ASHESI UNIVERSITY COLLEGE

INVESTIGATING THE IMPACT OF TECHNICAL AND VOCATIONAL EDUCATIONAL EDUCATION (TVET) ON YOUTH UNEMPLOYMENT IN GHANA

By

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DECLARATION

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

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I hereby declare that the preparation and presentation of the thesis *were supervised in accordance with the guidelines on supervision of thesis laid down by Ashesi University College.*

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ABSTRACT

Economists believe that human capital is necessary for development. This has resulted in a focus on the expansion of not just tertiary and secondary education, but also vocational education, and the use of manpower planning, as far as the Asian tigers are concerned (Taiwan, Republic of Korea, Hong Kong and Singapore) (Harris, 1996). Taking a cue from successful outcomes in Asia, this study therefore sought to find out how technical and vocational education has impacted youth unemployment in Ghana. TVET did face and continues to be plagued by persistent negative perception and other challenges even in the international context. Yet some countries, especially those in East Asia were able to grow rapidly and generate jobs especially for the youth because TVET played an important role in their development strategy. Thus, it makes sense to investigate the effect of TVET on youth unemployment in Ghana.

Data was collected with Questionnaires and interviews from both current vocational school students and graduates, and a COTVET official. The research confirmed that though TVET faces a lot of challenges such as, lack of school materials, inefficient Ghanaian market, uncertified schools etc. TVET has played and still plays a significant role in creating employment for the youths especially those who come from low income families.

It is imperative that the government and all other administrators of TVET understand and implement the recommendations made in this research project appropriately in order for the economy to benefit from TVET.

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List of Acronyms

COTVET – Council for Technical and Vocational Education and Training

EMIS – Education Management Information System

GDP – Gross Domestic Product

GES – Ghana Education Services

GNP – Gross Domestic Product

GOG – Government of Ghana

ICT – Information and Communications Technology

NTVI – National Technical and Vocational Institutes

SPSS – Statistical Package for Social Sciences

TVE – Technical and Vocational Education

TVI – Technical and Vocational Institutes

TVET – Technical and Vocational Education and Training

UNESCO – United Nations Educational, Scientific and Cultural Organization

CHAPTER ONE:

INTRODUCTION AND BACKGROUND

"Since education is considered the key to effective development strategies, technical and vocational education and training (TVET) must be the master key that can alleviate poverty, promote peace, conserve the environment, improve the quality of life for all and help achieve sustainable development"(The Bonn Declaration, 2004).

Education is seen by most countries as a tool to accelerate economic growth and development. Economic development is the qualitative change and restructuring in a country's economy in connection with technological and social progress (World Bank, 2004). For Sen (1999) overcoming deprivations is central to development. The deprivations which can be overcome by gaining employment by accessing the skills that TVET provides include not just unemployment but also hunger, famine, ignorance, an unsustainable economic life, barriers to economic fulfillment by women or minority communities, premature death, violation of political freedom and basic liberty, threats to the environment, and little access to health, sanitation, or clean water. Harris (1996) describes education as one of the social structures which needs to be provided as a basis for development or it can be perceived as a vehicle for transmitting those values and attitudes supportive of development.

A major indicator of economic development is increasing GNP per capita (or GDP per capita), reflecting an increase in the economic productivity and average material wellbeing of a country's population. Some

economists believe that human capital and high-level manpower is necessary in development. This has resulted in a focus on the expansion of not just tertiary, secondary education, but also vocational education, and on the use of manpower planning, as far as Asia's four little tigers are concerned (Taiwan, Republic of Korea, Hong Kong and Singapore) (Harris, 1996). Schultz (1961) reiterate this point by saying that a nation's capability to productively use physical capital is a function of its level of human capital (in this case education) and that if human capital does not increase along with physical capital, then economic development cannot proceed.

The economist in 1991 also stated that investing in education pays in spades, in other words the returns on education are high. Like japan, the "Asian tigers" single biggest source of comparative advantage is their well-educated workers and not their resource endowment.

