment skills. Certainly, in recent years there has been increasing attention paid to ‘employability skills’: skills such as problem-solving, the ability to work in a team, communication skills and so on.

However, the official rhetoric has been unambiguous in describing VET in terms of the skills and competences specified by industry. VET courses have been packaged up into industry training packages developed by the various industry skills, councils and their antecedents. These industry packages outline a set of nationally endorsed standards, guidelines and qualifications for training, recognising and assessing people's skills. They are developed by industry with the aim of meeting the needs of an industry or group of industries.

According to Adu-Sarkodie (1994), in Ghana, the purpose of Technical and Vocational education at non degree level is to provide young men and women with technical education and skills training (in addition to general education) in order to enable them fulfill the country's technical manpower needs, including self-employment in the field of industry, business and agriculture.

Policy on Technical and Vocational Education

The policy on technical and vocational education in Ghana reinforces the objectives of the on-going educational reforms programme and enhances the successful implementation of the programme, which aims at producing categories of qualified and skilled manpower for various occupations and national development. As a background to the nationalisation of technical and vocational education, the policy takes cognizance of the fact that investment in human resource development is a major criterion for economic growth and

extends the capacity of the people to meet the challenges of the requirements for accelerated development (Dzobo, 1974; Anamuah-Mensah, 2002).

Objectives of Technical/Vocational Education and Training in Ghana

1. To provide trained manpower in science, technology and commerce.
2. To provide personnel with technical knowledge and vocational skills necessary for agriculture, industrial, commercial and economic development while at the same time paying attention to environmental issues.
3. To give training and impart the necessary knowledge and skills leading to the provision of operatives, artisans, craftsmen, technicians and other middle-level technical personnel.
4. To equip students with the relevant productive and entrepreneurial skills that will prepare them for self-employment.
5. To equip students who have completed Basic Education with those occupational skills that will enable them to enter into gainful employment in industry and commerce.
6. To encourage the increased participation of women in education, training and employment in technical occupations.
7. To provide sound foundation for further education for those students who may wish to continue their education during their working life in the context of life long education.

8. To facilitate the polytechnics with their elevation to tertiary status, to provide technical education at the tertiary level.
9. To expose pupils at the Basic Education level to a range of practical activities in the vocational field in order to make them familiar with and stimulate their interest in vocational subjects and to give them equal opportunity to choose their future careers in either the technical or general education.

The Role of Vocational Technical Education (VET)

According to Aggrey, (1993), vocational and technical education is designed to prepare skilled personnel at low and middle levels of formal education for one type of occupation or trade. The International Labour Organisation (1981) also explains vocational technical education and training as all programmes in schools or school that prepares learners for a specific trade (pg. 146). Based on the foregoing definitions, it could be concluded that Votec's role is to prepare students for entry into employment and advancement on the job. Thus Votec is education for work; that is it is career-oriented. It is also the role of Votec to ensure the academic advancement of its graduates.

Difference Between Technical and Vocational Education and Training in Ghana

The history of technical and vocational education and training can never be written without knowing what is meant by Technical and Vocational.

According to UNESCO/ILO (1962/1974) the term Technical/Vocational Education and Training which has been adopted refers to those aspects of educational process involving, in addition to general education, the study of technologies and related sciences and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of economic and social life.

The broad educational goals of Technical/Vocational education distinguish it from Vocational Training which is directed to developing the particular skills and related knowledge required by a specific occupation or group of occupation. When used separately, each element takes on a restricted meaning.

Technical Education: Technical education is that type of education designed at upper secondary and lower tertiary levels to prepare middle level personnel (technicians, middle management etc) and at University level, to prepare engineers and technologists for higher management positions. Technical education includes general education, theoretical, scientific and technical studies and related skill training. The component of Technical education may vary considerably depending on the type of personnel to be prepared and the education level.

Technical/Vocational education has from time immemorial not enjoyed the same status as science education. It has been treated as second rate discipline, and thus has become a subject for the underprivileged masses of

society. It is only recently that it has been realized that Technical/Vocational and science education are correlated.

In recognition of the scientific and technological advancement-taking place in the world, Ghana has recognized the need to reform her educational systems for relevance and efficiency since 1987. In contrast to the former system, which emphasized predominantly academic curricula and prepared the youth mostly for white-collar jobs, there has been a paradigm shift. A shift which is aimed at vocationalising education with practical orientation at all levels to meet the socio-economic needs of the individuals, the community and the nation as a whole to academic works. Technical institutes owe it a duty to ensure that their graduates acquire certified knowledge and skills that would enable them to satisfy the needs and aspiration of industries in Ghana.

What is called technology today was formally restricted to technical education which in essence meant skill training in craft and in certain trades such as building, auto mechanics, electrical installation, painting and decorating and of course catering. If there has been any field or sector knowledge that lays equal emphasis and exhaust the three educational domains (cognitive, affective and psychomotor), it is technology. Technology in its entirety involves training in the process of applying both science and technology education to practical problems right from the primary to the tertiary levels. That is why technology education is more demanding in practice than technical education. It aims at developing practical skills, as well as the creative and innovative abilities of the

individuals. It also enhances and facilitates their problem-solving and decision-making skills.

According to Ajeyalemi (1990), on few occasions, it becomes difficult to make a distinction between science and technology because of the intimate linkage between both of them, yet they differ. He continues to say that the difference is that while science is concerned with the search for understanding of knowledge about nature, technology is concerned with the application of knowledge in the solution of practical problems of everyday living. In other words, science is concerned with knowing but not doing, while technology aims at getting done and efficiently.

Vocational Training: Vocational training is training for work – any kind of work which the individual finds congenial and for which society has a need. The American Vocational Association has defined Vocational training as training designed to develop skills, ability, understanding, attitudes, work habits and appreciation needed by workers to enter and make progress in employment on a useful and productive basis. The work in which people are engaged ranges from menial tasks to intellectual pursuits. For certain types of employment, the amount of specialized training is relatively small.

Training for work can be provided through organised vocational training programmes in schools or through similar programmes in business, industry or agriculture. Specialized training for work of a less skilled variety is frequently accomplished on the job: training for work demanding competence of a higher

of a higher order is usually provided through organised vocational programmes. This can be of two kinds:

1. That which is provided to an employment set-up for the purpose of preparing a person(s) to enter employment; and
2. That which is provided after one has entered employment for the purpose of developing a higher degree of competence in the worker.

Jennings-Wray (1982) is of the view that the major objective of including productive work as an integral activity of the school system is that of maintaining a balance between academic and practical skills in trainees' growth and development. Productive work is the only real foundation of true knowledge. It should provide knowledge and skills to improve self and community.

