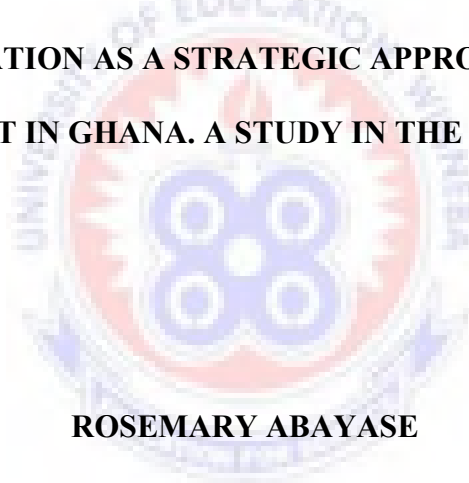


**UNIVERSITY OF EDUCATION, WINNEBA
COLLEGE OF TECHNOLOGY EDUCATION, KUMASI**

DEPARTMENT OF HOSPITALITY AND TOURISM EDUCATION

**INTEGRATING ENTREPRENEURIAL SKILLS IN TECHNICAL AND
VOCATIONAL EDUCATION AS A STRATEGIC APPROACH FOR IMPROVING
YOUTH EMPLOYMENT IN GHANA. A STUDY IN THE KUMASI METROPOLIS.**



ROSEMARY ABAYASE

NOVEMBER, 2016

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ROSEMARY ABAYASE

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**A Dissertation in the Department of HOSPITALITY AND TOURISM EDUCATION,
Faculty of VOCATIONAL EDUCATION, submitted to the School of Graduate Studies,
University of Education, Winneba in partial fulfilment of the requirements for the
award of Master of Technology (Catering and Hospitality) degree.**

NOVEMBER, 2016

DECLARATION

STUDENT'S DECLARATION

I, ROSEMARY ABAYASE declare that this dissertation, with the exception of quotations and references contained in published works which have all been identified and duly acknowledged, is entirely my own original work, and it has not been submitted, either in part or whole, for another degree elsewhere.

SIGNATURE:.....

DATE:.....

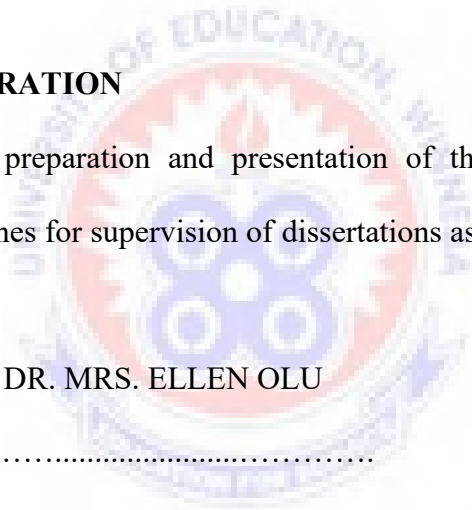
SUPERVISOR'S DECLARATION

I hereby declare that the preparation and presentation of this work was supervised in accordance with the guidelines for supervision of dissertations as laid down by the University of Education, Winneba.

NAME OF SUPERVISOR: DR. MRS. ELLEN OLU

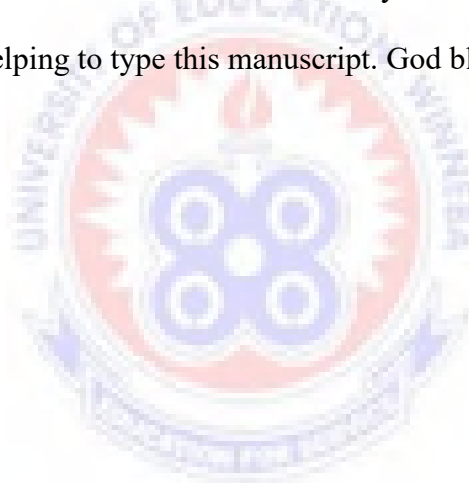
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DEDICATION

This project work is dedicated to my husband Mr. Thomas Adongo and my children Benson Vincent Adongo, Annabel Felicia Adongo, Immaculate Anastacia Adongo.



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LIST OF ACRONYMS

TVET.....	Technical/Vocational Education and Training
VET.....	Vocational Education and Training
UNESCO.....	United Nations Educational, Scientific and Cultural Organisation
LDC	Less Developed Countries
OECD.....	Organisation for Economic Cooperation and Development
KNUST.....	Kwame Nkrumah University of Science and Technology
NVTI.....	National Vocational Training Institute
GES.....	Ghana Education Service
MOE.....	Ministry Of Education
COTVET.....	Council for Technical and Vocational Education and Training
ILO.....	International Labour Organisation
MDGs.....	Millennium Development Goals
KVTI.....	Kumasi Vocational Technical Institute
CTI.....	Catholic Technical Institute
KTI.....	Kumasi Technical Institute
KMA.....	Kumasi Metropolitan Assembly



ABSTRACT

Entrepreneurship education integration in TVET has been identified as the key to solving the unemployment among the youth in any nation. In this regard, the study was conducted to assess the integration of entrepreneurial skills in vocational education as a strategic approach for achieving youth employment in Ghana using Kumasi Metropolis as a case study. The descriptive survey method was employed in this study. A total of 50 respondents consisting of teaching and non-teaching staff was sampled randomly and purposively from five vocational institutions identified in the Kumasi Metropolis. Questionnaire was the main data collection instrument used. Simple statistical analytical tools like frequencies, percentages and means were used to analyse the collected data using SPSS version 20. The study revealed that there were several practices that actually promote the entrepreneurial skill acquisition of students in the vocational training institutes. Among these practices were the provision of independent and critical thinking skills and competency based training of students based on practical activities. The study found that very few linkages existed between the vocational and technical training institutes and industry like industrial attachments, national service and on-the-job training for students. The integration of entrepreneurship education in TVET was fraught with many challenges which were revealed in this study. These challenges include inadequate funding, lack of entrepreneurial development centres, insufficient tools and equipment for practical skills acquisition. The study recommends that schools and industry should collaborate to create a vital link with entrepreneurs and set up school-based firms or student mini start-ups to ensure that students get the chance to solidify and practice their knowledge in entrepreneurship. Also, the government should provide support in the form of funding, training and study materials for teachers and students to foster the implementation of entrepreneurship education in the TVET sector.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

Supporting entrepreneurship in vocational education and training is increasingly important for governments as they seek to improve pathways to the labour market for the youth. Given the youth unemployment challenge that is currently faced in Ghana, entrepreneurship can offer opportunities for the youth to create jobs for themselves and for others (Edusei, 1991). The vocational education and training system has an important role to play in supporting this agenda by providing entrepreneurship training and business start-up support (Bortei-Doku *et al.*, 2011).

Entrepreneurship training has grown out of its initial basis in the conventional understanding of entrepreneurship as venture creation. It has traditionally been delivered by business departments and schools through courses on subjects such as small business management, business planning and technology management (Solomon, 2006). However, over the years the concept of entrepreneurship has evolved from a subject matter focused on business creation into a broader concept that refers to an individual's ability to turn ideas into action and is commonly considered to be key competence in the modern labour market (European Commission, 2008). Thus entrepreneurship has grown to cover more than setting up and running a business. It encourages creative thinking and promotes a strong sense of self-worth, initiative and a tolerance to failure. It not only gives people the means to cope with an increasingly complex and uncertain world, but also gives them the mind-set and capabilities to thrive upon it (Gibb, 2005).

Entrepreneurship skills are increasingly important to help the labour force adjust to the changing needs of the economy and vocational education and training (VET) systems can play a significant role in helping many youth acquire these skills. These skills refer to both entrepreneurial mind-sets as well as the set of skills that are needed to start and successfully operate a business. Entrepreneurship skills will be beneficial for all, particularly students, regardless of whether they go on to start a business or not because entrepreneurial behaviour can be an asset in any workplace.

Supporting the development of entrepreneurship attitudes and skills is a timely issue, as many governments are looking for methods of achieving job creation and economic growth. Entrepreneurship can be part of the answer. It is particularly important in Ghana where there are many challenges related to employment for the youth. This study aims to review practices in promoting and supporting entrepreneurship in vocational training centres in Ghana.

The only way to empower the youth is to provide them with adequate and qualitative education in order to make them job creators and eradicate poverty (Sekenu, 2004). Many countries of the world including Ghana have considered Technical Vocational Education and Training (TVET) as relevant in equipping young people with technical skills that would enable them engage in productive livelihoods. However, the United Nations Education Scientific and Cultural Organisation (UNESCO) section for Technical and Vocational Education and Training (TVET) in 2006 observed that TVET programmes have not led to increased employment as anticipated, despite the obvious need for technical and vocational services. This might be due to lack of employment opportunities for technically trained manpower. Another reason advanced by Tiong (2002) on the lack of increased employment by TVET is the impact of globalization which demands concrete response in the best direction and practice. These

responses include among others strengthening the social fabric, restructuring the local economy and training human resources to meet the demands of the global world.

The new world economy requires innovation, training, reinventing in vocational education and entrepreneurship training that will significantly favour the youth. Entrepreneurship skills could help the youth acquire the mind set and know-how necessary to make self-employment or viable career choices.

1.1 Problem Statement

The integration of Technical and Vocational education into the curriculum of schools was with the sole aim of providing self-employment skills to the youth in order to foster sustainable development especially in the developing countries. These have led to problems of unemployment especially among the youth leaving various educational institutions. There is the need include vocational training practices that promote the acquisition of entrepreneurial skills in technical institutions to make graduates of these schools self-employable. A look at the technical and vocational education curriculum reveals that there is a relevant but missing industry-academia link in the system due to the neglect of entrepreneurship integration in vocational education and training. Entrepreneurship education play a major role in changing attitudes of young people and providing them with the skills that will enable them to start and manage small enterprises at some point in their lives. Many challenges abound in the successful integration of entrepreneurial education in the technical and vocational curriculum. Against this backdrop, it has become essential to find ways to overcome these challenges and train the youth in entrepreneurial skills in Vocational Education to tackle the unemployment issue which has reached alarming proportions.

1.3 Purpose of the Study

The main objective of this study was to promote entrepreneurship study practices among Vocational Education and Training through entrepreneurship training and support at the various vocational training centres in Ghana.

1.4 Objectives of the Study

For the purpose of achieving the main objective of this study, further specific objectives were derived as follows:

1. To assess the vocational training practices that promote the acquisition of entrepreneurial skills among vocational and technical students.
2. To find the existing linkages between industry and vocational training schools.
3. To find the challenges of entrepreneurship education in vocational education curriculum.

1.5 Research Questions

In an attempt to achieve the set research objectives, the following research questions were posed:

1. What are the vocational training practices that promote the acquisition of entrepreneurship skills among students of technical and vocational institutions?
2. What are the existing linkages between industry and the vocational training institutions?
3. What are the challenges faced in integrating entrepreneurship in the vocational education curriculum?

1.6 Significance of the Study

This study will provide an insight into the benefits of integrating entrepreneurship education in the technical and vocational education curriculum. It will again provide recommendations which will be beneficial to stakeholders in laying down a national framework or policy for the integration of entrepreneurial studies in the vocational education curriculum.

1.7 Limitations of the Study

This study faced a number of limitations. Notable among them is the fact that the issue of unemployment is a pervasive problem in the whole nation. To this end, the study should have included the Senior High Schools in the Kumasi Metropolis giving it a larger sampling frame.

1.8 Delimitation of the Study

This study was restricted in scope to cover only Vocational Training Institutions in the Kumasi Metropolis.