Technical and Vocational Education and Training (TVET) should therefore be a main concern to countries as it enables youths to acquire employable skills (both human and physical) needed for economic development. The term "TVET" as used in this paper follows the 1997 UNESCO International Standard Classification of Education definition, which is education and training to "acquire the practical skills, know-how and understanding necessary for employment in a particular occupation, trade or group of occupations or trades" (UNESCO, 2009).

Though technical and vocational are two words that are used together, they can be looked at separately. Vocational training often refers to

education and training that focuses more on practical skills and being able to perform tasks related to working in a particular industry, whereas technical training is similar in nature, but the focus is on technology and developments made in computers and digital information (Wisegeek, 2013). General education as opposed to TVET is education that prepares students for the next higher level of education; the courses are mainly academic and theoretical (UNESCO, 2013).

1.1 Technical and Vocational Education and Training in Ghana

In Ghana, Vocational and technical education is organized at all the three levels; primary level, secondary level and tertiary level. The three different levels of vocational and technical education are the pre-vocational, vocational and technical and the polytechnics for the three levels respectively. The following three different kinds of TVET can be identified since its inception centuries ago (Aryeetey, Doh, & Andoh, 2011);

- ***The formal system TVET:*** this 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), youth training institutions and a variety of private vocational training schools.
- ***The non-formal TVET:*** this form of education 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:*** this includes a wide range of flexible programs 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. Indeed, Ghana has a long tradition of informal apprenticeships, particularly trades such as Carpentry, Masonry Auto-mechanics Welding and fabrication, Photography Tailoring Dressmaking and beauty.

Technical and vocational education has been in existence in Ghana for over three centuries now. By 1992, four technical/vocational schools were established in the Ashanti, Eastern, Greater-Accra and Central region, offering courses such as woodwork, brickwork, metalwork, which were considered essential for improving the quality of life of people (Ghana Education Service, 1984).

However, in recent times, the economic, technological, demographic, societal and educational situation in which vocational technical education is practiced has evolved, and it will keep evolving over time. Various TVE institutions are now incorporating human skills such as Human Resource Development (HRD) and technological equipment into their curricula (Saini, 2005). Vocational and technical education must also respond appropriately to the changes above in order to remain relevant in preparing individuals to be able to take advantage of the opportunities for the kind of workforce needed in today's world of work as well as to deal with certain problems such as unemployment and low productivity facing our society today.

This paper will be focusing on the formal system of TVET. There are currently 181 technical and vocational institutes in Ghana operated by both public and private bodies (GES, 2013). According to the Education Management Information System (EMIS) census, in 2012/13 there were 61,496 students enrolled in technical and vocational institutes (TVIs), of which 79% were enrolled in public TVIs. The table below shows a breakdown of the figures.

Table 1: TVET enrolment breakdown in in Ghana 2012/13

	GES	Public	Private	Total
Number of institutions	45	107	74	181
Enrolment	36,830	48,845	12,651	61,496
% of full time	89.1	90.6	93.1	91.1

Data Source: EMIS data

Technical and Vocational Education is a segment of education in Ghana that not much attention has been given to over the past years as compared to general education. The number of TVIs actually reduced from 252 to 181 institutions in less than 3 years (GES, 2013) due to poor management. TVE however can play a vital role in the economic development of Ghana in terms of employment, self-employment and productivity if properly managed. What happened in South Korea, Singapore, China and most European countries as far as TVET is concerned is a prove to this assertion. Nevertheless, in recent years, there has been a fresh awareness among policy makers in many African countries including Ghana and the international donor community of

the critical role that TVET can play in national development (African Union, 2007). In 2006, an apex body known as the Council for Technical and Vocational Education and Training (COTVET) was established by an Act of Parliament under the Ministry of Education to oversee all TVET activities (African Union, 2007).

Despite this awareness among these policy makers, and the body present to overlook activities in the technical and vocational education sector, little or no change has been seen to test the effectiveness of this type of education in economic development. In other words, the development of TVET is still not given the attention that it deserves in Ghana today because we see no action on their part.