Hoppers, (1993) consistently point to the poor alignment between training outputs and the demands of societies. He lamented that despite the need for technically and vocationally trained manpower, education in humanities have enjoyed prime favour over technical and vocational training.

In another development, Almegren, (1996) agrees with the propounded ideas of Hoppers, (1993). He further explains that because technical and vocational training are rather expensive venture to undertake, it is not out of place to realize economic objectives feature so strongly in the justifications for technical and vocational training programmes. Broadnax (1979) was convinced in this assertion and points out that education must be related to production

because the biggest problem facing society at this time is the problem of unemployment. This situation, he believes, cannot be tolerated among the youth who leave school clinging to certificates which make them feel that the only jobs possible for them is behind some desk. The situation is a characteristic feature of almost all developed countries.

Livingstone (1986) also sees the need for intensive and extensive vocational training, especially in development countries. He points out that there in the need to lay emphasis on education-productive work linkages into the training system. He further states the need to develop the pre –vocational and vocation skills which bear relationship to social-economic realities.

Foster (1965) on his part points out that the rejection of vocational training by the youth – in Africa – was a reasonable response to a situation in which the rewards and the availability of other types of work in the modern sector of the economy was lacking. It is obvious that the objective of reducing youth unemployment and promoting self-employment has met with varying degrees of success. Evaluations have revealed a lack of employment opportunities for vocational graduates as a serious problem. This is somewhat disappointing, since the reason for vocational institutions is to train people to fill job requirements. It is thus not surprising that Jennings-Wray (1982) laments the limited extent to which vocational training has succeeded in getting the youth to set up their own self-employment projects.

Pecku (1972) attribute this limitation to the low status ascribed to the curriculum of the vocational institutions. Secondly, the quality of these

programmes is affected by the fact that the poor salaries offered do not attract the best vocational institutions. These institutions have no training graduates and have the biggest percentage of pre-trained instructors.

A further survey carried out in June 1985 in Zambia by ILO (1986) revealed that 40% of all 1983 graduates and 60% of all the 1984 graduates from vocational institutions were unemployed and had never secured a job or worked casually ever since their graduation. Twenty five percent of the 1983 and 11.87% of 1984 vocational graduates had originally secured employment but were discharged after a short period of time. Fifteen percent of the 1983 and only 8% of the 1984 vocational graduates were in permanent employment either in the formal or informal sector in their respective trade. Some of the 1983 vocational graduates had accepted low level poorly paid types of employment incompatible with their acquired skills. The results of this survey epitomize the lack of employment avenues for vocational graduates coupled with the inadequate training offered them.

Sarpong (2000) is of the view that results pertaining to the achievement of the objective of developing positive attitudes towards manual work or physical work or vocational training have not been too encouraging. He however describes its achievements as commendable in that it exposed the youth to basic tools and equipment in the various trades and enabled them to produce finished articles. He asserts that programmes designed to train unemployed youth in skills needed by the community were perceived by parents and their children as being only suitable for dropouts. Napier (1972) sees the difficulties encountered

with standards of training from the viewpoint of trainees' recruitment at different levels of technical and vocational competence.

Historical Background of VOTEC Education in Ghana

Rensburg(1969) observes that the beginning of vocational/ technical education dates back to ancient days where parents taught their vocations to their younger ones. However, social needs for industrial education developed in relation to the economy. As industry developments proceeded to become a dominant factor in the economic life of America, the educational implications of forces such as manual labour, schools, mechanical institutions and associations of forces, craft men placed emphasis on the need for industrial development. From 1870 to 1906, concerted attention and action was focused upon the general problem of industrial education but of the crucible of the discussions came the foundation of a new era in education. The establishment of Agricultural Mechanical College (Marvill Act of 1861) did much to clarify the image of industrial education in the public mind.

The greatest boost came from the report of the Douglas Commission in Massachusetts in 1906, whose thorough investigation of the nature of and need for industrial education serves as a catalyst to increase public enthusiasm for vocational education. As Broadnax (1979) described the report was the opening wedge of the vocational drive in America.

Like America, the development of Vocational/Technical education in Ghana dates back to ancient days when it was embedded in the multivalent

indigenous education offered informally to the younger generation. When formal education began in 1529 in the then Gold Coast, little attention was given to Vocational/Technical education. Vocational/Technical education was relegated to the background, until 1950 when positive attempts were made to introduce subjects such as industrial, agricultural and trade training into schools to offset the apparently bookish nature of education.

The Ministry of Education Ghana (1972) observes that this was as a result of the report of the 1847 educational committee of the Privy Council on the British educational policy in its colonial areas. The policy aimed among other things to teach children how health could be preserved through proper diet, cleanliness, ventilation and clothing as well as training children in handicrafts.

In 1877, the Basel Mission started a three-year course in Accra to train boys in joinery, carpentry and metal works. In the 1880s, the first technical school was started in Cape Coast to train boys to become joiners, blacksmiths and printers. In 1882, the Wesley mission started another Technical school at Cape Coast. The courses offered were similar to those offered in the schools established in the 1880s. (Ministry of Education, Ghana, 1972).

Governor Gordon Guggisberg also provided a driving force towards the development of Vocational and Technical Education in Ghana when he opened an engineering school at Achimota in 1920. This school produced the country's first engineers. In 1922, four government trade schools were opened at Yendi (transferred later to Tamale), Asuansi, Kibi and Ashanti Mampong.

The Accelerated Development Plan (ADP) of 1951 also made remarkable contributions towards the development of Votec education in Ghana as it recommended the increase in the awards of scholarships to students in Vocational and Technical schools in the country. The ADP also recommended the establishment of four secondary technical schools at Tarkwa, Kumasi, Accra and Sekondi-Takoradi.

The boost of Vocational Technical education in recent times came as a result of the 1987 Educational Reforms. Under these reforms, vocational technical education started right at Junior Secondary School [JSS] level. It also consisted of 3-year second cycle education which was structured to include vocational schools, technical schools, secondary technical schools and senior secondary schools [SSS]. The senior secondary schools were also to have various departments, including Vocational Technical departments.

Also, a number of programmes such as Vocational Technical Component of UNDP/ILO umbrella programme and the current World Bank project (Vocational Skills and Informal Support project) have been put in place. These are to improve both formal and informal Technical and Vocational Education and Training in Ghana.

The technical education has come to stay; the department was under the Ministry of Education and the Director re-designated Chief Technical Education Officer. In 1964, Technical Education was placed under the then Ministry of Science of higher education. With the change of government in 1966 technical education was again brought back under the Ministry of Education and there it

remained until 1974 when it became part of Ghana Education Service. As a result of this last change, technical education has lost its autonomy. Technical and Vocational Education and Training is now being given attention it deserves for National Socio-Economic Development by the Ghana Government, Ministry of Education, Ghana Education Service and the Ministry of Employment and Social Welfare and NVTI (National Vocational Training Institute).