1.9 Organisation of the Study

This study is organised into five chapters. Chapter one deals with background to the study, the problem, research questions and the purpose of the study. Other aspects of the chapter are the significance, limitations and delimitations of the study. Also in chapter one is the definition of terms. Chapter Two focuses on the review of related literature while the methodology of the study is the subject of Chapter Three. The methodology describes the research design, the population, sample and sampling procedures, data gathering instruments, pilot study and data collection procedures of the study. Also covered in the chapter are the variables of the study and the methods of data analysis. Chapter four presents the results and discussion of the

findings whilst in Chapter Five, conclusions, recommendations and suggestions for further research are presented.



CHAPTER TWO

LITERATURE REVIEW

2.0 Introduction

This study was conducted to look into efforts made by various stakeholders in vocational and technical education to promote the study of entrepreneurship as a way of mitigating the nation's problem of youth unemployment. This section presents a discussion of relevant studies conducted by other authors relating to the subject under study.

2.1 Overview of Entrepreneurship Education

The terms entrepreneurship and entrepreneur are being used interchangeably to mean the same. Though they may be closely related, the terms are not in any way the same. A sharp distinction exists between them. For instance, entrepreneur refers to a person while entrepreneurship refers to a process which seeks answers to what he does, how he does what he do, etc.

According to the European Commission on enterprise and industry, entrepreneurship simply refers to an individual's ability to turn ideas into action. It covers creativity, innovation and risk taking, and the ability to plan and manage projects in order to achieve objectives. To them, an entrepreneur can be defined as one who brings resources, labour, material among others into combinations that make their value greater than in the past, as well as been able to introduce changes, innovation and new ideas for the growth of a business. Similarly, Kitner (2007) viewed an entrepreneur as a special type of labour that requires the assembling of all factors of production namely capital, land and labour, and tries to ensure optimum utilization of them to ensure maximum profit. From the management angle, entrepreneurs are pictured as managers of small business. They organise, manage, and assume the risk of a business or an enterprise. In entrepreneur management, an entrepreneur does not only organise resources to create wealth

but manages such resources efficiently in order to sustain his/her innovation and minimize possible risks that might lie ahead. The success of an entrepreneur depends on the willingness to accept responsibility for one's own work.

As a process, Allawadi (2007) defined entrepreneurship as that which involves evaluating business opportunities, development of a business plan, and determination of the required resources as well as management of resulting enterprise. It is the practice of consistently converting goods and ideas into profitable commercial ventures. It is a continually pursuit of opportunities through innovations leverage of resource that are for the most part not controlled internally. Entrepreneurship refers to an individual's ability to turn ideas into action. According to the European Commission (2009), entrepreneurial programmes and modules offer the beneficiaries the ability to think creatively and become an effective problem solver. Modern school of thought claims that the role of the entrepreneur is that of an innovator, even though the definition of innovation is still widely debatable. However, Kitner (2007) posits that the process of innovation is actually of spontaneous "un deliberate learning". Meaning that the necessary characteristic of entrepreneur is alertness, and no intrinsic skills are involved.

Though the idea that entrepreneurs are innovators is largely acceptable, it is difficult to apply this theory of entrepreneurship to Less Developed Countries (LDCs). According to Allawadi (2007) entrepreneurs in LDCs rarely produce brand new products; rather they imitate the products and production processes that have been innovated in developed countries. Allawadi refers to this practice as "creative imitator". Creative imitation takes place when the imitators better understand how an innovation can be applied, used, or sold in their local market. Thus, the innovation process in LDCs is often that of imitating and adapting, instead of the traditional notion of the new product or process discovery and development. Some individual apply the

concept of entrepreneur and entrepreneurship to the creation of any new business, while others may focus on intentions.

Still, others tend to confuse managing a small business such as roadside Auto mechanic or furniture maker as entrepreneurs. But, Kitner (2007) argued that not all business managers are entrepreneurs because they do not innovate. On the other hand, Parker (2009) noted that the function that is specific to entrepreneurs is the ability to take factors of production- land, labour and capital and use them to produce new goods and services. Parker argued that entrepreneurs perceive opportunities that other business executives do not see or care about. Allawadi (2010) tied entrepreneurship to the creation of five basic “new contributions” of introducing a new product, a new method of production, opening a new market, conquest of new source of supply and creating a new organization. Creativity and entrepreneurship promote the birth of new firms which is critical to economic development efforts.

A definition which seems to fully capture the true meaning of entrepreneurship is one provided by Kitner (2007). Kitner conceived entrepreneurship as a process in which individuals pursue opportunities, fulfilling needs and wants through innovations, together with the attendant risks. Based on the above definitions, it can be concluded that entrepreneurship is the process of carefully determining and analyzing unmet needs through creatively and satisfying those needs by bearing the related risks. By combining the above thoughts, it can be generalized that entrepreneurs are risk bearers, coordinators, organizers, gap-fillers, leaders, and innovators or creative imitators who are focused and determined to make life meaningful. More so that education for entrepreneurship can be particularly effective in initial Technical Vocational Education and Training (TVET), where risk taking is supported by relevant skills in a specific occupation.

Entrepreneurship education is the process of acquiring the knowledge, attitude and psycho-productive skills for self-reliance, job creation and other forms of independent living in the absence of paid employment. It seeks to equip individuals with creative, problem-solving and innovative orientation skills (Igbo, 2009). Entrepreneurship implies the willingness and the ability of an individual to seek investment opportunities in an environment and be able to establish and run an enterprise successfully based on identified opportunities. The fluctuating job market and the increasing awareness of the need for vocational graduates to become self-employed have necessitated the inclusion of entrepreneurship education into the curriculum of tertiary institutions (UNESCO, 2007).

By the foregoing, entrepreneurship education is designed to prepare individuals to undertake the formation and/or operation of small scale business enterprises. Consequently, students who lack the expected entrepreneurial skills upon graduation are bound to encounter difficulties in making a living. Odura (2007) asserts that entrepreneurship education has the overall objective of generating employment in small scale enterprises in the countries in which they are implemented. Specifically, it aims at:

- Developing a pool of potential entrepreneurs who are well equipped to start and successfully manage small and medium scale industries;
- Encourage self-employment as a conscious and pre-determined choice;
- Generating employment opportunities for others;
- Reduction of dependence on government and large firms for paid employment;
- Simulation of rural development and the achievement of a meaningful level of broad based economic and industrial development generally;
- Uplifting dignity of labour and the reward for hardwork; and
- Upgrading the social status of the Ghanaian youth.

Entrepreneurship education will in the long run, help to reduce unemployment among the youth, social unrest and enhance the economic growth as well as economic development of the nation.

2.2 Vocational Education and Training Defined

Vocational programmes differ from academic ones in their curriculum and in their aim of generally preparing students for specific types of occupations and, in some cases, for direct entry into the labour market. Vocational Education and Training (VET) takes a variety of forms in different countries but also within a country. Initial VET normally leads to a certificate at upper secondary level. Taking into account differences between European countries, the definition of vocational education used in this project is broad, including all vocational, technical and commercial schools and colleges, and all possible fields of specialised training. The project therefore considers as ‘vocational’ all education and training that differs from general, comprehensive or academic education.

Olaitan (1998) defined Vocational Education and Training (VET) as a form of education that primarily concerns the development of occupational skills needed in an individual as a preparation for work. It is a form of education which promotes the dignity of labour by entrenching work as the goal of education. VET is training or retraining programme given in schools or classes under supervision and control. The learning experiences according to Abubakar (2010) may occur in variety of learning context, including educational institutions and workplace. In Nigeria, the teaching of skills in the formal sector exists in two types of institutions (Oziengbe, 2009). These institutions are Technical Colleges and Trade Centres. In these institutions, individuals are provided with needed skills that will enable them become proficient in both the public workplace and private employment. VET is a continuous process

of adaptation of the worker's training towards acquiring the minimum knowledge required. Technical Vocational Education and Training is result oriented. It brings about technological advancement and aims to fit new manpower for employment and provide continuing training for those already qualified, so that they can keep pace with modern and emerging work environment. VET are by design intended to develop skills that can be used in specific occupation or job (Olaitan 1998).

The objectives and content of the curricula of VET according to the World Bank are derived from occupational standards or more directly from analysis of the task that are to be carried out on the job. The effectiveness of these curricula can thus be measured by the extent to which trained beneficiaries can use their skills in employment. The National Policy on Education (2004) explained the purpose of VET as:

- i. To enable individuals acquire vocational and technical skills.
- ii. To expose the individuals to career awareness by exposing useable options in the world of work.
- iii. To enable youth acquire an intelligent understanding of the increasing complexity of technology, and
- iv. To stimulate creativity.

2.3 History of Technical/Vocational Education in Ghana

In dealing with the discussion of related literature on vocational and technical skill education for this research, it was necessary to begin with a brief account of how vocational education and technical skills training started in the country. In 1844, the Basel Missionaries introduced craft and simple farming techniques in their elementary schools at the Christianburg Castle, Osu and Abokobi respectively (McWilliam and Kwamena-Poh 1978; Edusei 1991). Boys were

taught book binding, lock and blacksmithing, bricklaying and carpentry so that they could undertake repair works for the missionaries since there were no masons and carpenters who met the taste of the missionaries. On the other hand, the girls were taught cookery, needle work and home management skills by the wives of the missionaries. The Wesleyan did the same in Cape Coast and its environs around the same period (Edusei, 1991).

No significant improvement came in this field of education after the establishment of the Accra Technical School until the early 1920s when Governor Gordon Guggisberg established Trade (Technical) Schools at Asuansi, Kibi, Yendi and Mampong- Ashanti, to offer courses in masonry, carpentry, metalwork and woodwork. The Yendi School was later moved to Tamale while that at Kibi could not survive the trade slump of the 1930s. This followed the release of the British government's reassessing of the status of education in its colonial territories in 1925 (Fafunwa, 1971).

The Accelerated Development Plan for Education in 1951 led to the establishment of the Kumasi College of Technology (now Kwame Nkrumah University of Science and Technology- KNUST) in 1952 to provide courses in technological and vocational training to students. More institutions for vocation skills training were opened in Accra, Kumasi, Takoradi, Tarkwa and Kpando during this era. This attempt to teach vocational skills to school children included children with disabilities. Vocational skills training were however de-emphasized at the elementary levels since those schools were set up purposely to offer basic education. With the introduction of the 1987 Educational Reform, Pre-vocational training programs were introduced. Subjects such as technical drawing, vocational skills and basic agricultural science were taught in schools (Asante-Kyei, 2006).

Akyeampong (2002) opines that the “universally accepted purpose of vocational education in general has been the provision of occupational skills for employment”. He also continues to emphasize that vocational education can offer to learners educational options corresponding to their needs including employment training and preparation for higher education. These are done at the secondary levels of education where preparation for employment is not the focus of vocational education under GES curriculum but rather preparation for higher vocational skills training at the tertiary level (Akyeampong, 2002).

On his part, Baiden (1996) stated that in Ghana;

“The purpose of technical and vocational education at the non-degree level is to provide young men and women with skills training (in addition to general education) in order to enable them fulfil the country’s technical manpower needs including self-employment up to middle level in the field of industry, business, and agriculture”.

He further outlined nine main objectives of vocational studies. To him, the vocationalization of curriculum in education sought to:

1. 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 so give them equal opportunity to choose their future careers in either the technical or general field;
2. Equip students who have completed Basic Education with those occupational skills that will enable them enter into gainful employment in industry and commerce;
3. Equip students with the relevant productive and entrepreneurial skills that will prepare them for self-employment.