I decided to tackle this topic because I see technical and vocational education as one of the greatest instruments to deal with unemployment, low productivity among the youths from mainly lower income families, and consequently extreme poverty in countries like Ghana. I believe that this area of education has abundant potential to transform the economy into a better one. For instance, Japan is country where the almost every individual is educated, but if we look back into history, this country was poorer than some African states such as Ghana. The Japanese government was able to revive the economy much faster than many countries' expectations, and according to Cantor (1985) one important contributory factor is undoubtedly the system of Japanese vocational education and training. Contextual education such as TVE for me is a great way to fight against poverty related

problems our society is having today. Thus, this paper seeks to highlight the benefits of technical and vocational education to Ghanaians as well as to the country as a whole and why the government of Ghana and administrators of TVE need to act now.

1.2 Problem statement

Unemployment and productivity are serious problems that the young generation of Ghana faces today. According to Ghana Statistical Service statistics gathered in 2000 and published in 2012, the youth (of between the ages of 15-24) unemployment rate in Ghana is 25.6%, twice that of the age 25-44 age group and three times that of the 45-64 age group, (Mantar, 2013). In Africa, 60% of youth are unemployed, and the situation is mainly due to demographic change and lack of skills (Mantar, 2013). One of the reasons why young Africans lack the skills is due to the fact that the government is not looking at all the edges to tackle this problem effectively, and one of the areas where the leaders has failed to invest in to resolve the problem of youth unemployment and low productivity is technical and vocational institutions. TVET is important especially in our African context because it gives youths the opportunity to gain employable skills at an early age. Low Unemployment rate and high productivity are indispensable in the economic development of a nation.

For the past decades, the government of Ghana (the ministry in charge of technical and vocational education) especially has shown little or no interest in this sector for one reason or the other. The nation lacks skilled

middle level human capital to boost development of the country. Due to this problem, attention needs then to be given to technical and vocational institutes which are to a large extent responsible in developing these human skills needed for national development. In Ghana, 70% of the population is made up of young people; that is about 35.1% between 15-35 years and about 35.3% below 15 years, many of which are unemployed (Mantar, 2013). These unemployed Ghanaian youths and school dropouts roam the streets of Accra thereby increasing crime rate while they could easily develop basic working skills in TVET institutes that would reduce unemployment rate.

1.3 Research question

The main question my research will try to answer is; how and in what ways has Technical and Vocational Education significantly impacted youth unemployment in Ghana? Related questions that this research will also tackle include: why the government and other administrators should give more importance to TVET and why TVET has been neglected in the previous years? By the government attaching more importance to TVET, I mean dedicating a reasonable share of the budget to this sector, creating awareness in the society about the benefits of technical and vocational education which will increase patronage of this form of education by the youth and ensuring that there are available jobs for the graduates of these institutions. Public spending on education, (% of government expenditure) in Ghana was 22.48 in 2008. Ghana's TVET education budget allocation went down from 2.4% in 2007 to 1.9% in 2008 (UNESCO, 2013). Clearly, we can see that this

percentage of allocation is not enough to make a significant change in this sector of education.

To answer these question, I will visit three registered technical and vocational institutes in Accra, talk to graduates of those schools and TVET policy official at the COTVET about how COTVET has facilitated employment. I will try and find out effective the administration of TVET has been, how TVET has helped with employment and also find out from current students what they did or where they were before joining the school, the relevant courses they take and the challenges they face. These target groups holds the answers to my question.

1.4 Research Objectives

The primary objectives of my research are the following:

- To investigate if a focus on TVET will translate into a reduction in unemployment rate and an increase in productivity among the youth in Ghana.
- To evaluate the contemporary challenges faced by TVET and recommend appropriate strategies to improve TVET in Ghana.
- To assess if TVET can improve the standard of living of the youth.

1.5 Significance of study

The significance of this study includes the following:

My research will provide relevant material for the ministry of education and the COTVET to look at and consider while making decisions on how and why to restructure technical and vocational education in modern day Ghana.

Many developing countries in Africa are in the same situation as Ghana as far as technical and vocational education is concerned, and some in even worse situations. This research will therefore help Policy makers other African countries that are also struggling with the development of such institutes to see the benefits it can generate to their country if properly implemented.