Technical and Vocational Education and training has increased both its public institutes and programmes appreciably and enhanced the quality of the programme up to technician levels. Currently, there are about twenty eight (28) government technical vocational institutes in the country.

Following a decision of government in April 1955, the Technical Education branch of the Educational Department was separated from its parent body and the department of technical education came into being in January 1956.

In order to provide the basic education and training necessary for good tradesmen and craftsmen, it was decided that all craft courses should follow the lines of those of the “City and Guilds of London Institute”. Considerable modification was necessary in both syllabus and examination paper to suit the needs of Ghana and negotiations were opened with the City and Guilds with the subject.

It was further decided that, before entry to the specialized City and Guilds course, the ex-middle school pupils should undergo a preparatory course to raise their standard in English, Mathematics and Elementary Science to

introduce to them the principles of geometrical and technical drawing and develop their manual dexterity by practical training in woodwork and metal work. To provide for technician class, the City and Guilds were asked and they readily agreed to conduct in West Africa examinations of standard similar to the national certificate in the United Kingdom. The first students to the course leading to this examination were admitted in September 1958.

Side by side with the re-organisation of the craft courses and the preliminary work on the technical courses went with the development of commercial subjects and domestic subject courses. In August 1956, the department of technical education merged with the Ministry of Education and became the Technical Education Division of the ministry.

In April 1958, the Government of Ghana invited the director of City and Guilds of London Institute to visit Ghana and inspect the Government Technical Institutes and trade schools. The invitation was accepted with the result that consequently all government institutes now had to be approved by City and Guilds and students attending them were awarded full City and Guilds certification after successful completion of their craft courses.

Foster (1967) attributed the unemployment problem in the country to the dysfunctional nature of the education introduced into the country by the colonial government. The relevance of an academic education during the colonial times was questioned and described as impractical and to inspire distaste for manual and technical work. The reason given by Rensburg (1969) as the main purpose of the existing pattern of education in Africa also throws more light on this

point. For Rensberg (1969) the main purpose of the existing pattern of secondary education which was directly modeled on the British Grammar school or French Lycee, it was to prepare young people for life in the formal sector. It has been observed that there has been a remarkable expansion of educational facilities after independence in Ghana. However, the courses of study were not relevant to Ghana's experiences. Livingston (1986) suggested that, it is necessary to adapt the Educational and Training System to the needs of the urban and rural market. He described the educational system as often too academic, fostering a preference for 'white-collar' jobs and wrong attitudes towards agricultural and manual work.

Self-Employment

Hopper, (1985) as cited by Atsatorme (1988), realized that the vocational training given to Nepalese graduates were irrelevant because it did not focus on providing attitudes and skills essential for responding to one's environment by concerning, starting and managing a business enterprise. Even though the purpose of the vocational programme was to provide terminal training, most of them continued their study at higher levels. Hopper, (1985) advocated collaboration between institutional and industrial vocational training and called for making vocational educational programmes appropriate to the societies and economies of developing countries.

The researcher feels that it is not only a matter of combining vocational/ industrial training and institutional training. The main issue is whether the

combination would provide the relevant skills that would enable the graduates to establish their own enterprises. Attempts therefore should be made to find out what these relevant and necessary skills are to enable the institutions provide the relevant skills to the students.

Sutton (1965) observes that no amount of technical education could produce skilled workers as some Africans like Sekou Toure were advocating. He made reference to a study in Uganda to support his point that the country's effort to produce technicians through technical schools was failing. He made a further reference to a report on industrialisation in the Gold Coast by Arthur Lewis. In that report Lewis argued that it is erroneous to believe that entrepreneurship requires mainly technical knowledge and capital. If people have management ability, they would in most cases, acquire technical knowledge and capital to work with.

On the basis of this, Sutton (1965) advocated the acquisition of technical and commercial skills on the job in the specific context where they make sense. He felt that better technicians could have been produced from more emphasis on basic general education supplemented by technical training on the job.

Abdulla (1996) wrote and analyzed the perception of private sector firms towards the quality of the vocational education system. His sample consisted of the respondents who were either owners or managers of private sector firms employing more than one person. Three hundred and thirty firms were surveyed of which 250 (74.53%) were considered usable. Respondents completed a mailed questionnaire that used a 4-point Likert scale. The questions

using this scale explored perceptions regarding various aspects of which firms would be willing to cooperate with the vocational education system. An open question ended questionnaire allowing respondents to make suggestions for changes to enhance cooperation between the private sector and the vocational education system. Chronbach's alpha for reliability of the instruments was 74.

The major findings of the research showed that respondents' perceptions toward vocational education as a whole were positive. However, many respondents felt that the current vocational education programmes and curricula were not sufficient to fulfill their manpower needs (87.2%) and that the programmes needed reform (85.5%). Respondents re-enforced the importance of students of vocational schools learning about the work place and the system of work and workers (92.0%) and that they should explore various occupations while they are in school (81.2%). Respondents believed that students are less experienced, poorly trained and that they lack awareness of job requirements discipline, self-confidence and aspiration.

Despite the negative perception of students' attributes, respondents were willing to hire vocational school graduates and they thought that this process would not cost them extra money. The majority of private sector is willing to cooperate with vocational education schools but it seems that there is little, if any, co-operation currently.

Finally, based on this study's findings, recommendations for practice and further studies were proposed for improving the quality of the vocational

education system and strengthening the cooperation between this system and the private sector.

It has been stated that in global economy, international capital and transnational companies make the market and define the rules. The world has become information-based economy recently. The countries using information technology effectively gain greater advantages within the globalism process. Funds managers, bankers, big companies and moreover, millions of investors can transfer great amounts of money to the other parts of the world by clicking a button on a computer in the new global economy. Globalisation in world scale is the reflection of expansion of information, capital, service and good transfer and it indicates the economic solidarity among the countries.

The developments of global economy made the VET more significant. VET has a great role not only in meeting the demands on developing the economical structure but also providing human resources who have the basic knowledge and skills. This situation is observed in the VET conference held in South Africa and USA in 1995, Taiwan and the USA 1996, Finland in 1997 and Turkey in 1998. The common result that came out from the conference is: The world is becoming a village which has a unique economy. The human power movement in larger areas has brought the necessity to recognize the education and training system of every country. The need to make arrangements that will enhance education and training suitable for the economy and own culture of every country has come to surface under the lights of these developments in the world.