4. To provide trained human resources in science, technology and commerce, matching supply of skilled labour with demand;
5. Provide personnel with the technical knowledge and vocational skills necessary for agricultural, industrial, commercial and economic development while at the same time paying attention to environmental issues;
6. Give training and impart the necessary knowledge and skills to trained manpower leading to the provision of operatives, artisans, craftsmen, technicians, and other middle level technical personnel;
7. Enable the youth have an intelligent understanding of the increasing complexity of science and technology through systematic exposure to modern technology;
8. To encourage the increased participation of women in education, training, and employment in the technical field; and
9. Provide a sound foundation for further education for those students who may wish to continue their education later in the context of life long education.

Baiden (1996) continued to explain that, vocational studies in Ghana's mainstream education comprise Visual Arts and Home Economics subjects. The Visual Arts consist of the handicrafts, (specifically sculpture, leatherwork, graphic design and basketry).

2.4 Vocational Training Practices that Promote the Acquisition of Entrepreneurial Skills

It is a fact that the society needs men and women that are capable of establishing businesses that would help cushion the adverse effects of mass unemployment and poverty which entrepreneurial skills in TVET affords. Amedorme (2013) cited practices like the provision of funding, provision of entrepreneurship development centres and provision of practical work as practices that promote the study of entrepreneurship among schools.

According to Igbo (2009) good practice indicators for entrepreneurship education in vocational schools are:

1. The programme or activity has well-defined objectives and appropriate measures of success. It should be regularly evaluated, and receive positive feedback from students for the evaluation results to be continuously fed into the development process.
2. Good balance between theory and practice: the programme or activity should be action oriented, based on experience and project work. It aims to improve the students' abilities to work in a team, develop and use networks, solve problems, and spot opportunities. Students are actively involved in the learning process, and responsible for their own education.
3. The programme or activity should be adapted to the students' learning environment and to their specific fields of study.
4. The institution has external links with enterprises, experienced business people and young entrepreneurs, and with the local community. Entrepreneurs are involved in the learning process.
5. Students are exposed to real-life work situations and encouraged to take part in extracurricular activities. External events, activities and contests are organised.
6. Teachers have an appropriate qualification in entrepreneurship (through experience in business and/or participation in training). They use up-to-date study materials and up-to-date knowledge.
7. The programme or activity stimulates the students and teachers to look beyond the borders of their school environment (e.g. by exchanging experience or ideas with other schools, with students from other countries or with other technical backgrounds).

8. The programme or activity is part of a wider scheme: students are followed after participation in the programme, and are referred to the right support mechanisms if they want to start up a business.

2.5 State of Entrepreneurship Education and TVET in Some African Countries

The world has become private sector driven as evidenced by the establishment of big multinational companies. These companies obviously started as small start-ups and were nurtured to grow to large scale companies. Africa has struggled to get a firm foothold on integrating entrepreneurship education in TVET and reaping its associated full benefits.

2.5.1 Entrepreneurship and TVET in Nigeria

In Nigeria, unemployment of graduates has become a menacing problem. The plague which has often caused problems for government in industrialized nations elsewhere is now assuming gigantic dimension in Nigeria. Graduate unemployment in Nigeria is cumulative which increases as institutions turn out graduates annually. The rate at which young people are leaving school and seeking employment continuously outpaces the capacity of the economy to provide employment. The value system of the Nigerian society has changed due to the transition from school to work to earn a living (Uche *et al.*, 2009). This is because Nigeria that once harbored aliens from West African countries and beyond for employment is currently recording high rate of unemployment (Anyago, 2009). The menace of graduate unemployment in Nigeria is blamed on the tertiary education curriculum which has been geared towards stereotyped goals and jobs without adequate practical work. In other words, graduates from the universities and technical institutes acquire knowledge without entrepreneurial skills which would enable them, on graduation to practice what was learnt in school, create jobs for themselves and others and participate in economic development in Nigeria.

In order to make technical and vocational education functional, relevant and practical, the Federal Government of Nigeria, through the National Universities Commission (NUC) made entrepreneurship education a compulsory course for all undergraduate students in Nigerian tertiary institutions. The aim of the policy is to ginger in the students entrepreneurial spirit that will help to curb the increasing rate of graduate unemployment. Tulgan (1999) states that the primary purpose of entrepreneurial education is to develop in the learners' entrepreneurial capacities and mindsets. This will help graduates to recognize business opportunities, mobilize resources and exploit the opportunity for self-employment which will be beneficial for community and national development (Uche *et al.*, 2009).

Currently, entrepreneurship education is being offered in all universities and other higher institutions. The introduction of entrepreneurship education into the university curriculum is an empowerment strategy for graduate self-employment, self-reliance and poverty reduction. Where appropriate skills, attitude and knowledge accompanied with appropriate practical work are taught to the students, they would on graduation become self-employed and employers of labor. This will reduce the rate of unemployment if not completely eradicated and move Nigeria from a consumer to producer nation (Okah and Odelola, 2009). The word empowerment as used in the context of this study involves equipping the students with the potentials by teaching them relevant skills, knowledge and competencies that will enable them to function adequately as entrepreneurs after graduation. It is the recognition of the need to empower youths for self-employment that has necessitated the inclusion of entrepreneurial education in the university curriculum.

2.5.2 Entrepreneurship and TVET in Tunisia

Supporting entrepreneurship in vocational education and training is increasingly important for governments as they seek to improve pathways to the labour market for youth. Given the youth unemployment challenge that is currently faced in Tunisia, entrepreneurship can offer opportunities for youth to create jobs for themselves and for others. The vocational education and training system has an important role to play in supporting this agenda by providing entrepreneurship training and business start-up support (OECD, 2014).

Vocational training in Tunisia is primarily under the responsibility of the Ministry of Vocational Training and Employment (MVTE) through the Tunisian Agency for Vocational Training (TAVT). The TAVT is a non-administrative public institution. It was established in 1993 under 93-11 Law of February 17, 1993 and its administrative and financial structures, as well as its operating procedures, were established by the Decree 97-1937 on 29 September 1997. The missions of the TAVT are:

- To provide initial training for young people and adults taking into account economic and social needs,
- To implement to the satisfaction of requests for skilled labour training within the guidelines set by the supervisory authority,
- Implement training programmes whose implementation is entrusted by the supervisory authority,
- Conduct periodic evaluations of training activities that take place within ancillary facilities under the ATFP.

The ATFP is responsible for 136 vocational training centres, including:

- 47 Sectoral training centres (CSF)

- 61 Training and learning centres (CFA)
- 14 Training centres for young rural women (CFJFR)
- 11 Centres for Training and Promotion of Self-Employment (CFPTI)
- 1 Aeronautic training centre

While the public vocational training centres under the responsibility of the ATEP focus on industrial activities, there are four priority sectors (as of September 2012). These four priority sectors are:

- Building and construction
- General engineering and steel construction
- Electricity and electronics
- Tourism and hotel business

In all, 244 specialties are offered by the vocational training centres under ATEP according to the following diplomas:

- Competence certificate (CC): Training for candidates aged 15 years and over, with the 7th year completed and who meet the specific skills or requirements or having passed the prerequisite assessment test
- Certificate of Professional Competence (CAP): Training cycle open to candidates who studied until the end of the ninth year of basic training
- Professional Technician Certificate (BTP): Training cycle open to candidates who have completed the second year of secondary training, and have the certificate of professional competence in the same field.
- Qualified Technician Certificate (BTS): Training cycle open to holders of the Baccalaureate or those who passed the entrance test open to holders of the professional technician certificate in the same field.

As seen in the four diplomas are offered following the 7th year of basic training and are considered to be training levels 1 to 4. A BTS diploma is the same level as a general baccalaureate diploma +2. In addition to the ATFP, the MFPE has three other structures under its supervision that have a role in the public vocational training system.

- The National Centre for Training for Trainers and Training Engineering (CENAFFIF), which provides training for trainers and training engineering;
- The National Centre for on-going Training and Career Development (CNFCPP), which manages the mechanisms of vocational training for companies and those in continuing training;
- The National Agency for Employment and Independent Work (ANETI), which manages employment programmes including training components and support to entrepreneurship.

The remaining 33 public vocational training centres that are not managed by ATFP fall under the responsibility of other Ministries and their agencies where the training centre is specialised in a discipline that is managed by a Ministry. This includes public vocational training centres specialised in tourism, which fall under the authority of the National Office of Tunisian Tourism; public vocational training centres that specialise in agriculture, which are managed by the Agency for the Development of Agricultural Training which is under the authority of the Ministry of Agriculture; public vocational training centres that specialise in health, which are under the authority of the Ministry of Health; and public vocational training centres specialised in defense industries which are operated by the Ministry of Defense. Training centres under the authority of the Ministries of Tourism, Health and National Defense are also co-supervised by ATFP for matters related to pedagogy.

Methods used to teach entrepreneurship in vocational training in Tunisia

The choice of relevant teaching methods is generally considered to be important in entrepreneurship training at all levels. It is increasingly accepted that entrepreneurship is best learned by doing. The closely related concepts, such as contextual learning (e.g., Rae, 2004), experiential learning (Kolb, 1984) and action learning (Marquardt and Waddill, 2004) all understand learning as a highly situational and holistic, contextually-embedded process, in which participants tackle elusive problems and combine social processes with their individual learning (Mumford, 1995). There is some evidence that this kind of learning might be effectively addressed by multi-method approaches creating value-added to students. Methods for teaching entrepreneurship vary extensively.

Entrepreneurship training uses the current approaches: classic methods (i.e., lectures and readings), action learning, new venture simulations, technology-based simulations, the development of actual ventures, skills-based courses, video role plays, experiential learning, and mentoring (Pittaway and Cope, 2007). However, the approach is not an end in itself but it supports the reaching of the learning objectives (Heinonen and Akola, 2007), i.e. one can learn from mistakes, by doing, by coping, by experiment, by problem-solving/opportunity grasping, by making things up as well as from explicit formal sources (Gibb, 2002).

While it is often suggested that entrepreneurship training should be theory-driven (Fiet, 2000), there is a need to integrate entrepreneurship training with concrete and practical challenges that give opportunities for “hands-on” experiences. This is particularly true for vocational training which typically operates in close collaboration with industries and businesses. The practical notion is strengthened when external networks and sources of knowledge are intensively tied into the training. Entrepreneurial learning involves emphasis upon “how to” and “who with” and that some knowledge is offered on a “need to know” basis (Gibb, 2002). Therefore, it is fruitful to attempt to integrate entrepreneurs, students and trainers/lecturers in order to catalyse

a fruitful exchange of different viewpoints. In addition, enough time and support need to be given to feedback, reflection and discussion. For example, intensive “boot camps” may serve these needs. Literature on entrepreneurship training clearly highlights the need of active pedagogies, but on the other hand it acknowledges that methods and contents that work well in one context and audiences do not necessarily work equally well in other contexts (Pittaway and Cope, 2007; Fayolle, 2013).

2.6 Relevance of Entrepreneurship in Vocational Technical Education

Theodore, in Osuala (2004) contends that the entrepreneur’s special attributes like intelligence, creativity, initiatives, innovativeness and resourcefulness should better the development through formal education in order to reduce the scourge of poverty. In this direction also, Ocho (2005) notes that central to the eradication of poverty is the initiation of a good education system. A good education system is a costly system, but no amount of expenditure is too much for the production of an enlightened citizenry, capable and willing to contribute to the growth and development of the nation. Similarly, the government of Ghana stresses that in order to pursue excellence in skill acquisition and achieve the desire for job creation and poverty reduction, the government introduce Technical Education which essence is to ensure that graduates acquire sufficient technical/entrepreneurial skills and competencies to be self-employed through job creation.