Some students or parents do not even want to consider this type of education as an option. Such students or ex-students and parents could gain more insights on Training and Vocational Education and consider it in the future.

This research will also contribute to other research that has already been done on Technical and Vocational education and training.

1.6 Organization of study

This research will be divided into five chapters.

- The first chapter will be looking at the introduction and background of the study;
- In the second chapter, I will be dealing with the literature review;
- The third chapter will address the methodology of the research;
- The fourth chapter will deal with the data analysis and discussion;
- Finally the fifth chapter will be deal with the conclusion and recommendations.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

TVET is considered by many nations as an important catalyst in the development of a country, but curiously Ghana like many other developing countries does not invest in it to an appreciable degree. In Ghana, the technical and vocational institutions in general still face a lot of challenges such as poor infrastructure and outdated materials and curriculums, and many others. These challenges which have seemed to be going on for a long period of time has in one way or the other negatively affected the smooth development of the country. Other countries like Japan and China developed partly because of their good educational system, in particular TVET. Cantor (1985) attributes the success of Japan to its TVET system and Morris (2010) argues that the provision of a large-scale program of technical and vocational education has been a central element in long-term planning in the period following early industrialization of South Korea and Taiwan.

From my analysis on the different articles that have been published on technical and vocational education by different authors such as Cantor (1985), countries such as Japan that have achieved middle-income and even high-income are those countries that have given special and focused attention in technical and vocational institutions. What is remarkable about previous research on the topic is the change in the delivery of TVET due to

environmental and technological changes (Boateng, 2012). During the industrialization or post war era, TVET was mainly focused on industry skills. Around the 21st century, TVET in the developed world especially started shifting their focus to ICT in TVET and the development of human resources.

Because TVET was not a success everywhere especially in many developing countries, other authors such as Lewis (1998) are questioning the relevance of TVET by saying that it should not be delivered separately from general education. This literature review will analyze what different authors have said on the topic and also discuss the challenges TVET faces in Ghana and other developing countries on TVET. My literature review will mainly be organized in four main sections. The first part will look at the benefits of TVET and how it has helped other countries to develop. In the second part, I will tackle the challenges that this sector of education (TVET) face especially in Ghana, then I will look at the relationship between TVET and general education and their returns in different countries. Finally I will talk about how TVET is funded and what different authors think about the role the government has to play.

2.2 The Benefits of Technical and Vocational Education

All the authors that agreed that TVET will definitely benefit the country as a whole and should be given special attention did so under their own specific conditions. For instance, Mustafa, Abbas, Saeed and Anwar (2005) tried to find out the importance of HRD in general and vocational training in particular for economic growth in Pakistan. They used data from the

Labor Force Survey published by Federal Bureau of Statistics, Statistical Division of Government of Pakistan and concluded in their article that vocational education and training are indispensable instruments for improving labor mobility, adaptability and productivity, thus contributing to enhancing firms, competitiveness and redressing labor market imbalances. According to the authors, for TVET to significantly translate into economic growth, the government and private sectors should pursue policies that promote growth in Human Resource Development (HRD) investment and improved social infrastructure. They claim that the demand for vocationally trained and technically educated human resource rises with every step towards industrialization and modernization of production units and work premises. Moreover, with the emergence of globalization there is an increase of capital inflow from developed to developing countries implying that even without technology imports, capital output ratios in developing countries would rise and the complementarities between capital and skills, this would raise the relative demand for skilled labor (Mustafa, et al, 2005) hence the need for a HRD fixated TVET.

According to Witte and Kalleberg, (1995), a vocational education might aim to achieve a variety of goals including: developing specific occupational skills; transmitting general work skills and employee socialization; building the self-esteem of the least advantaged; and providing structured activities for young people who might otherwise be engaged in undesirable or illegal activities. The main claim of the paper is that an individual's training should be in done in ways that fits the labor market. The authors in their paper

consider if the returns to vocational education depends on whether individuals are working in the occupations in which they were trained for. The authors described the relationship between employment tenure and fit as complicated. If one were to simply look at whether or not there is fit between vocational education and employment, in a cross-section of population, one is likely to find a positive relationship between employment tenure and fit. The example the authors used is that, if a person has found a job that used his or her training and provides reasonable return to one's human capital, then there is little incentive to change jobs. Individuals with relatively long employment tenures should thus have good fits, but it is likely to be a consequence and not a cause of a good match between training and employment.