Perception

Perception is the process by which organisms interpret and organize sensation to produce a meaningful experience of the world (Lindsay & Norman, 1977). Sensation usually refers to the immediate, relatively unprocessed result of stimulation of sensory receptors in the eyes, ears, nose, tongue, or skin Perception, on the other hand, better describes one's ultimate experience of the world and typically involves further processing of sensory input. In practice, sensation and perception are virtually impossible to separate, because they are part of one continuous process thus, perception in humans describes the process whereby sensory stimulation is translated into organized experience. That experience, or percept, is the joint product of the stimulation and of the process itself. Relations found between various types of stimulation (e.g., light waves and sound waves) and their associated percepts suggest inferences that can be made about the properties of the perceptual process; theories of perceiving then can be developed on the basis of these inferences. Because the perceptual process is not itself public or directly observable (except to the perceiver himself, whose percepts are given directly in experience), the validity of perceptual theories can be checked only indirectly.

Historically, systematic thought about perceiving was the province of philosophy. Philosophical interest in perception stems largely from questions about the sources and validity of what is called human knowledge (epistemology). Epistemologists ask whether a real, physical world exists independently of human experience and, if so, how its properties can be learned

and how the truth or accuracy of that experience can be determined. They also ask whether there are innate ideas or whether all experience originates through contact with the physical world, mediated by the sense organs.

As a scientific enterprise, however, the investigation of perception has especially developed as part of the larger discipline of psychology. For the most part, psychology bypasses the questions about perceiving raised by philosophy in favour of problems that can be handled by its special methods. The remnants of such philosophical questions, however, do remain; researchers are still concerned, for example, with the relative contributions of innate and learned factors to the perceptual process.

Such fundamental philosophical assertions as the existence of a physical world, however, are taken for granted among most scientific students of perceiving. Typically, researchers in perception simply accept the apparent physical world particularly as it is described in those branches of physics concerned with electromagnetic energy, optics, and mechanics. The problems they consider relate to the process whereby percepts are formed from the interaction of physical energy (for example, light) with the perceiving organism. Of further interest is the degree of correspondence between percepts and the physical objects to which they ordinarily relate. How accurately, for example, does the visually perceived size of an object match its physical size as measured (e.g., with a yardstick).

CHAPTER THREE

METHODOLOGY

This chapter deals with the methodology of the research design of the study. It begins with an introduction followed by a description of study design, the population and sample. The methods of data collection and analysis are also described in this chapter.

Study Design

This exploratory survey gave the researcher the opportunity to familiarize himself with the actual problems on the ground with regard to the topic chosen. Some of the practical problems facing the graduates in the institutions were crisscrossing (were almost the same to each institution). It was also done to see if there could be any generalization in the institutions concerned. Some of the problems identified were as follows:

1. Insufficient practical training to the trainees. This was found on the timetable.
2. Curriculum not reflecting on the needs of the society. (This was found in the syllabus being used).
3. Obsolete equipment in use. (Found at the workshop).

4. Lack of complete industrial attachment for the students. This was made known to me by the Heads of department from the various institutions.

Further trips were made to Electricity Company of Ghana, Ghana Water Company and AESL. The explanations assigned to their inability to employ the graduates into their fold were:

a. The risk involved in their employment.
b. Lack of financial constraints
c. Insurance procedure and policies not clearly shown in their condition of service as regard to the employability of the students, and
d. Some of the students are also very lazy and many other reasons.

Having identified the situation on the ground from the survey conducted, the researcher decided to use the descriptive (case study) sample survey. Gay (1987) postulated that descriptive sample survey involves collecting data in order to test hypothesis or to answer questions concerning the status of the subject of the study. A descriptive sample survey determines and reports in the way things are (p.189).

In a descriptive sample survey, as the name implies, information is referred from a population of interest by the researcher. It is also concerned with conditions or relationship that exist, practices that prevail, beliefs/point of view, or attitudes that are held, processes that are going on, effects that are being felt or trends that are developing. Its major purpose is to tell what is.

There are two major types of descriptive surveys that can be conducted – cross sectional survey and longitudinal survey. A longitudinal survey collects information at different points in time in order to study changes over time Nelson (1993). The cross-sectional survey was used because after considering the number of people involved in the study, it was thought to be the more appropriate design.

Population

The target population for the study included all Technical/ Vocational institutions, their educators, students, individuals, organisation and employers in the Cape Coast Metropolitan as identified from the Regional Education Office of GES and the Association of Ghanaian Industry (AGI) and Ghana Employers Association (GEA). The main objectives of these institutions are to equip the trainees with skills to enable them fit into the industry and commerce or set up their own business or own workshop so as to fit into the society. (Commonwealth Secretariat, 1987/9, 9).

Sample Size

The sample for the study was chosen conveniently from the population of employers, organizations, students and VET teachers in the Cape Coast Metropolis. A sample size of 192 was targeted but only 157 respondents obliged as shown in table 3.

Sampling Procedures

To get the sample size, simple random sampling methods were used to select teachers and students from Cape Coast Technical Institute and Cape Coast Polytechnic, because of their large size. It gave everybody an equal chance to be selected from the population. Purposive sampling method was also used to select workers of Electricity Company of Ghana and Ghana Water Company. This method was used because their size was not large.

In any case the sample size will not affect the result of the study because the Vocational and Technical Institutes in the country admit students from all over the country. Also their activities are coordinated by a central agency, the National Coordinating Committee on Technical and Vocational Education and Training (NACVET).

Even though Asuansi Technical and Briwa Vocational and Rehabilitation Centre were visited during initial survey, it was just to find out if there could be any generalization of the perception among the Cape Coast Metropolitan schools and also that of the public that has these graduates, and also to argue at length on the perception that being created by the public.

To get the total number of respondents from the industries/organisation, questionnaires were given to the supervising heads and administrators in their organisations. I was informed that it was given to the graduates who have gone through the Technical and Vocational education and training. In the case of the institutions, Heads of departments collected them and distributed to students in

various departments. The departments were Catering, Electrical Engineering, Dressmaking and Mechanical Engineering.

The departments were purposively sampled for the study because they were departments where Vocational/Technical courses common to all institutions selected for the study could be found. A limited time was given to the population (respondents) because the students were going on vacation and also the organisation because of their schedule, time was not on their side. As at the time of collection, most respondents had not completed their forms.

The following figures below show the institutions, organisations, and departments in the institutions and respondents of the population.