The relevance of entrepreneurship development on vocational technical education is implicit in the ideas of Ohaegbulem cited in Odura (2007) thus:

- a. Production of goods and services that is important to the well-being, comfort and happiness of individuals and the society as a whole.

- b. Creation of self-employment: This helps to reduce the problem of unemployment and other social vices and further provides employment for others.
- c. Through entrepreneurship, the entrepreneur's standard of living and that of the entire society are improved upon.
- d. Entrepreneurs determine or identify the specific wants of the people and what type of goods and services to be produced.
- e. Entrepreneurs stimulate rural economic and industrial growth and development of any society.

2.7 Challenges of Technical/Vocational Education in Ghana

It is a fact that no country can develop without quality technical and vocational education and training (TVET) sector. Over the years, three different forms of TVET have evolved in Ghana (Boateng, 2012). These comprise the formal system, the non-formal system and the informal system. The formal system includes primarily time-bound, institution-based, graded, and certified training. It is offered by institutions such as the NVTI (National Vocational Training Institute), Ghana Education Service (GES) technical institutes, youth training institutions and a variety of private vocational training schools. Non-formal TVET typically has structured learning objectives, learning times and learning support but will normally not lead to certification. Workshops, short courses and seminars are typical examples of non-formal learning. The informal system includes a wide range of flexible programmes and processes by which individuals acquire skills and knowledge from designated training venues outside of the home and, in some cases, at home. Traditional apprenticeships make up the majority of the informal sector. Technical vocational education affords an individual the chance to acquire practical knowledge and requisite skill training needed in the job market or for immediate self-employment. Almost all the technical skills we need to develop as a country are run by the

technical and vocational schools across the country (Amedorme, 2013). Some of the courses mounted at the technical institutes are motor vehicle mechanics, electrical works, welding and fabrication, carpentry and joinery, block laying and concreting or masonry, plumbing, tailoring and dressmaking, just to mention a few (Bortei-Doku et al., 2011).

Lewin (1997) reported that there are five justifications for governments worldwide to focus and invest in technical and vocational education and training TVET. These are:

1. To increase relevance of schooling by imparting individuals with skills and knowledge necessary for making the individual a productive member of the society.
2. To reduce unemployment as a result of provision of employable skills especially to the youth and those who cannot succeed academically.
3. To increase economic development due to the fact that it improves the quality and skill level of the working population.
4. To reduce poverty by giving the individuals who participate access to higher income occupations.
5. To transform the attitude of people to favour occupations where there are occupational prospects for future.

Technical education in Ghana is bedevilled with problems. Some of these problems are

- **limited number of technical institutes**

The total number of technical institutes available in Ghana is woefully inadequate and statistics by the Ministry of Education indicate that currently, they are about 21. The regional breakdown of technical institutes is very worrying compared to the number of senior high schools (SHS) available in the regions.

- **lack of facilities and materials for training students**

The existing technical institutes in Ghana lack essential facilities and materials for training students in the various vocations. Technical school is a place to acquire practical knowledge and hands-on experience in addition to the basic theory in the chosen field of specialisation. These require training materials which are lacking in these institutions which leads to deficiencies. This eventually prevents students from practicing well on their own and working effectively in the industries.

- **inadequate technical teachers or facilitators**

The teachers or the facilitators in the technical institutions are not enough and when they are more, majority of them have shortfalls in practical experience. Some of them have not worked in the industries to enrich their skills before coming to the classroom and therefore find it very difficult to deliver or make the necessary impact as far as the acquisition of practical skills are concerned.

- **limited number of training institutions for technical teachers and**

Formerly, some institutions were established to train technical teachers only. But now, it is only the Kumasi Campus of the University of Education, Winneba – Kumasi (UEW – K) that is training pure technical graduates to become technical teachers in their areas of specialisation. The rest of the technical training colleges train technical teachers from those who have completed senior high or finished secondary technical schools and not from pure technical institutes. These categories of teachers are trained to teach pre-technical skills or Basic Design and Technology (BDT) in the junior high schools (JHS).

- **difficulty in career progression.**

The biggest challenge facing technical education in Ghana is the progression of students from one level to another as against their counterparts from the senior high schools. After three years in the technical institute, one has to pursue advanced craft course or technicians part I, II & III in the Polytechnic before offering the Higher National Diploma (HND) in the same Polytechnic. Whilst their colleagues from the senior high or secondary schools proceed to offer the HND. The problem is even more exacerbated when a technical student wants to acquire a degree in the University.

There are other challenges enumerated by Atchoarena and Delluc (2001) which include

- mismatch between acquired skills and market needs,
- widespread concern about poor quality training and training environments, and
- negative public attitudes and perceptions regarding technical and vocational education and training.

2.8 Prospects of Vocational and Technical Education in Ghana

The establishment of the Council for Technical and Vocational Education and Training (COTVET) coupled with the resultant coherent national policy for technical and vocational education training, points to the country's perceived value for human capital development. Therefore, to give true meaning to this productive segment of our national life, it is instructive that implementation of the policies on TVET supports this key driver with the potential of spurring Ghana's economic growth not only to train to meet industrial needs but also equip brighter young hands with skills to start their own businesses (Quansah, 2000).

Sarpong, (2000) opined that Ghana's global competitiveness as a country hinges on our ability to adapt the TVET system and innovate it; therefore effort must be made to galvanise support at both national and international levels to assist in improving the employability of products from such institutions, with the view to making it attractive because it will offer ready jobs as well as structured support for start-ups.

Sarpong (2000) went further to intimate that, with the advent of countries recruiting expertise for new found wealth, if Ghana focuses its TVET training in such areas, it may be an important source of foreign exchange for both graduates and the country at large, as the potential for bringing in experts from such countries to enable students gain deeper insights into what expectations their country and institutions will have of such 'imported' labour.

The role of industrial linkages cannot be over emphasized as this will not only afford industries the opportunity to observe fresh minds at work, but can also pick those with natural talents in their chosen fields who deliver results with passion, since this will be evident during the industrial attachment.

Again, considering the important role of this sector, commitment to see Africa and Ghana in particular rise should concentrate some energy and resources in this area. The development of community supports interventions for skill development and the use of TVET sector as a means to reduce poverty in local communities and transforming cottage industries for women, youth and other identifiable groups (Akyeampong, 2002).

2.9 Entrepreneurial skills in Technical Vocational Education and Training

It is no news that the world has become private sector driven, and economic prosperity in the 21st century requires the possession of entrepreneurial skills to function. The youth needs

exposure in practical entrepreneurial work experience in order to be proficient in their chosen career and be useful to themselves and the society. Entrepreneurship which is a planned effort undertaken by an individual or individuals, institutions or agencies to develop the required competencies in people can easily be addressed through vocational options. Competencies of individual's entrepreneurial skill in TVET are designed to lead the beneficiaries' to self-employment, economic self-sufficiency, and employment generation through short or long-term training. This has lead African countries including Ghana to realise that training in TVET is necessary to alleviate poverty through skill acquisition. TVET can be described as any form of education whose primary purpose is to prepare beneficiaries for gainful employment in an occupation or group of occupations.

2.10 Achieving Youth Empowerment through Entrepreneurial skills in Technical Vocational Education and Training

Youth empowerment is an attitudinal, structural and cultural process whereby the youth gain the ability to make decisions and employment changes in his or her hues and other people including adults.

It is usually addressed as a gateway to intergenerational equity, civic engagement and democracy building. The language all over Africa including Ghana is the creation of specific jobs to take the millions of youth out of the shackle of poverty and underemployment thereby empowering the youth. The need to link entrepreneurial training with TVET would provide gainful employment (paid or self-employment) to the recipient which is the base for industrialization and technological development. The UNESCO, (2003), while addressing the need for fostering entrepreneurship mind sets and promoting entrepreneurship education among the youth recommends TVET as a sure way out of poverty facing the youth worldwide

today. It is a fact that the society needs men and women that are capable of establishing businesses that would help cushion the adverse effects of mass unemployment and poverty which entrepreneurial skills in TVET affords.

Entrepreneurial studies allows the beneficiaries to consider various occupational possibilities, the work required, available rewards, necessary training and relative advantages and disadvantages of each (Nwoye, 2011). The scope of entrepreneurship education according to the UNESCO, (2003) includes creativity, innovations, risk taking and the ability to plan and manage projects in order to achieve objectives. In line with the scope of entrepreneurship education, and by its definition as the ability to turn ideas into action, the International Labour Organisation (ILO) in its recent appraisal of the world job situation urged member nations to create specific programmes to engage the youth in vocational areas of automobile mechanic, metal work, electrical electronics, carpentry and tailoring among others. Such intervention, the ILO opined was the solution to the ever-widening challenges of joblessness worldwide.

TVET prepares its graduates for employment in the workplace. The deepening youth unemployment and need to empower the youth requires training them in entrepreneurial education through TVET. Introducing entrepreneurial studies as an explicit goal in the curriculum will be a clear signal that it is important for every student. Moreover, it will make it easier for teachers to spend teaching hours on the subject. A general trend should be on how to shift national curriculum from content to competences. This process would strengthen competency-based teaching and learning to make it easier for entrepreneurship to be included in the school programmes. It is important that schools extend entrepreneurial training to all fields of study in TVET. This, Dike (2009) opined would enable graduates of TVET to make intelligent use of the product of technology and develop better entrepreneurial skills to become

more innovative workers. Persons who have passed through TVET programme become more dutiful and conscientious in their duties. TVET reduces unemployment in the society (Oranu, 1991; Olaitan, 1992).

In a country like Ghana where high rate of unemployment is experienced, seemingly brought about by the failure of systems and institutions, coupled with inability of government to create jobs for the teeming youth (Muhammed, 2010) means that entrepreneurship in TVET could be employed to develop saleable skills in the youth so that they become easily self-employed or employable after graduation. The promotion of entrepreneurial studies would create opportunities for employment with subsequent income multiplier effects for the surrounding community. If job creation and entrepreneurial activities are carefully co-ordinated, then it would not be argued that increased entrepreneurship would no doubt help the most disadvantaged in the labour market. This become more important because there seem no indication that unemployment will be eradicated completely in the 21st century. The situation according to Maigida (2012) become worse due to the change in the competencies required of job seekers in the labour market brought about by innovations in technology which makes it necessary for youth to acquire specialized skills to enable them cope with the current trends in technology and the labour market. Entrepreneurship in TVET may serve as a tool for achieving youth empowerment. This is possible in the light of TVETs' immense contributions to social and economic development to individuals. Therefore, promotion of entrepreneurial skills in TVET should form an array of developmental programmes and policies in technical and vocational institutions.

2.11 The Youth and Unemployment

Like many developing countries in Africa, Ghana is facing a serious unemployment problem coupled with a declining standard of living, increasing disparity between the urban and rural regions of the country, and inadequate social and physical infrastructures to meet the needs of a rapidly growing population (Ferej, 1994). To provide a means of survival, many of the unemployed have turned to the informal sector to create small enterprises that range from trivial trading activities to reasonably successful production, manufacturing, and construction businesses. In general, a small enterprise may be defined as an enterprise having less than 20 employees. The small enterprise sector is composed of a range of enterprises including: self-employed artisans, microenterprises, cottage industries, and small enterprises in the formal business sector. These small enterprises may be engaged in trade, commerce, distribution, transport, construction, agribusiness, manufacturing, maintenance and repair, or other services. As a result of the trend toward the creation of small enterprises, the informal sector has grown to include approximately 60% of the labor force in Africa (International Labor Organization, 1985).