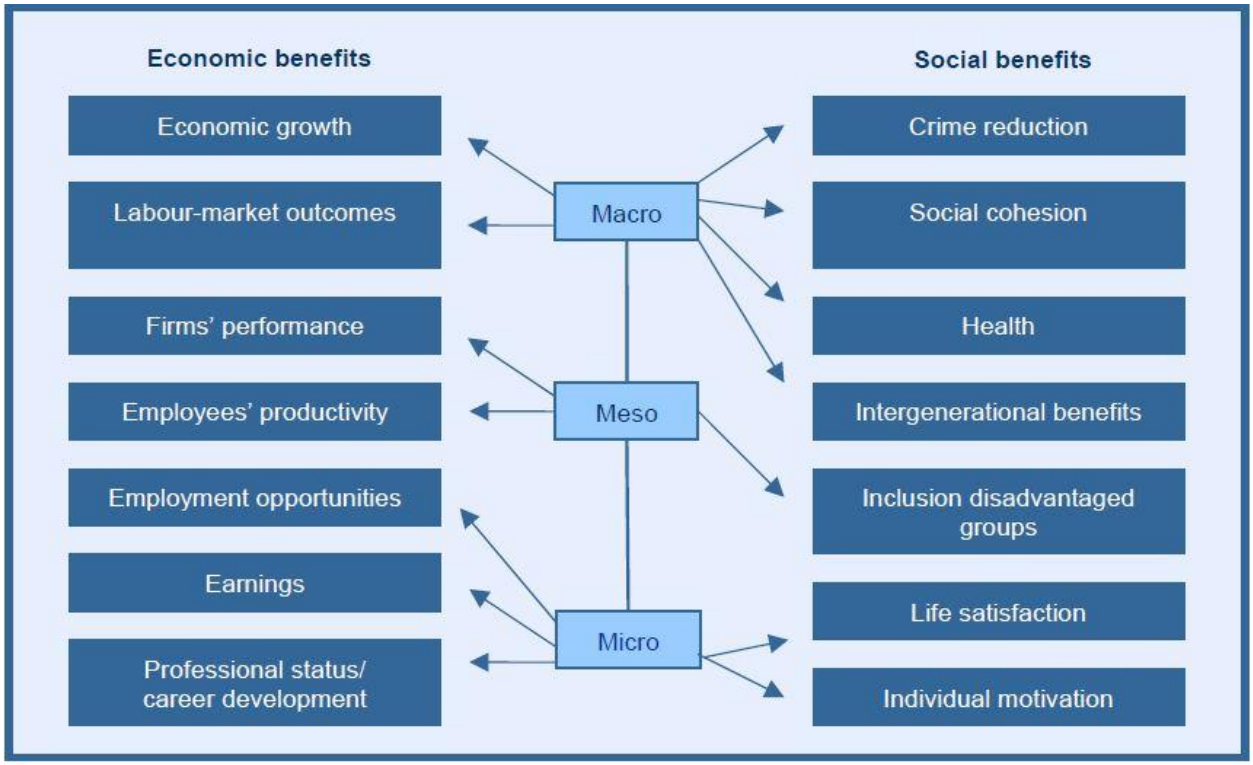
On the other hand, employment tenure maybe negatively associated with fit. The longer a person stays in a job that does not fit, the greater will be the contributions to his or her skills of accumulated on-the-job training and experience. Over time, the importance of these forms of human capital may come to outweigh the possible benefits to be realized by moving to a job that better fits his or her vocational education. The authors of the article measured fit objectively as well as subjectively. Objective measures were those that compared apprenticeship program designations to occupational titles or skill requirements. While subjective measures of fit represented respondents' assessment of whether or not their current occupation was the one for which they received training.