Table 1

List of Sampled Institutions and Industries

No.	Institution
1	Cape Coast Polytechnic
2	Cape Coast Technical Institute
3	Electricity Company of Ghana
4	Ghana Water Company

Table 2

Departments in the Sampled Institutions

Departments
Catering
Dressmaking
Electrical Engineering
Mechanical Engineering

Table 3

Population and Number of Respondents

Population/ Respondents	Responses	
	No. sent	No. collected
Employers	42	37
Industry/Organisation	40	34
Students	72	53
Teachers	38	33
Total	192	157

Table 3 shows distribution of population and responses of various respondents. Out of 192 questionnaires, which were sent out, 157 were retrieved.

Instrumentation

Questionnaire and structured interviews were adopted as data collecting instruments. These techniques were supplemented by observation of workshop materials, tools and equipment. Questionnaire was used as part of data collection because the population involved in the study was large.

This was divided into five sections. Section one was the BIO-DATA of the respondents. This section was designed to find out the respondents' level of education, age, position in the organisation/ institution and how long the person has been schooling or working. Instrument A covered the responses by Employers on contributions of Vocational and Technical Education towards industrial development in the Cape Coast Metropolitan. Instrument B consisted of fourteen (14) items asking students on Employability of Vocational and Technical graduates. Instruments C and D consisted of twelve (12) items with five items requesting information from teachers on factors that facilitate or inhibit the restructuring of vocational and technical education, whilst seven (7) items questioned teachers on the government's responsiveness to the needs of Vocational and Technical Education. Instrument E consisted of twelve (12) items asking Industries/ Organisation on Government's responsiveness to the needs of Business and Industry.

The thirty-six (36) items were constructed using the 5-point Likert type scale. These were:

SA – Strongly Agree

A – Agree

U – Uncertain

D – Disagree

SD – Strongly Disagree

This likert scale method of measuring the performance of the Votec student in the job market was selected for the study because it is the most popular, easy to administer and to score (Borg & Gall, 1989).

In all 192 were sent out and 157 were retrieved. Apart from the number which was retrieved, one to one interview was conducted on heads of departments, heads of institutions and individuals. This was done to give on the spot account of these personalities of what is prevailing as regard to the perception of those personalities. The interview was also necessary because if offered the researcher opportunity to clarify a lot of issues and also got their personal feelings about points raised on the perception about Vocational/ Technical graduate performances on the job market during the interview.

Interview Schedule

One on one interview was used by the researcher to collect information from the Heads of institutions and the heads of departments of the selected courses. The purpose of the interview with the heads was to find out the problems hindering the performance of the Vocational and Technical school graduate in the job market.

Research Procedure

Introductory letters, which explained the purpose of the study, were presented to all the heads of institutions and the organisations in which the study was carried out. The questionnaire was administered personally by the researcher to the following: Cape Coast Polytechnic, Cape Coast Technical Institute, Electricity Company of Ghana and Ghana Water Company. The instructions were read and explained to the respondents. In the organizations, the bulk was given to the administrative heads of department, and some key supervisors. The explanations were also given to the above mentioned categories. On the part of the students some two weeks were given to them since most of them were about to write their examinations. On the part of the organizations, they were collected by their supervisors and were handed over to the administration. The ressearcher collected them later.

Data Analysis Procedure

The data collected were edited, coded and analyzed. Descriptive statistics was used to show the existence of relationship and translate them meaningfully as well as indicate the central point around which the data revolve. The questionnaires collected were numbered serially to facilitate easy analysis.

In scoring the Likert scale, a positive item was scored by the following key. Strongly Agreed (SA), Agreed (A), Uncertain (U), Disagreed (D), Strongly Disagreed(SD).

CHAPTER FOUR

RESULTS AND DISCUSSION

This chapter presents the findings that emerged from the study. It describes the background of respondents, the nature of Vocational and Technical Education in Cape Coast and the industrial needs of the Metropolis. It then assesses the role of Vocational and Technical Education in industrial development in the Metropolitan and the perceived role for Government in enhancing employment prospects for Vocational and Technical graduates.

Contribution of VOTEC to Industries in Cape Coast

The Ghana Poverty Reduction Strategy requires each District Assembly to provide a medium Term Development Plan. With this being a requirement, the Cape Coast Metropolitan Assembly produced one for the period 2002 – 2004. This document provides the blue print for the socio – economic development of the metropolis in conformity to the general goal of the Country. It is rather unfortunate that this document is rather silent on the extent to which vocational and technical education could contribute to the industrial development of the Cape Coast metropolis. It is also unclear how the Metropolitan authorities could stimulate industrial growth that might require upgrading of Votec education. It is therefore apparent that Cape Coast

Metropolitan has no laid down policy regarding the contribution that vocational and technical education has towards the industrial development of the Assembly.

Perception of the Role of Government

Traditionally vocational and technical training has been the preserve of private entrepreneurs. With the evolution of government intervention in the 1960's the institutions involved have increasingly become public. From the teacher's perspective, government is a key payer in Vocational and Technical delivery as depicted in table 4.

Table 4

Role of Government in Vocational and Technical Education by the Teachers

Perception	SA%	A%	UN%	D%	SD%	Total%
Government is responsive to needs of Vocational and Technical Education	26.1	39.1	13.0	8.7	13.0	100
Government is committed to expanding Vocational & Technical Education	8.7	60.9	13.0	8.7	8.7	100
Government provides sufficient funds	8.7	39.1	-	21.7	30.4	100
Government provides adequate facilities	8.7	17.4	26.1	26.1	21.7	100
Government is committed to maintaining high standards	21.7	8.7	21.7	30.4	17.4	100

The majority of teachers believe that government is responsive to the needs of Vocational and Technical education (65.2%) and that government is also committed to expanding Vocational and Technical training and education (69.6%). However other issues relating to government commitment to Vocational and Technical education are more contentious. More teachers (52.1%) disagree that the government allocates sufficient funding than agree (47.9%). More respondents (47.8%) also disagree that government provides adequate facilities, equipment and resources than agree (26.1%). Almost an equal percentage (26.1) are not sure about the issue. With regards to government commitment to ensuring high standards 47.8% are doubtful while 29.4% agree that government is committed to this. However small percentages (21.7%) are not sure of government intentions. Clearly the whole issue of government involvement in Vocational and Technical is not clear cut as to ensure unanimous perception of its role.

For those in industry who are the recognized users of Vocational and Technical educational competence, government involvement in this sector must be welcomed. However the perception of industrialist of the government's present role is uncertain as revealed in Table 5.