In the past, a widespread approach to the problem of limited job opportunities was through the establishment of large industrial complexes that were expected to provide many jobs and enhance the economic situation of the local area (Charmes, 1990). This approach has been largely unsuccessful because it was overly capital-intensive in countries that had limited capital. It actually provided few new employment opportunities and exacerbated the gap between the rich and poor. Because of the failures of this approach, formal development efforts are now emphasizing the creation of small enterprises in the informal sector that are operated by self-employed individuals.

While much of the job growth potential in developing countries seems to exist through the creation of small enterprises, the ultimate impact of new job creation through the informal sector may be limited for numerous reasons. First, much of the growth of private enterprise in the informal sector in Ghana has been spontaneous rather than a result of deliberate strategies within an overall government policy framework. Second, although large numbers of small enterprises may be created, their prospects for growth into medium-sized enterprises is limited (House, Ikiara, & McCormick, 1990; McCormick, 1988; Mwaura, 1994).

Reasons for this lack of growth include an over-supply of similar goods in the marketplace, lack of management and technical skills, limited capital, and low product quality (House *et al.*, 1990). In addition, many of these small enterprises are owned by "first generation" entrepreneurs who have limited experience and are unwilling to take the necessary risks to expand their businesses. Third, while technology is a primary factor in economic development (Sherer & Perlman, 1992), it has had a limited impact on the growth of small enterprises because of political conflicts, economic restrictions, limited educational capabilities, and weak technological infrastructures (Githeko, 1996).

One approach to enhancing entrepreneurial activity and enterprise growth in developing countries is to create an "enterprise culture" among the youth of the country (Nelson & Mburugu, 1991). By focusing on youth while they are still in school, this approach may provide a long-term solution to the problem of job growth. To achieve a widespread "enterprise culture" in the long run, education and training programs in Ghana must integrate business, technology, self-employment, and entrepreneurship into the curriculum. This idea was supported by Ferej (1994), which recommended that entrepreneurship training be taught in all technical training

institutions. With its history firmly entrenched in the technical and occupational aspects of work, technical education is an ideal vehicle through which to create an "enterprise culture."

Unemployment, particularly among the youth, is a critical problem in developing countries. Self-employment in small enterprises has been identified as a partial solution (Nelson, 1986). Entrepreneurship education can play a major role in changing attitudes of young people and providing them with skills that will enable them to start and manage small enterprises at some point in their lives.

Potential entrepreneurs who are able to establish small enterprises in small towns and villages in rural areas must be developed in adequate numbers. By increasing the number of entrepreneurs in a region, a more even distribution of income between rural and urban areas can be achieved by improving the productive capacity of people living in rural areas (Gibb, 1988). Since technical training institutions are located throughout Ghana, entrepreneurship education will help ensure an adequate supply of potential entrepreneurs in both urban and rural areas.

Accelerated industrialization, particularly through small-scale enterprises, requires an increased supply of individuals with entrepreneurial capabilities. As Ghana moves from over-dependence on an agrarian economy to a more diversified industrial society, the supply of entrepreneurs involved in manufacturing and technology-related businesses must increase. Technical training institutions are capable of preparing potential entrepreneurs by adding entrepreneurship education to their curriculum.

Capital is a scarce resource for economic development that needs to be used wisely. Care should be taken to ensure that the individuals who receive loans actually possess the technical and entrepreneurial skills needed to succeed. The emergence of limited numbers of enterprises, the high mortality rate of those that start, and the slow or stagnated growth of those that survive are clear indications that increased efforts are needed to prepare more competent entrepreneurs.

Human resources are very important for development. By orienting young people toward self-employment, human resources may be used more productively. The objectives of entrepreneurship education should focus on:

- i. upgrading the social and economic status of self-employment as a career alternative,
- ii. stimulating entrepreneurial attributes in young vocational trainees,
- iii. facilitating the development of entrepreneurial ideas, and
- iv. promoting the overall development of an "enterprise culture" in Ghana.

Entrepreneurship education is an area of study that can challenge trainees to adopt such an orientation to work, either as employers or as employees.

2.12 Entrepreneurship as a Field of Study in Technical and Vocational Education

The entrepreneur is the key actor in the private enterprise sector and can be defined as a person who is able to look at the environment, identify opportunities for improvement, gather resources, and implement action to maximize those opportunities. The entrepreneur can be depicted as a role model in the community, a provider of employment opportunities for others, a stabilizing factor in society, and a primary contributor to the development of natural and human resources within a nation. Entrepreneurs provide new insights and perform a positive function in the economic development of a country. In the private sector, entrepreneurs are those who are motivated to take risks, be innovative, develop new business ideas, and invest

money and other resources to establish enterprises that have growth potential. There appears to be some agreement that most people possess entrepreneurial qualities to some extent and in some combination.

What are the entrepreneurial qualities that are needed by future entrepreneurs? Informal educational programs support the development of these personal entrepreneurial traits, potential entrepreneurs will be more likely to initiate action and have a better chance for success in their business ventures. While technical skills are needed by successful entrepreneurs, it is important to identify differences between technical skills and entrepreneurship capabilities. This distinction is important because there are many training programs for technical skill development, but relatively few entrepreneurship development programs currently exist in Ghana. Most existing entrepreneurship development programs have been designed for entrepreneurs who are already in business. During the past 10 years, large numbers of Ghanaians have received vocational and technical skill training, but there are limited employment opportunities for graduates of technical training institutions. A growing economy will help expand opportunities for producing new goods and services in the market; yet people need to be equipped with both technical and entrepreneurial skills in order to take advantage of these new opportunities, initiate new enterprises, and become self-employed.

2.13 Challenges of Entrepreneurship Education in Ghana

Quality Entrepreneurship Education could play a vital role in equipping individuals with necessary intellectual capacity, skills and right type of work habit and attitude to be able to create jobs for the growth of the economy. However, what is quite essential is the extent to which the entrepreneurship Education programme can be implemented to realize these goals (Osuala, 2010). The programme is confronted with a lot of challenges which has brought a

setback in the attainment of its objectives. These challenges have not enable Ghanaians to enjoy the benefits of this programme as expected. This limits the achievement of the millennium development goals (MDGs) in Ghana.

Some of the challenges have been pointed out by eminent scholars such as Gana (2000), Aiyeduso (2004), Osuala (2010) and they include:

- Poor funding by government and Non-governmental organizations.
- Poor or ineffective planning, supervision information and evaluation of the programme across the board.
- Inadequate teaching materials, equipment and infrastructural facilities.
- The challenges posed on globalization, information and communication technology (ICT) have effect on curriculum, methodology, facilities, staff and equipment.
- Inadequate qualified teachers and instructors as well as supporting staff at all level.
- Inadequate motivation for available teaching and non-teaching staff which affects staff efficiency, retention, creativity and initiative.
- Emphasis on theoretical Knowledge rather than practical knowledge due to lack of entrepreneurship education centre.
- High level of corruption and very poor maintenance culture in the system.
- Poor enabling business environment, access to credit/ loan, infrastructural decay, mass poverty, inflation, technological infraction, political instability and insecurity of lives and properties which hamper economic and business activities.

2.14 Entrepreneurial Options in Vocational/Technical Education

The major occupational areas of vocational and technical education are: vocational agriculture, vocational business and office education, distributive education, vocational home economics, trades and industrial technical education.

2.14.1 Vocational Agriculture

According to Boshorun and Uzochukwu (1999), the entrepreneurial options within vocational agriculture include:

- i. Livestock production: poultry, goat, cow, pig and fish production
- ii. Agricultural supplies and distribution, chemicals, feeds, seeds, fertilisers
- iii. Farm equipment and machinery supplies and maintenance
- iv. Agricultural extension services/farm management
- v. Soil management, farm produce and species development
- vi. Agricultural resources management – forestry
- vii. Ornamental horticulture

2.14.2 Vocational Business

Vocational business education and office education equips its recipients with the knowledge, skills and competencies necessary for them to gain entry level employment as well as advance in their chosen office career or occupation in the face of advanced technological change in modern offices. Entrepreneurial options in this specialised area of vocational/technical education are:

- i. Establishment of private secretarial training centers
- ii. Establishment of private business centers for the provision of secretarial services
- iii. Establishment of post-primary business/commercial schools

- iv. Office ergonomics
- v. Establishment of account and auditing firms (Osuala, 2004)

2.14.3 Distributive Education

Distributive Education is preparation for employment in business engaged in the distribution of consumer goods and services. It encompasses all activities involved in packaging, branding, advertising and distribution of general goods and services. Entrepreneurial opportunities here are numerous, few as may be identified here include:

- i. Sales and distribution of computer/household goods
- ii. Distribution of consumer/computer accessories
- iii. Retail/outlet operation e.g. provisions and cosmetics
- iv. Wholesale sales of identified product line
- v. Advertisement agent/expert consult
- vi. General merchandise-departmental stores, supermarket operators, etc.

2.14.4 Vocational Home Economics

Dacosta (1999) notes that home economics as a vocational subject is widely recognised and acknowledged. The basic aims of vocational home economics education is mainly the proper training of the individual to living a meaningful life and earn a living. Ogunjimi (1995) asserts that the curriculum of vocational home economics education is concerned with improvement of the general environment of the family and society. The curriculum is now designed with the objective of developing in the recipients, an all-round skill to live a useful and satisfying life. The scope of vocational home economics education includes: child development, home management, food, nutrition and meal preparation, human relationship, home nursing/health,

family living and parenthood. In vocational home economics, there exists wide varieties of entrepreneurial options. Some of these include:

- i. Dressmaking/fashion designer, boutique expert producers/sales
- ii. Child care and development centre operator
- iii. Snack and beverage production expert/dealer – ice-creams, popcorn, pastries, etc.
- iv. Dieticians, food and nutrient counselling expert for schools, hospitals and hotels
- v. Interior decoration expert consult (offices, private homes, hotels)
- vi. Event planning and organising

2.14.5 Trade and Industrial Technical Education

Osuala (1987), notes that trade and industrial technical education provides instruction for the development of basic manipulative skills, safety judgement, technical knowledge and related occupational information for preparing persons for useful self or paid employment in vocational industrial pursuit. Entrepreneurial development options in this specialised area include:

- i. Identify, repair and maintenance or servicing of air conditioners faults
- ii. Identify, repair and maintenance or servicing of refrigerator faults
- iii. Identify, repair and maintenance of electrical appliances, compressors, dryers, water heaters, etc.
- iv. Construction occupations – woodwork, carpentry and joinery
- v. Fabrication occupation: electrical welding, metal works, asbestos roofing sheets, etc.
- vi. Builders: Building technology experts, building electrical works, architectural designers.

In agreement with the above descriptions of entrepreneurial opportunities in the various aspects of vocational technical education, Owusu (1998) notes that in the Ghanaian business scene, vocational technical education finds expression in some substances of entrepreneurial activities in such areas as carpentry, auto mechanics, tailoring, typesetting, photo-studios, shoe-making, etc.

2.15 Summary of Literature Review

Entrepreneurship education is seen as the way forward for improving employment and enhancing the socio-economic status of individuals. The literature review looked at entrepreneurship education in general, the history of technical and vocational education in Ghana, the vocational training practices that promote acquisition of entrepreneurial skills and the state of entrepreneurship education and TVET in some African countries. It was seen from the literature reviewed that entrepreneurship education and TVET has similar challenges which were lack of cooperation between industry and academia, infrastructure and logistics and personnel.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter covers the methods that were employed for the collection of data for the study. Methodology is a description of the approaches and kinds of research paradigms used in a particular research (Kaplan, 1973). The chapter begins with a description of the research design, the population, sample and sampling procedure, data collection instruments and techniques, and ends with a description of the instruments used in the analysis of the data collected.