In a paper written by Schmidtke and Chen (2012) titled *"philosophy of Vocational Education in china: A Historical Overview"* Huang Yanpei, one of the proponents of pragmatism in china was convinced that there were three purposes to vocational education: preparing individuals to earn a living, inculcating in people the desire to serve the society and promoting productivity. Vocational education was seen as an avenue for individuals to explore and discover their talents and perfect them to be able to serve society most effectively (Schmidtke& Chen, 2012). In 1951, the official purpose of secondary vocational education in china was to develop large numbers of lower-level and middle-level technical personnel while continuing an emphasis on culture and science modern technology, and physical fitness as well as a desire to serve the society wholeheartedly (Fang, Liu & Fu, 2009) in (Schmidtke & Chen,2012).

Moreover, the article stated that the decision on Educational System Reform issued by the Communist Party's central committee in 1985 declared that vocational education had to be developed to create a technical workforce whose production capacity would help strengthen social development. in 1991, the minister of education, Li Tieying, stressed that vocational education should be taken as the 'means of educating qualified laborers' for the purpose of national economic construction but at the same time vocational education also has a relationship with people's welfare and happiness in life.

A report by European Center for the Development of Vocational training (Cedefop) claims that, the benefits of TVET occur in two dimensions; the economic dimension and the social dimension. Both can be analyzed in three different levels: the micro level (the benefits for individuals), the meso level (benefits for enterprises and groups), and the macro level; (benefits for society as whole. *The table below briefly describes the different levels of benefits of TVET.*

Table 2: Benefits of TVET



Source: Cedefop

2.3 Challenges Faced by TVET in Developing Countries

In spite of the claim by Mustafa, et al (2005) that technical and vocational education remains relevant in the economies of developing

countries, TVET still faces a lot of challenges in the developing countries context. The nature and characteristics of TVET itself presents unique challenges to institutions and administrators (Boateng, 2012). In Boateng's view, Vocational and technical institutions require more intensive use of workshops, tools, equipment, and materials (but such amenities are expensive). Vocational and technical subjects require more instruction and practical time than arts and science education, they need to be allotted sufficient time to satisfy their practical goal. All these make TVET more expensive than any other type of education.

In the final draft *"Strategy to Revitalize Technical and Vocational Education and Training (TVET) in Africa"* by the African Union (2007), they outlined that one of the key issues that TVET faces is poor perception whereby, the public and even parents consider that the vocational education track as fit only for the academically less endowed. In many countries, students entering the vocational education stream find it difficult if not impossible to proceed to higher education. Boateng (2012); Lillis and Hogan, (1983); Jee-pengTan &Yoo-JeungNam (2012) all concur that TVET has a poor public perception in developing countries.

A research done by Dzigbede (2009) to find out the challenges of the administration of TVET in Ghana acknowledged that most of the challenges emanate from internal and external factors. However, the challenges could be resolved through good practices such as contributions of various stakeholders. Respondents from the Ghana education service (GES) pointed

out that TVET has been starved for long by the absence of career Guidance and Counseling service, lack of good number of trained/professional teachers, logistics stationery, equitable funding, among others. The research was conducted on 204 sample population using questionnaire, and semi-structured interview to generate opinion and findings. The sample size of this research consisted of students, scholars and educational workers.

In the article *"The Challenges Facing Technical and Vocational Education in Ghana"*, Amedorme & Fiagbe (2013) provide a list of problems that the TVET sector is bedeviled with. Some of the problems they discussed are limited number of technical institutions, lack of facilities and materials for training students, inadequate technical teachers and facilitators, limited number of training institutions for technical teachers, and a difficulty in career progression. Just like Amedorme & Fiagbe (2013), Boateng (2007) also discusses the same challenges faced by TVET in her article *"Restructuring Technical and Vocational Education in Ghana: The Role of Leadership Development"*. She mentions the fact that vocational and technical institutions require workshops, tools, equipment, and materials; vocational and technical subjects require more instruction and practical time than arts and science education, and the need to be allotted sufficient time to satisfy their practical goals. Methods of assessing vocational technical subjects, especially the form of assessment require the training of assessors who can assess students` competence in the classroom and in the workplace.