Table 5

Perception of the Role of Government in Vocational and Technical Education to the Needs of Business/Industry

Perception	SA (%)	A (%)	UN (%)	D (%)	SD (%)	Total%
Government is responsive to the needs of business and industry	41.7	50.0	8.3	-	-	100
Government provides attractive incentives and infrastructure to business and industry	-	50.0	-	41.7	8.3	100
Government provides conducive environment for research and development activities	12.5	33.3	12.5	41.7	-	100
Government is attracting large foreign direct investment	8.3	45.8	33.3	12.5	-	100
Technology transfer by multinationals is satisfactory	-	-	66.7	12.5	20.8	100
Government's plans and activities to help local entrepreneurs establish and expand is successful	-	20.8	33.3	33.3	12.5	100
The creation of local technological capability is satisfactory	8.3	66.7	-	25.0	-	100
The participation of local entrepreneurs in the domestic economy is satisfactory	8.3	41.7	12.5	37.5	12.5	100
Global economy	12.5	33.3	16.7	25.0	12.5	100
Cape Coast Metropolitan can achieve the status of industrial enclave by year 2020	-	25.0	33.3	29.2	12.5	100

Business and industry need competent and skilled manpower, preferably well-trained Vocational and Technical graduates, to handle the middle-level technical problems of small-medium scale industries. If government promotes these small-medium enterprises they would then be in a strong position to offer the conducive environment which would attract Vocational and Technical graduates and also extended pressure for the upgrading of training facilities in the Vocational and Technical institutions.

There is general agreement that government has been responsive to the needs of business and industry with 91.7% of respondents agree that this is so. Indeed 41.7% held this view strongly. And while 8.3% were unsure no one disagreed. This implies that respondents are satisfied by efforts made by the government to facilitate the growth of their businesses.

However, for this to happen, incentives and infrastructure must be provided to satisfactory limits. The perception here is vastly different from the earlier one. Fifty percent are in agreement while 50.0% are in disagreement with 8.3% of them in strong disagreement. We thus see here, an even support for the two positions viz government is doing well/not doing well with regard to assisting business by providing infrastructure and incentives.

For an established business to grow research and development must thrive to provide the technological breakthroughs that might offer handsome reforms to the entrepreneur. The perception that such research and development is being fostered was high (45.8%). This is significant and opens up a whole new arena for vocational and technical graduates in the Metropolitan. However

the perception that this possibility exists is pessimistic as exhibited in Table 2. Only 20.8% of respondents agree that government plans and actions have been successful. Over 45% disagree and 33.3% are not sure. Clearly indigenization of technology, most of which originate from abroad is doubtful given present governmental posture and this does not appear encouraging for Vocational and Technical graduates. On the other hand government plans and actions to help local entrepreneurs establish and expand their business accounted for 75% of respondents. Only 25% disagreed. Expansion of business may relate to financial and economic policy but may pay-off in terms of employment of Vocational and Technical graduates.

The Cape Coast Metropolitan has a development plan that anticipates industrialization of the area by the year 2020. The industrialists involved clearly hold a different perception from the bureaucrats and professional who wrote the document for Table 5 reveals only 25% of respondents in agreement with 41.7% in disagreement and 33.3% not sure. Clearly the hope that Cape Coast can be an investment enclave by the year 2020 is doubtful and this would not provide much comfort to teachers and graduates of Vocational and Technical Education institutions.

Government policy in official documentation implies a concern for this type of education and this must of necessity translate into expansion of institutional capacity, including provision of more funding and adequate facilities, engagement and resources as well as support for encouraging high standards and excellence in practical activity.

Perception of VOTEC Graduates' Contribution to Industry

A sample of 43 students with different levels of training and competence in vocational and technical skills were interviewed to determine their perception of their own abilities to assist in the industrial development of Cape Coast. Their responses were uniformly positive.

Student reactions to statements relating to their perceived acquired skills, psychological preparation and academic preparation for the world of work were examined in tables. Table 6 gives an indication of student perception of acquired skills during VOTEC education.

Table 6

Perception of Acquired Skills

	SA		Agree		U		D		SD	
	No	%	No	%	No	%	No	%	No	%
Statement										
Necessary communication skills	7	16.3	15	34.9	11	25.6	6	14.0	6	14.0
Social interpersonal skills	17	39.5	8	18.6	16	37.2	2	4.7	-	-
Technical skills	21	48.8	14	32.6	8	18.6	-	-	-	-
Critical thinking & problem solving skills	7	16.3	11	25.6	7	16.3	17	39.5	1	2.3
Entrepreneurial skills	14	32.6	16	37.2	12	27.9	1	2.3	-	-

Over 51.2% of students agreed that they had the necessary communication skills required in their work. But 28.0% disagreed and some 25.6% were uncertain. Thus there was a near clear agreement on of favourable disposition to communication skills acquisition. The same position held, to a lesser extent, for social interpersonal skills where 57.1% of respondents agreed they possessed this skill while only 4.7% disagreed but 37.2% were uncertain. Social skills and communication skills work in tandem in any business to ensure clear understanding of roles and duties.

Students were however unanimous that they did possess the necessary technical skills for the job. Over 81.4% of students agreed with this while 18.6% were uncertain. Technical skills are what Vocational and Technical is all about and it would have been most damaging if student assessment of this essential ingredient was negative, even by a small margin. The difference between academic studies and Vocational and Technical students is the development of critical thinking skills and problem-solving skills in the student. Academic studies lay much emphasis on this but this does not mean technical studies does not require an element of critical thinking to unlock complicated technical and scientific situations. Student perception of the development of these skills in Vocational and Technical indicate that only 41.9% of them believed they had imbibed these skills in their studies while 41.8% disagreed. Over 16% of them were uncertain either way. This splits opinion evenly as to whether technical education is about critical thinking or problem solving. The debate is here not conclusive as explained by Ajeyalemi (1990).

One thing a Vocational and Technical student is relatively expected to do is to be self-employed and manage on their own. This implies an acquisition of some entrepreneurial skills to function. According to table 6, 69.9% of students, agree that they have this skills and by implication they is thus able to function effectively as self-employed person. However, some 2.3% disagree, a negligible figure were it not for the over 27% who were uncertain. This gives over 30% of persons who have doubt about their abilities, ad derived from technical education to maintain their own businesses.

Clearly, however, students of Vocational and Technical are generally content that they have the requisite skills to be able to contribute to the industrial development of Cape Coast.

The psychological outlook of individuals is a necessary input into their effective functioning of whatever enterprise they may be involved in. In the world of work these psychological inputs include self-motivation and a positive attitude. The level of which students think they are self-motivated is indicated in table 7.

Table 7

Perception of Self-Motivation of Graduates

Response	No.	%
No response	4	9.3
Strongly Agree	21	48.8
Agree	13	30.2
Disagree	3	7.0
Strongly Disagree	2	4.7
Total	43	100.0

Clearly, the overwhelming majority (79.0%) agreed that they were self-motivated in their work with its consequent implication for on the job psychological. Some 11.7% disagreed that they had self-motivation which may either be a product of the individual, the education or interaction of both. But the conclusion to be drawn here is that Vocational and Technical graduates are capable of self-motivation and thus capable of working hard on their own.