3.2 The Research Design

Research design is a framework or blueprint used for conducting a research project. It specifies the details of the procedures necessary for obtaining the information needed to promote and integrate entrepreneurship in Vocational and Technical Education (Bickman & Rog 1998). The study touched on various variables of entrepreneurship education about the existing processes and policies in support of entrepreneurial education in the vocational education sector. The descriptive survey method was employed for the collection of quantitative data which made possible gathering of large-scale data upon which a basis for interpretation and generalisations were drawn. The study was a cross-sectional one, taking into cognisance the fact that the research was conducted for academic purposes only and within a short period of time.

3.3 Sources of Data

Data was collected primarily from the sample of vocational and technical education institutions in the Kumasi Metropolis. The primary data was collected by means of self-administered questionnaires. Extensive literature was read on the topic to gain an insight into the overview

of entrepreneurship education and technical/vocational education. This served as a secondary source of data for the researcher in order to know the right questions to ask and from whom to ask.

3.4 Study Area

The Kumasi Metropolis is one of the 30 administrative districts in the Ashanti Region. The city of Kumasi was founded in the 1680s by the first Asante King Osei Tutu I to serve as the capital of the Asante Kingdom (KMA, 2010). Given its strategic location and political dominance, Kumasi developed into a commercial centre with all major trade routes in Ghana converging in the city (KMA, 2010). With time, the city began to expand, and it is currently rated second only to Accra (the national capital) in terms of land area, population size, social life and economic activity (KMA, 2010).

Kumasi Metropolis boasts of a vibrant educational system with educational facilities being invested into by both public and the private sector ranging from pre-school up to the university level. There are more than 30 technical and vocational schools in the Ashanti Region where Kumasi metropolis is located. The Metropolis itself has a concentration of about 15 of these technical schools. Notable among them are the Kumasi Technical Institute, Kumasi Vocational Training Institute, Mancells Vocational Training Institute, Ahmadiyya Muslims Girls Vocational Training Institute and Opoku Ware Girls Training School among others.

3.5 The Target Population

Population according to Burns and Grove (1997) is the entire aggregation of respondents that meet the designated set of criteria for a particular study. The target population in this study was all vocational and technical schools in the Kumasi Metropolis. Kumasi as a metropolis boasts of about fifteen (15) technical and vocational institutions. The population considered for the

study consisted of students and staff of identified vocational training institutions. Stakeholders from the Technical Educations Unit and National Vocational Training Institute also made up part of the population for this study

3.6 Sample and Sampling Technique

In the selection of the institutions, the purposive and random sampling techniques were employed to ensure representativeness. The purposive and random sampling were used to make a fair selection of teaching and non-teaching staff from five (5) vocational/technical institutions identified in the Kumasi Metropolis. The institutions selected for the study are; Ahmadiyya Muslim Girls Vocational Training, Catholic Technical Institute, Kumasi Technical Institute, Kumasi Vocational Training Institute and Ramseyer Vocational Technical Institute all in the Kumasi Metropolis. A total of 50 respondents were selected for the study consisting of 40 teaching staff and 10 non-teaching/administrative staff from the various institutions. In the selection of respondents, eight (8) teachers were randomly selected from each of the five institutions whilst two (2) non-teaching staff or administrators were equally sampled randomly from each school. The raffle method of random sampling was used where respondents were made to pick pieces of folded papers which were labelled 'Yes' and 'No' from a container. The members who picked 'Yes' were used as the sample for the study. The use of random sampling ensured that each member had a fair chance of being selected to participate in the study.

3.7 Instruments for Data Collection

The instrument used for collecting the data for the study was questionnaire. Hendricks (2009) describes a questionnaire as a set of carefully designed questions given in exactly the same form to a group of people in order to collect data about some topic(s) in which the researcher is interested. To measure the subtle issues of entrepreneurial education integration in

vocational/technical education calls for a cautious selection of appropriate data collection instruments. The researcher conscientiously opted to use questionnaire for data collection. The questionnaire consisted mainly of close ended items, both multiple choice and Likert scale types. The questionnaire was divided into five parts which sought different information from respondents. The first part of the questionnaire, Section I, collected respondents' demographic data whilst the second to the last sections sought information about the research questions of the study.

3.8 Data Collection Procedure

The institutions selected were visited and the participants were briefed on the purpose of the study and its educational implications after permission was sought and granted by the Heads of the establishments involved. The respondents were allowed some time to raise questions about the areas they were finding difficult to understand. After the discussion, copies of the questionnaires were distributed to them to respond to at their own convenience. On the whole, about two weeks were spent for the collection of the data. All the respondents completed the questionnaires for collection.

3.9 Validity and Reliability of Instruments

Validity and reliability in research is the degree of stability exhibited when measurement is repeated under identical conditions (Burns & Grove, 1997). Research validity refers to the researcher's objectivity in actually measuring what was supposed to be measured and not something else. Reliability means responses to the questionnaire were consistent (Steiner & Norman, 1989). The following steps were taken in order to ensure the validity of the data. The questionnaire was based on information obtained from literature review. This was to ensure

that it was from a representation of elements from the topic under discussion (Polit & Hunger, 1993).

Again, an initial draft of the questionnaire was tested informally using staff of other institutions outside the study area in the Ashanti Region. Based on their feedback, few items were revised to improve better comprehension, content validity, wording format and question flow. This pilot exercise was carried out in accordance with what Hendricks (2009) described as getting the bugs out of the instrument so that respondents in the main study will experience no difficulties in completing them. This was also to enable the researcher carry out a preliminary analysis to see whether the wording and format of questions will present any difficulties when the main data is analysed.

3.10 Data Analysis Procedure

Data analysis is the process of evaluating data using analytical and logical reasoning to examine each component of the data provided (Burns & Grove 1997). Information gathered during data collection may lack uniformity and some information given may need reconstruction. After collecting the data, they were first edited. During editing, relevant and appropriate errors were found and modified. The edited questionnaires were then organized and coded. Coding involves assigning numbers or symbols to each response category in order to translate the raw data into a form that could be counted, tabulated or fed directly into a computer (Agyedu, Donkor & Obeng, 2011). Descriptive statistics such as frequencies and percentages were used in the analysis of the data. The organized and coded data was then fed into the Statistical Package for Social Sciences (SPSS Software) for analysis and interpretation. The analysis and discussions are presented under Chapter Four of this study.

3.11 Ethical Considerations

A major ethical concern for researchers in their line of duty is that which requires them to strike a balance between the demands placed on them as professional scientists in pursuit of truth and their participants' rights and values potentially threatened by the research (Cohen, Manion and Morrison, 2007). To make this study conform to ethical principles and practices, the rights to self-determination, anonymity, confidentiality and informed consent were observed (Kusi, 2012). The respondents were informed of their rights to voluntarily participate or decline. They were also informed about the purpose of the study and were assured of not reporting any aspect of the information they provided in a way that will identify them. They were also assured that there were no potential risks involved in the research process.



CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This section of the study presents the results emanating from the data collected from the field survey and a discussion on it is also provided. It deals with the presentation and analysis of data gathered from the field from the administered questionnaires. Descriptive statistical tools such as frequencies, percentages, means and standard deviations were used for the analysis. The frequency distribution tables were used to illustrate the outcomes of the data collected. The analyses were guided by the various objectives of this study in the design of the questionnaires administered on the field. The questionnaire was designed purposely to gather information on the means of integrating entrepreneurial skills in technical and vocational education to boost youth employability in the Kumasi Metropolis.

This chapter consists of five (5) sections. The first section contains the presentation and analysis of the socio-demographic characteristics and background information of the respondents. The second section discusses the vocational training practices that promote entrepreneurial skills among students whilst the third section talks about the existing linkages between industry and vocational training institutions. Section four discusses the challenges of entrepreneurship education in vocational/technical education and the last/final part discusses measures that can be instituted to improve the development of entrepreneurial training in vocational and technical education.

4.2 Demographic Data of Respondents

The demographic background information was meant to give the researcher an understanding of the profiles of the participants and also establish the suitability of the respondents for the

study. This also provided a basis for further discussions. The questionnaire presented to respondents sought the details about their gender, age groups, educational qualification, years of teaching experience and section or department of work for analytical purposes in this study. The results obtained are presented using frequency distribution tables in Tables 4.1 to 4.5.

Table 4.1 Gender distribution of respondents

Gender	Frequency (<i>f</i>)	Percentage (%)
Male	32	64%
Female	18	36%
Total	50	100%

Source: Field survey (2016)

Table 4.1 presents the gender distribution of respondents who participated in the study. According to the gender distribution of respondents from the table, 18 respondents representing 36% were females whilst the remaining 64% were males. This shows that majority of staff in the vocational and technical institutions are males. This result may be due to the fact that, the education system in Ghana allows more males up the educational ladder whilst females drop. For one to be a staff in a technical or vocational institution requires higher education which favours males more than females in the Ghanaian context.

Table 4.2 Age distribution of respondents

Age	Frequency (<i>f</i>)	Percentage (%)
26 – 30 years	9	18%
31 – 39 years	23	46%
40 – 49 years	13	26%
50 – 59 years	5	10%
60 years and above	0	0%
Total	50	100%

Source: Field survey (2016)

Looking at the age distribution of respondents presented in Table 4.2, it is seen that majority of respondents i.e. 23 representing 46% were aged between 31 – 39 years whilst 13 respondents representing 26% were aged 40 – 49 years. Again, only five (5) respondents which represents 10% were aged between 50 – 59 years whilst nine (9) respondents were in the age group of 26 – 30 years with the last age group being 60 years and above recording no responses. It can be deduced from this result that most of the respondents are considered averagely matured which makes them suitable for this study. The researcher also considers it that since majority of respondents were moderately matured, it presupposes that they were privy to the intricate matters in their field of work, which is the vocational and technical education sector.

Table 4.3 Educational qualification of respondents

Educational Qualification	Frequency (<i>f</i>)	Percentage (%)
Certificate	2	4%
Diploma	8	16%
HND	21	42%
1 st Degree	13	26%
Post-graduate	6	12%
Total	50	100%

Source: Field survey (2016)

The educational background of respondents presented in Table 4.3 shows that majority 21(42%) of respondents were holders of Higher National Diploma (HND) certificate whilst the next higher qualification was bachelor’s degree from universities. A close look at the table reveals that only two (2) respondents which represents 4% had ordinary certificates whilst eight (8) respondents representing 16% held Diploma qualifications. It is again seen that 6 respondents representing 12% held post-graduate degrees. This result indicates that majority of respondents held qualifications of Higher National Diplomas and above which qualifies

them well to be members of staff in the Technical and Vocational Institutions. This again is an indication that respondents themselves had either gone through the technical education system before acquiring the HNDs and as such are more open to the processes in the system.

Table 4.4 Work experience of respondents

Work Experience	Frequency (<i>f</i>)	Percentage (%)
1 – 5 years	12	24%
6 – 10 years	17	34%
11 – 15 years	11	22%
16 – 20 years	6	12%
Above 20 years	4	8%
Total	50	100%

Source: Field survey (2016)

The work experience of respondents was collected which is also presented in Table 4.4. It is seen from the table that, majority of respondents 17(34%) have been working in the voc/tech sector for 6 – 10 years whilst 24% have experience of 1 – 5years. Again, 11 (22%) respondents reported to have an experience of 11 – 15 years whilst six (6) and four (4) respondents each representing 12% and 8% respectively had experiences of 16 – 20 years and above 20 years. This indicates that the respondents who participated in the study are relatively well experienced and hence could be trusted to provide adequate and valid responses to the items presented in the questionnaire.