2.4 A comparison of TVET and General education

Drokers (1993) speaking of *"the precarious balance between Dutch general and vocational education"* states that in the Netherlands where TVET is heavily patronized, attending vocational training does not automatically mean a shorter period of unemployment; it depends heavily on the subject or discipline. He observes that "the Dutch educational system is a dual track system even in the lower stage of the second level despite all efforts to integrate general and vocational education into one school-community". Dronkers ends up concluding that the Dutch educational system shows that educational systems do not inevitably give academic awards higher status than vocational training. Generally speaking, senior vocational training gives better opportunities on the labor market than senior secondary school or grammar school.

France is one of the few countries that have successfully integrated TVET at the higher level of education. Giret (2011) cited that vocational courses developed in universities during the 20th century in France benefited from the rapid expansion in student numbers, representing only 4% of university students in 1970, they accounted for 14.2% in1998. As at 2006, 43.1% of the youths in France were attending technical and vocational institutions (OECD, 2008). His article examines the implementation of vocational courses in the French higher education system.

Giret's (2011) research attempts to show that labor market outcomes with a bachelor degree, which corresponds to three years of study in higher

education, vary according to the type of education (general or vocational). The results show that vocational bachelor training facilitates transition from university to the labor market and as expected, vocational training at university level helped to reduce the professional downgrading and increase the wages of university leavers three years after graduation. In addition, the vocational bachelor graduates benefited from the stronger institutional links between universities and employers to find their job. Also, 31% of vocational bachelor graduates state that they are employed below their skill level as against 40% of general bachelor graduates.

In an article written by Lewis (1998), he sets forth arguments for consideration of vocational education as general education, that is, as education for all. He argues that, all students should have equal chances of engaging in a breadth of studies supportive of wide-ranging vocational insight; all should pursue academic subjects and all should learn about the world of work. In that case, there will be a unitary curriculum as opposed to a heterogeneous one. In Australia, it is known as the "new Vocationalism", wherein the distinction between mental and manual labor is regarded as outmoded, and not a basis upon which social roles should be constructed (Sedunary, 1996 cited in Lewis, 1998). Lewis makes this claim about "new Vocationalism" because she believes that the practice of dividing the curriculum into academic and vocational aspects, and treating the latter as a default for those deemed to be ill-suited to the former, has been an enduring staple of educational systems and schools across the globe. Therefore it would not be fair to have such a division. Lewis' point is supported by Gray

(1996) who says that the primary goal of such integration is "to make the experience of applied vocational education more accessible to academic students at the same time that advanced academic courses are made more accessible to students concentrating in vocational education". The table below shows a comparison on returns on TVET and general education in selected countries.

Table 3: Returns to TVET and Other Labor Market Outcomes in Selected Developing Countries

Country and year	Impact on earnings	Methodology	Author(s)
Studies showing more favorable results for TVET than for general education			
Egypt, Arab Rep. (1998)	Returns to vocational secondary education are 35.4 percent, while returns to general secondary education are 6.1 percent for men.	Mincerian earnings regression (1st stage: ordered logit)	El-Hamidi (2006)
Singapore (1998)	Private returns to vocational/technical education are 10.3 percent at the secondary level and 12.7 percent at the post-secondary level, compared with the corresponding figures of 9.4 percent and 11.3 percent for general education.	Extrapolation of Mincer equation results from 1980s Singapore data	Sakellariou (2003)
Sri Lanka (2002)	Returns to formal vocational training are 17 percent compared with 7.9 percent for general education.	Mincerian earnings regression (not controlling for selectivity bias)	Riboud, Savchenko, and Tan (2007)
Thailand (1989–95)	Returns to vocational education at the upper secondary level exceed those to general education by 63.9 percent for men and 49.4 percent for women.	Mincerian earnings regression (1st stage: probit)	Moenjak and Worswick (2003)
Israel (1983)	Vocational school graduates employed in occupations related to their field of study earn between 8.1 percent (widely related) and 9.6 percent (directly related) more than peers who graduated from general education or who are working in fields unrelated to their studies.	Mincerian earnings regression (OLS, without first stage)[a]	Neuman and Ziderman (1991)