Another necessary psychological ingredient is attitude towards work. Attitudes impact on output and when asked if they had a positive attitude, Vocational and Technical graduates replied variously as in Table 8.

Table 8

Positive Attitude towards Work by Graduates

Response	No.	%
No response	7	16.3
Strongly Agree	9	20.9
Agree	19	44.2
Uncertain	1	2.3
Disagree	5	11.6
Strongly Disagree	2	4.7
Total	43	100.0

Over sixty-five percent of respondents agreed that they had a positive attitude towards work. Only 16.3% disagreed. The implication is that most graduates were confident in their work habits and abilities as indicated in table 8.

A final message of Vocational and Technical education doubts to address gaps in technical manpower availability is the access to employment opportunities available within the Metropolitan. The availability of this reflects in individual's decision to pursue Vocational and Technical education and to stay on in the field. Graduates perception of employment availability for them compared to academic secondary education was favourable as revealed in Table 9.

Table 9

Graduates have Better Employment Opportunities Relative to SSS Graduates

Response	No.	%
No response	4	9.3
Strongly Agree	12	27.9
Agree	10	23.3
Uncertain	4	9.3
Disagree	8	18.6
Strongly Disagree	5	11.6
Total	43	100.0

Over 51% percent of respondents had perception of better employment opportunities, relative to academic graduates. But 30% disagreed. Another 18.6% were uncertain. This casts doubt on the question of competence and ability of Vocational and Technical graduates relative to academic education as indicated in Table 9. However, the spirit to compete is often more important than the fact itself. Nevertheless, Vocational and Technical graduates agree generally that they are well-prepared to enter the competitive workforce as Table 10 records.

Table 10

Graduates are Well Prepared to Enter the Competitive Workforce

Purpose	No.	%
No Response	4	9.3
Strongly Agree	13	30.2
Agree	18	41.9
Uncertain	4	9.3
Disagree	3	4.7
Strongly Disagree	3	4.7
Uncertain	4	9.3
Disagree	3	4.7
Strongly Disagree	3	4.7
Total	43	100

Over 72% of graduates agree that they are well-prepared to enter the competitive workforce. Only 9.4% disagree with another 18.6% not sure about this. Nevertheless the pattern that emerges is that there is agreement in the competition that awaits graduates and must perceive themselves capable of having an edge.

Generally, graduates of VOTEC education believe they have the skills and the psychological disposition to do well on the job and in the job market. They also believe in themselves that they are well-prepared to be competitive. However they have some doubts about their critical thinking skills and problem-

solving abilities, which deficiency, however, may detract from the entrepreneurial requirements of the self-employed.

CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

This chapter provides a summary of the findings of the study, draws conclusion, and offers a few recommendations towards the enhanced public perception on the performance of Vocational and Technical graduates in the world of work, to stakeholders in education and manpower development in Cape Coast metropolis. Suggestions for further research is put forward. The total number of respondents sampled for the study consisted of (23) teachers, (43) students, (27) Employers/Managers and (24) Industrialist/Managers. In all One Hundred and Seventy Two and Seventeen (117) instruments were retrieved from various Institutions which were selected for the study.

Five sets of questionnaires were developed to collect the data for this study. The first set of (4) questions were the Bio-Data of the respondents which was answered by all the respondents in the various organizations and the institutions concerned. The second set of (36) questions covered the respondents by employers, teachers, industries and students. In addition, one-on-one interview (structured) were used to collect information from the Heads of the Institutions and Departmental Head of the selected programmes/courses.

Items including the following were observed, that is workshop equipment and tools, teaching materials, curriculum and timetable etc.

Summary of Findings

The study set out to investigate perception of performance and relevance of skill-acquisition through Votec education for the job market in Cape Coast Metropolitan industrial sector. The key findings that emerged from the study are as follows:

1. Government was perceived as the key player in VOTEC delivery by all stakeholders, that is students, educators and employers.
2. Most respondents disagreed that Government was committed to education in terms of sufficient findings, provision of adequate facilities and resources.
3. For Industry/Employers, Government role was satisfactory as it was perceived as responsive to the needs of business and industry.
4. The perception that Government was providing the necessary infrastructure and incentive was contentious.
5. Students of VOTEC were universally positive that they had the necessary skills to be functional in Cape Coast industries.
6. There was an even split among students as to whether they were imbued with the necessary critical thinking skills necessary for technical skills in the education process.
7. Nevertheless the students were of the opinion that they could manage self-employment.

Conclusions

From the foregoing, it is possible to conclude that the students of VOTEC education had the self-motivation and (ability) efficiency to contribute to industrial development. This view was validated by educators and employers. However the role of the recognized key player – the government was not altogether satisfactory as it had not provided the necessary infrastructure, incentives and finding to enable the entire system take off to sustainable levels.

The Vocational Technical Educational programme demands qualified professional teachers and administrators, flexible curricula reflective to the needs of the people, linkages between the school and the industry and sufficient budget.

The Votec Educational programme needs to be monitored to evaluate the educational needs, the national employment situation and the performance of graduates in the working world and more especially in the Cape Coast Metropolitan.

Recommendations

It is recommended that due to the overwhelming perception of Governments ability to influence policy direction in Votec education, Government should as a matter of urgency provide the enabling environment in terms of infrastructure, financial policy initiatives and for facilitating Votec education as well as economic incentives to local business so that they develop the capacity to employ and utilize Votec graduate skills and competence.

It is recommended to students that while they believe they have the necessary capabilities to participate fully in the labour market, they should enhance avenues of self-employment, through management and business education, preferably by distance learning. This will ensure that as private business entities they attract business outsourced from the bigger and long established companies.

Votec educators are urged to keep track of the needs of the industry and the market and to restructure curriculum accordingly to facilitate easy entrance of Votec graduates into the labour markets. Employers ultimately will have to rely on a brisk business environment to risk employing and paying well for labour. The onus is on government initiative and individual industrialists to recognize the necessity of employing skilled labour.

Graduates also must take the initiative to convince businesses of their competence and to market their certificates received. Furthermore, labour market information to students from all educational streams should be increased.

The Polytechnic and Technical Institutions should also be responsive to the human resource needs of industry, commerce as well as the overall human resource requirements of the country.

Reports produced by the National Board for professional examinations revealed that the Polytechnic curricula are supply-driven and not responsive to the needs of the market, even though this report does not indicate so. The National Board should, in the interest of students, make bring this disconnection to the attention of the polytechnics for redress.