Table 4.5 Respondents' department of work

Status of Work	Frequency (<i>f</i>)	Percentage (%)
Teaching Staff	40	80%
Non-Teaching staff	10	20%
Total	50	100%

Source: Field survey (2016)

Table 4.5 presents the category or department of work of respondents. It is seen from the table that 40 (80%) of respondents were teaching staff whilst 10 (20%) each were non-teaching staff from the various technical and vocational schools selected for the study. The researcher selected a cross section of staff from the universities to ensure that all opinions and perspectives are captured and represented in the current study.

4.3 Vocational Training Practices that Promote Entrepreneurial Skills among Students

The Technical and Vocational Education and Training (TVET) curriculum is planned in such a way that it promotes the acquisition of skills and competencies that enables one to set up a small business after graduation. This section of the study attempts to bring out the relationship or impact of such competencies or skills acquired on the entrepreneurial skills acquired by students. In doing so, the researcher collected information through a 4-point Likert scale questionnaire items. The scaling values for the items as presented in Table 4.6 is given as, 1 = Strongly Agree (SA), 2 = Agree (A), 3 = Disagree (D) and 4 = Strongly Disagree (SD). For the purposes of analysis the researcher condensed the strongly agree and agree categories to mean Agree and the Strongly Disagree and Disagree categories to mean Disagree. Based on the four-point Likert scale used, a computed mid-point mean value of 2.5 and below ($\bar{x} \leq 2.5$) signifies general agreement with the statement whilst a mean score of 2.6 and above ($\bar{x} \geq 2.6$) indicates

that respondents generally disagreed with the statement. According to Cohen, Manion & Morrison (2007) the use of a 4-point scale category implies a midpoint mean value of 2.5 while a 5-point scale and 7-point scale category has midpoint values of 3 and 4 respectively.

Table 4.6 Vocational training practices that promote entrepreneurial skills among students

Variables	SA		A		D		SD		Mean (\bar{x})	Total
	f	%	f	%	f	%	f	%		
Emphasis on practical work rather than grades in technical education enhances youth empowerment needed for entrepreneurship.	14	28%	24	48%	7	14%	5	10%	2.06	50 100%
Competency based training in technical and vocational education enhances workers productivity.	28	56%	16	32%	6	12%	0	0%	1.56	50 100%
Balanced combination of theory and practice in Voc/Tech education helps students to develop creativity and innovation skills	10	20%	30	60%	6	12%	4	8%	2.08	50 100%
Vocational education empowers students to be employers of labour rather than employees.	5	10%	8	16%	24	48%	13	26%	2.90	50 100%
Acquisition of real world experiences through field trips exposes students to knowledge and skills for job creation	17	34%	22	44%	9	18%	2	4%	1.92	50 100%
Promotion of independent and critical thinking skills of students enhances output effectiveness and efficiency in business	28	56%	20	40%	2	4%	0	0%	1.48	50 100%

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

Source: Author's field survey, 2016

Table 4.6 presents the vocational and technical education practices that promote entrepreneurial skills among students. From the data presented in the table, an overwhelming majority of 48(96%) respondents agreed that the promotion of independent and critical thinking skills of students in vocational and technical education enhances the effectiveness and efficiency in business settings. This item received a mean value of 1.48, which indicates that respondents rated it higher than the other factors. The next vocational training practice that

promote entrepreneurial skills of students as rated by respondents was competency based training in technical and vocational education. To this statement, 28(56%) of respondents strongly agreed whilst 16(32%) agreed, yielding a mean value of 1.56. In ascending order of mean values which indicate decreasing acceptance, with means of 1.92, 2.06 and 2.08, respondents accepted that vocational education practices like the acquisition of real world experiences through field trips, emphasis on practical work rather than grades and balanced combination of theory and practice were some of the vocational training practices that promote the acquisition of entrepreneurial skills among students. On the other hand, respondents generally disagreed that vocational education empowers students to be employers of labour rather than being employees since this item received a mean rating of 2.9 which is above the accepted mean value of 2.5. This indicates that respondents were of the opinion that vocational education does not empower students to be employers of labour.

The foregoing discussion indicates that respondents accepted that several of the practices at the vocational and technical training institutions promote entrepreneurial skills among students but disagreed that vocational education empowers students to be employers of labour rather than employees. Igbo (2009) supports this by indicating that good practice indicators for entrepreneurship in vocational education are necessary for ensuring the success of entrepreneurship integration in vocational education. Amedorme (2013) also cited practices like the provision of funding, setting up of entrepreneurship development centres and adequate provision of practical work to promote the study of entrepreneurship among vocational and technical education institutions.

4.4 Existing Linkages between Industry and Vocational Training Institutions

According to Nelson & Mburugu (1991), one approach to enhancing entrepreneurial skill acquisition among students and create an ‘enterprise culture’ among the youth of any country is to establish vital linkages between industry and the vocational/technical training institutions. This would go a long way to develop an ‘enterprise-aware’ student generation who see the relevance of what they learn in the classroom in the real world. Again, students will be willing to put into practice what they learnt in the classroom with the foreknowledge that the existing industries were grown from small enterprises like theirs. In this regard, the researcher sought to find out the avenues or linkages that existed between industry and the vocational training institutions in the study area. The data obtained is presented in Table 4.7.

Table 4.7 Linkage between industry and Voc/Tech institutions

Variables	SA		A		D		SD		Mean (\bar{x})	Total
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%		
Provisions for industrial attachment are available for vocational and technical students	27	54%	13	26%	6	12%	4	8%	1.74	50 100%
There are internship opportunities for vocational education students in industrial establishments	5	10%	15	30%	20	40%	10	20%	2.70	50 100%
Industry provides on-the-job training for students of vocational and technical institutions	12	24%	21	42%	10	20%	7	14%	2.24	50 100%
There is collaboration for vocational and technical students to be posted into industry for national service	16	32%	17	34%	12	24%	5	10%	2.12	50 100%
Bilateral collaborations exist with companies for field trips and excursions.	2	4%	10	20%	22	44%	16	32%	3.04	50 100%
The school invites company personnel as resource persons for seminars and workshops in vocational and technical schools	7	14%	17	34%	14	28%	12	24%	2.62	50 100%
Exchange programme arrangements for students to experience real world industrial settings.	3	6%	11	22%	21	42%	15	30%	2.96	50 100%

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

Source: Author’s field survey, 2016

Table 4.7 shows the responses on the available or existing linkages between industry and vocational/technical training institutions in the study area. From the table, it is seen that 27(54%) respondents strongly agreed to the statement that there are provisions for industrial attachments for vocational and technical education students whilst 13(26%) agreed. This accounts for a combined percentage of 80% respondents out of the total 50(100%) with only 12% and 8% respectively disagreeing and strongly disagreeing. Using the combined percentages for the 'agree' and 'disagree' categories, 80% agreed whilst 20% disagreed yielding a mean value of 1.74. Looking at the frequency and percentage values coupled with the mean value, it is evident that respondents strongly accept the fact that there exist opportunities for students of vocational and technical education institutions to attach themselves to the various industries relevant to their fields of study.

On the issue of providing mandatory internship programmes for students, where students would be required to spend at least a full academic term in industry to learn about the way such industries operate, only a combined percentage of 40% of respondents (which is 10% 'strongly agreed' and 30%) 'agreed' whilst a combined percentage of 60% disagreed. This statement yielded a mean value of 2.70 which was above the accepted mean value of 2.50, indicating that respondents did not agree that students underwent well organised internship programmes supervised and facilitated by the vocational training institutions they attend.

The third item in Table 4.7, providing on-the-job training for students of vocational and technical institutions received a mean rating of 2.24 which is within the acceptable mean value range. A closer look at the table shows that a combined 66% of respondents agreed whilst 34% were in disagreement with the statement. This is indicative of the fact that respondents hold the view that when students of vocational and technical institutions are given opportunities to work in industry, they are given on-the-job training to make them fully functional in their work environments.

From the table, it is also seen that respondents agreed to the statement that there is collaboration for vocational and technical students to be posted into industry for their national service after completion of their programme of study. Looking at the percentage and mean values, this item received a mean value of 2.12 which is within the acceptable mean range and a combined agreement percentage of 66% as against 34% for disagreement.

With mean values of 3.04, 2.62 and 2.96, respondents were of the view that the statements; bilateral collaborations exist between technical/vocational institutions and companies for field trips and excursions, schools invite company personnel as resource persons for seminars and workshops, and exchange programme arrangements for students to experience real world industrial settings were not true. In this light, it presupposes that respondents expressed opinion that there were no bilateral collaborations between companies and technical/vocational schools and that schools did not invite company personnel as resource persons for workshops and seminars at school and that there were non-existent exchange programmes between industry and the technical/vocational schools. This is corroborated by research evidence, Akyeampong (2002) who states that the development of community support interventions for skill development will serve as a means to reduce poverty in local communities and transform the lives of the individual graduates.

4.5 Challenges of Entrepreneurship Education in Voc/Tech Education

Quality Entrepreneurship Education could play a vital role in equipping individuals with necessary intellectual capacity, skills and right type of work habit and attitude to be able to create jobs for the growth of the economy. However, according to Osuala (2010), the programme is confronted with a lot of challenges which has brought a setback in the attainment of its objectives. The researcher in view of this sought to find out the existing challenges facing the implementation of entrepreneurship education in vocational and technical education

programmes. The results as obtained from the respondents are presented in Table 4.8 and discussed accordingly.

Table 4.8 Challenges of entrepreneurship education in Voc/Tech education

Variables	SA		A		D		SD		Mean (\bar{x})	Total
	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%	<i>f</i>	%		
Inadequate funding	31	62%	18	36%	1	2%	0	0%	1.40	50
Poor mindset of students towards entrepreneurship	17	34%	21	42%	8	16%	4	8%	1.98	50
Lack of well-equipped entrepreneurship development centres	23	46%	22	44%	3	6%	2	4%	1.68	50
Lack of training/instructional materials	19	38%	24	48%	6	12%	1	2%	1.78	50
Inadequate qualified manpower	4	8%	15	30%	20	40%	11	22%	2.76	50
High emphasis on theoretical knowledge rather than practical knowledge	23	46%	20	40%	4	8%	3	6%	1.74	50

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

Source: Author's field survey, 2016

From Table 4.8, respondents accepted all the items presented as challenges that the vocational and technical education programme is grappling with in the implementation of entrepreneurship programme in its curriculum. In order of decreasing mean values; 1.98, 1.78, 1.74, 1.68, and 1.40 which indicates a rise in the rating of the challenges, respondents were of the view that the problems facing entrepreneurship education in Voc/Tech programme are in the following order; Inadequate funding, lack of well-equipped entrepreneurship development centres, high emphasis on theoretical knowledge rather than practical knowledge, lack of training/instructional materials and poor mindset of students towards entrepreneurship education.

Taking a close look at the table shows that the percentage values for the response categories indicate the same order as reported by the mean values. Inadequate funding as a challenge,

which is ranked as the first received a percentage agreement of 98% as against 2% disagreement, whilst lack of well-equipped entrepreneurship development centres received an agreement percentage of 90% against 10% disagreement. Also, high emphasis on theoretical knowledge rather than practical knowledge received percentage agreement responses of 86% as against 14% disagreement and lack of training or instructional materials received 86% agreement percentage. Bortei-Doku *et al.*, (2011) and Atchoarena and Delluc (2001) enumerates some challenges of vocational and technical education as lack of facilities and materials, limited number of technical institutions and inadequate qualified personnel.

4.6 Measures to Improve the Development of Entrepreneurial Training in Vocational Education

The need to link entrepreneurial training with TVET would provide gainful employment (paid or self-employment) to the recipient which is the base for industrialisation and technological development. It therefore is expedient for stakeholders to look at the way forward in order to achieve the objectives of technological and entrepreneurial training. To this end, the researcher sought from respondents the measures that can be instituted to improve the development of entrepreneurial education in vocational and technical education curriculum.

Table 4.9 Measures to improve the development of entrepreneurship training in vocational education

Variables	SA		A		D		SD		Mean (\bar{x})	Total
	f	%	f	%	f	%	f	%		
Provision of career guidance and counselling to students in vocational/technical schools	14	28%	27	54%	8	16%	1	2%	1.92	50 100%
Development of a viable and rigorous curriculum to imbibe in students the essential components of entrepreneurship as a way of thinking rather than a course that leads to the award of a grade	26	52%	22	44%	2	4%	0	0%	1.52	50 100%
Provision of competency entrepreneurship training for vocational and technical education teachers	13	26%	26	52%	11	22%	0	0%	1.96	50 100%
Provision of coordination between institutions and the labour market to identify the relevant areas in which to train students	32	64%	18	36%	0	0%	0	0%	1.36	50 100%
Provision of start-up capital or funds for students who successfully graduate from vocational institutions having presented a viable business plan.	1	2%	47	94%	2	4%	0	0%	2.02	50 100%
Provision of student support centres where students can be coached and mentored into becoming entrepreneurs	22	44%	16	32%	12	24%	0	0%	1.80	50 100%

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

Source: Author's field survey, 2016

The data presented in Table 4.9 shows responses on the measures to improve the development of entrepreneurship training in vocational education. A cursory look at the table reveals that all the mean values of the items presented in the table 1.92, 1.52, 1.96, 1.36, 2.02 and 1.80 which are all within the accepted mean values indicate that respondents agreed that the items presented all represent measures that can be instituted to improve the development of entrepreneurship training in vocational education.

In order of importance, respondents agreed that the provision of coordination between institutions and the labour market, development of a viable and rigorous curriculum to imbibe in students the essential components of entrepreneurship, the provision of student support centres, provision of competency based entrepreneurship training for vocational and technical

education teachers, provision of career guidance and counselling to students in voc/tech institutions and the provision of start-up capital or funds for students who successfully graduate from the vocational training institutions.



CHAPTER FIVE

SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This chapter of the study presents the summary, conclusions and recommendations of the study. The study was conducted with the aim of promoting the study of entrepreneurship in the vocational and technical education curriculum at the various vocational training centres in Ghana.

5.2 Summary of Findings

From the analysis made which emanated from the data collected during the study, a number of findings were arrived at by the researcher. These findings are presented in a summary form under this section of the study. The findings are presented in accordance with the objectives of the study.

5.2.1 Vocational Training Practices that Promote Entrepreneurial Skills among Students

It became evident from the analysis of the data obtained that several practices at the vocational and technical training institutes promote entrepreneurial skills among students. The practices that were accepted by students to promote entrepreneurial study among TVET students are; the provision of independent and critical thinking skills of students, competency based training in technical and vocational institutes, acquisition of real-world experiences through field trips, emphasis on practical work rather than grades and a balance combination of theory and practice in the vocational training institutions. These facts were agreed on by respondents that they promote the acquisition of entrepreneurial skills of students in the vocational and technical training schools.

5.2.2 Existing Linkages between Industry and Vocational Training Institutions

The analysis of questionnaire items based on this objective revealed that there was limited linkage that existed between industry and the vocational and technical training institutions. It was seen that the very few linkages that existed between industry and the vocational training institutions were not that strong since the mean values of such items were very close to the cut-off limit for the acceptable mean value ranges. The linkages that were reported to be existing between industry and the institutions are industrial attachments, national service and on-the-job training.

5.2.3 Challenges of Entrepreneurship Education in Voc/Tech Education

It was revealed from the study that the integration of entrepreneurship education in the Technical and Vocational Education (TVET) curriculum faced a myriad of problems. Chief among these challenges as accepted or agreed upon by the respondents are inadequate funding, lack of well-equipped entrepreneurial development centres, lack of training and instructional manuals, high emphasis on theoretical knowledge rather than practical knowledge and inadequate qualified manpower to handle the entrepreneurship aspect of vocational and technical education.

5.2.4 Measures to Improve the Development of Entrepreneurial Training in Vocational Education

The study came out with several measures to improve the development of entrepreneurship education in the TVET sector. These were all supported and endorsed by the respondents. The respondents agreed that the provision of career guidance and counselling to students, developing a viable and rigorous curriculum to imbibe into students entrepreneurship as a way of thinking rather than a grade awarding course, provision of competency based

entrepreneurship training for vocational and technical education teachers, provision of coordination between institutions and the labour market, giving start-up capital to students after graduation from TVET institutions and providing student support centres to coach or mentor students while starting up their businesses.

5.3 Conclusion

The researcher was prompted to investigate into this study because it was observed that for some time now, students coming out from technical and vocational institutes do not get jobs, are often laughed at by their friends and are given low respect by society. This study was conducted in a bid to enlighten readers and promote Technical and Vocational education through the integrating entrepreneurship education.

From the study, it can be concluded that there are several practices that actually promote the entrepreneurial skill acquisition of students in the vocational training institutes. Among these practices are the provision of independent and critical thinking skills and competency based training of students based on practical activities. Again, very few linkages existed between the vocational and technical training institutes and industry like industrial attachments, national service and on-the-job training for students. The integration of entrepreneurship education in TVET is fraught with many challenges which were revealed in this study. These challenges include inadequate funding, lack of entrepreneurial development centres, insufficient tools and equipment for practical skills acquisition.

5.4 Recommendations

The idea of implementing entrepreneurship integration in technical and vocational education to empower graduates and reduce unemployment is very laudable since its benefits to the nation

are immense. The existing literature and findings from this study suggests that, there remains much to be done in this regard in order to enjoy the true benefits of entrepreneurship in TVET. The study therefore recommends the following measures to the relevant stakeholders of technical and vocational education:

- i. Stakeholders and curriculum planners for technical and vocational education should focus more on the acquisition of entrepreneurial skills such as information skill, financial management skill, creativity and innovation skills, problem solving skills and communication skills as essential skills for students to become self-employed.
- ii. Schools and industry should collaborate to create a vital link with entrepreneurs and set up school-based firms or student mini start-ups to ensure that students get the chance to solidify and practice their knowledge in entrepreneurship.
- iii. The government and other stakeholders should enact a legislation to provide support in the form of funding, training and study materials for teachers and students schools to foster the implementation of entrepreneurship education in the TVET sector.
- iv. Internships should be made a mandatory part of the Technical and Vocational Education curriculum.

5.5 Suggestions for Further Studies

The following suggestions are made by the researcher for further research:

- A research should be conducted to investigate into the effect of teachers' qualification and experience on students' performance in learning technical courses.
- A study should be done into the apparent preference of males over females in the study of technical courses in Ghana.

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APPENDIX

QUESTIONNAIRE FOR STAFF OF VOCATIONAL/TECHNICAL INSTITUTIONS

INTRODUCTION

The researcher is a final year student from the University of Education, Winneba offering M.Tech Catering and Hospitality and conducting a study into the integration of entrepreneurial skills in vocational and technical education as a strategic approach for improving youth employment in Ghana. You are kindly required to respond to the following questions. This study is for academic purposes only and your responses will be held in strict confidence and anonymity.

SECTION I: DEMOGRAPHIC DATA

1. Sex:

a) Male

b) Female

2. Age (in years)

a) Below 25

b) 26 – 30

c) 31 – 39

d) 40 – 49

e) 50 – 59

f) 60 and above

3. Educational qualification:

c) Certificate

d) Diploma

e) HND

f) 1st Degree

g) Post-Graduate

4. Section/Department of work

a) Teaching staff

b) Administrator

c) Non-Teaching staff



5. How long have you worked in this Institution?

- a) 1 – 5 years []
- b) 6 – 10 years []
- c) 11 – 15 years []
- d) 16 – 20 years []
- e) Above 20 years []

SECTION II: VOCATIONAL TRAINING PRACTICES THAT PROMOTE ENTREPRENEURIAL SKILLS AMONG STUDENTS

Please indicate the extent to which you agree to the following relevance of entrepreneurship in vocational and technical education as a means of achieving job creation among graduates.

Key: SA = Strongly agree, A = Agree, D = Disagree, SD = Strongly disagree.

SN	Statements	SA	A	D	SD
6	Emphasis on practical work rather than grades in technical education enhances youth empowerment needed for entrepreneurship.				
7	Competency based training in technical and vocational education enhances workers productivity.				
8	Balanced combination of theory and practice in Voc/Tech education helps students to develop creativity and innovation skills				
9	Vocational education empowers students to be employers of labour rather than employees.				
10	Acquisition of real world experiences through field trips exposes students to knowledge and skills for job creation after graduation.				
11	Promotion of independent and critical thinking skills of students enhances output effectiveness and efficiency in the business world.				

SECTION III: EXISTING LINKAGES BETWEEN INDUSTRY AND VOCATIONAL TRAINING INSTITUTIONS

Please indicate the extent to which you agree to the following elements of entrepreneurial education necessary for students to empower them for job creation.

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

SN	Statements	SA	A	D	SD
12	Provisions for industrial attachment are available for vocational and technical students				
13	There are internship opportunities for vocational education students in industrial establishments				
14	Industry provides on-the-job training for students of vocational and technical institutions				
15	There is collaboration for vocational and technical students to be posted into industry for national service				
16	Bilateral collaborations exist with companies for field trips and excursions.				
17	The school invites company personnel as resource persons for seminars and workshops in vocational and technical schools				
18	Exchange programme arrangements for students to experience real world industrial settings.				

SECTION IV: CHALLENGES OF ENTREPRENEURSHIP EDUCATION IN VOCATIONAL/TECHNICAL EDUCATION CURRICULUM

Please indicate the extent to which you agree to the following as challenges facing the implementation of entrepreneurship education in technical and vocational education curriculum.

Key: SA = Strongly agree, A = Agree, D = Disagree, SD = Strongly disagree.

SN	Statements	SA	A	D	SD
19	Inadequate funding				
20	Poor mindset of students towards entrepreneurship				
21	Lack of well-equipped entrepreneurship development centres				
22	Lack of training/instructional materials				
23	Inadequate qualified manpower				

24	High emphasis on theoretical knowledge rather than practical knowledge				
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SECTION V: MEASURES TO IMPROVE THE DEVELOPMENT OF ENTREPRENEURIAL TRAINING IN VOCATIONAL EDUCATION

Please indicate the extent to which you agree to the following as measures that could be instituted to improve the integration of entrepreneurial training in vocational education.

Key: SA = Strongly Agree, A = Agree, D = Disagree, SD = Strongly Disagree.

SN	Statements	SA	A	D	SD
25	Provision of career guidance and counselling to students in vocational/technical schools				
26	Development of a viable and rigorous curriculum to imbibe in students the essential components of entrepreneurship as a way of thinking rather than a course that leads to the award of a grade				
27	Provision of competency entrepreneurship training for vocational and technical education teachers				
28	Provision of coordination between institutions and the labour market to identify the relevant areas in which to train students				
29	Provision of start-up capital or funds for students who successfully graduate from vocational institutions having presented a viable business plan.				
30	Provision of student support centres where students can be coached and mentored into becoming entrepreneurs				