It is further recommended that any negative perception on the performance of the Votec graduates could be eliminated by intensive educational campaign with the view to making the public aware of the advantages of Vocational and Technical Education.

It is again recommended that industrial attachment for both technical vocational teachers and students must be granted by the industries to improve the practical efficiency of students before entering the job market.

Finally, national policy on vocational and technical education and training must be formulated to safeguard vocational technical skills practice and programmes to upgrade continuously the knowledge and skills of the graduates.

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APPENDICES

APPENDIX A

THE PUBLIC PERCEPTIONS ON THE PERFORMANCE OF VOCATIONAL AND TECHNICAL GRADUATES IN SELECTED INSTITUTIONS IN THE CAPE COAST METROPOLIS

PREAMBLE

There has been an outcry on the performance of the Technical and Vocational School graduates in the Cape Coast Metropolitan. Stakeholders, private sector and the public in general also have a different perception about these graduates. It is in this direction that the researcher wants to investigate and come out with his findings.

I would be very much pleased for your kind cooperation and consequently, it would be highly appreciated if you could respond to the questionnaire below by putting a tick (√) against your views/opinions.

NOTE: This is purely an academic exercise and as such the researcher wants to assure you that all statements made will be treated confidentially.

QUESTIONNAIRE FOR STUDENTS, TEACHERS AND EMPLOYERS

SECTION ONE – A (BIO DATA)

1. What is your level of education? Please tick.

   a. 2nd Degree ( )

   b. 1st Degree ( )

   c. HND ( )

   d. DBS ( )

   e. NVTI ( )

   f. J.S.S. ( )

g. Any other please state ……

2. Age: Please tick appropriate space

a. Below 25 years ( )

b. 25 – 30 years ( )

c. Above 30 years ( )

3. For how long have you been schooling/working in this institution/organisation?.....

4. What is your position in this Institution/organisation? ….....

a. Manager ( )

b. Supervisor ( )

c. Teacher ( )

d. Lecturer ( )

e. Student ( )

f. Sate any other position ……..

APPENDIX B

Contribution of Vocational and Technical Education toward Industrial Development in Cape Coast (Employers/Teachers)

ITEMS	SA	A	U	D	SD
1. Vocational and Technical education contribute to industrial development of Cape Coast 2. Vocational and Technical Intuitions have prepared sufficient numbers of skilled and semi-skilled workers to satisfy the needs of industry in Cape Coast. 3. Vocational and Technical programs are more suitable than regular academic school programs in responding to the rapidly changing nature of skills new technology. 4. Public Vocational Technical Institutions are preparing higher quality skilled and semiskilled workers than private Vocational and Technical Institutions. 5. Substantial financial investment in Vocational and Technical education is justified considering the high employment rate of Vocational Technical graduates.					

NOTE: S.A. - Strongly Agree

A - Agree

U - Uncertain

D - Disagree

S.D. - Strongly disagree

APPENDIX C

Employability of Vocational and Technical Graduate Studies.

ITEMS	S.A.	A	U	D	S.D.
6. Graduates of Vocational and Technical schools have better employment opportunities than graduates from academic secondary school.					
7. Graduates of Vocational and Technical schools are well prepared to enter the competitive work force.					
8. Graduates to Vocational and Technical schools possess necessary communication skills.					
9. Graduates of Vocational and Technical schools possess necessary social and interpersonal skills.					
10. Graduates of Vocational and Technical schools are self-motivated.					
11. Graduates of Vocational and Technical schools possess necessary technical skills in there specialization.					
12. Graduates of Vocational and Technical schools possess necessary critical thinking and problem-solving skills.					
13. Graduates of Vocational and Technical school have entrepreneurial skills.					
14. Graduates of Vocational Technical schools possess positive attitudes toward work.					

NOTE:

S.A. - Strongly Agree

A - Agree

U - Uncertain

D - Disagree

S.D. - Strongly disagree

APPENDIX D

Factors that facilitate or inhibit the restructuring of Vocational and Technical education (Teachers)

ITEMS	S.A.	A	U	D	S.D.
15. The government is committed to restructure Vocational and Technical education to meet the needs of industry.					
16. The government provides a dear direction regarding how to initiate partnership or collaboration between Vocational and Technical institutions and industries.					
17. The government content of Vocational and Technical curriculum is base on the needs in the labour market.					
18. The structure of Vocational and Technical education is becoming more flexible in responding to the changing labour market.					
19. Public Vocational and Technical institutions would achieve greater efficiency and productivity if managed like business.					

NOTE:

S.A. - Strongly Agree

A - Agree

U - Uncertain

D - Disagree

S.D. - Strongly disagree

APPENDIX E

Government's responsiveness to the needs of Vocational and Technical education (Teachers)

ITEMS	S.A.	A	U	D	S.D.
20. The government is responsive to the needs of Vocational and Technical education and training.					
21. The government's policy is focused on expanding Vocational and Technical education and training					
22. The government allocates sufficient funding to upgrade and expand Vocational and Technical and technical education and training.					
23. The government provides adequate facilities, equipments and resources to Vocational and Technical institutions.					
24. The government is committed to maintaining the high quality standard of Vocational and Technical education and training programs.					
25. Input from joint public-private sector advisory committees is crucial for the improvement of Vocational and Technical education.					
26. Exchange of technical expertise between Vocational and Technical institutions and business/industry is beneficial for both parties.					

NOTE: S.A. - Strongly Agree

A - Agree

U - Uncertain

D - Disagree

S.D. - Strongly disagree

APPENDIX F

Government's responsiveness to the needs of Vocational and Technical education (Industry)

ITEMS	S.A.	A	U	D	S.D
27. The government is responsive to the needs of business and industry					
28. The government provides attractive incentives and excellent infrastructure to attract business and industry.					
29. The government provides attractive incentives and conducive environment for public/private sectors to initiate research and development activities.					
30. The government policy regarding attracting direct foreign investment is successful.					
31. The level of technical transfer to this country by the foreign Multi-National Corporations is satisfactory.					
32. The government's plans and actions toward encouraging technical indigenization (the creation of local technology capability) are successful.					
33. The government's plans and actions to help local entrepreneurs establish and expand their businesses are successful.					
34. The participation of local entrepreneurs in the domestic economy is satisfactory.					
35. The participation of local entrepreneurs in the global economy is satisfactory.					
36. Cape Coast Municipal can achieve the status of an industrialization endive by year 2020.					

NOTE: S.A. - Strongly Agree A - Agree

U - Uncertain D - Disagree

S.D.- Strongly disagree