Country and year	Impact on earnings	Methodology	Author(s)
Studies showing no difference or mixed results			
India (2004)	Returns to formal vocational training are approximately 8 percent, comparable to returns to general education at 8.4 percent.	Mincerian earnings regression (not controlling for selectivity bias)	Riboud, Savchenko, and Tan (2007)
East Germany (1984–96)	No advantage exists in earnings or employment among graduates of public-sector-sponsored continuous vocational training and retraining in the first years following training.	Propensity matching score techniques	Lechner (2000)
Romania (1995–2000)	No significant differences exist in labor market participation or earnings between vocational and general education students.	Regression discontinuity	Malamud and Pop-Eleches (2008)
Tanzania (1997–2000)	Returns are higher for high levels of academic education than for vocational or lower levels of academic education; the returns to vocational or technical education are lower the higher the level at which it is entered.[b]	Mincerian earnings fixed effects regression	Kahyarara and Teal (2008)
Indonesia (1993, 1997, 2000, 2007)	For men, no significant differences exist in earnings between public general and vocational graduates, but public vocational graduates in the youngest cohort experience a large wage penalty. For women, public vocational graduates have greater wage returns than general graduates. Public vocational graduates are also more likely to obtain formal jobs than public general graduates.[c]	Mincerian earnings regression (OLS and LAD) (1st stage: multinomial logit regression)	Newhouse and Suryadarma (2011)

Country and year	Impact on earnings	Methodology	Author(s)
Studies showing less favorable results for TVET than for general education			
Pakistan (2004)	Returns to formal vocational training are 8.1 percent, while returns to general education are slightly higher at about 9 percent.	Mincerian earnings regression (not controlling for selectivity bias)	Riboud, Savchenko, Tan (2007)
Rwanda (1999–2001)	Returns to vocational education are 12.5 percent, while returns to general secondary education are 29.0 percent.	Mincerian earnings regression (1st stage: multinomial logit)	Lassibille and Tan (2005)
Suriname (1990, 1992, 1993)	Returns to both general language and mathematics tracks exceed returns to technical or vocational education for both males and females.[d]	Mincerian earnings regression (1st stage: probit regression)	Horowitz and Schenzler (1999)

Source: Labor force survey of each of the countries, World Bank

2.5 The role of the Government in Financing TVET

In Japan, one important contributory factor that has led to its success is undoubtedly the system of Japanese vocational education and training (Cantor 1985). In an article, *"Vocational and Technical Education: the Japanese Approach"* written by Leonard Cantor, he states that any attempt to describe and analyze the Japanese approach to vocational education

and training and its contribution to the country's economic progress must, of course, be set in the context of Japanese society , its educational system and industrial organization; briefly summarized under three major heads: the Japanese attitude to education; state regulation of vocational training; and industry's attitude to employment and training. In Japan, there is state facilitation of vocational training and a high degree of centralized control of the educational system. Thus, there is a long tradition of government involvement both in establishing national economic goals and in setting up and overseeing a framework of industrial training and development. The primary responsibility for providing vocational training rests with industry, and the state, through the Ministry of Labor, assists in this process in a variety of ways, including running a national Institute of Vocational Training, whose prime function is to train instructors for industrial and public training centers, and providing substantial subsidies to encourage smaller companies to provide the necessary training. Cantor (1985) gathered his information from published journals and books in the United States, booklets and articles published by Japanese authorities especially those of Ishikawa and Suzuki; also by discussing with leading Japanese educationalists and visits to vocational and training institutions in and around Tokyo. Like japan, financing china’s vocational education rests heavily in the hands of the state. In that way, government will be responsible for what is necessary to speed up economic development (Schmidtke & Chen, 2012). Similarly, Indonesia also follows

the same strategy of letting the government play the major role in financing TVET (Newhouse & Suryadarma, 2009).

Ghana on the order hand has not been very successful in effectively administering its technical and vocational institutions. Cost constraints have hampered the development of TVET in Ghana (Akyeampong, 2010 in Aryeetey, Doh & Andoh, 2011). Ghana's TVET education budget allocation remains unchanged at around 1% of the education budget, the allocation grew to 2.4% in 2007 and was 1.9% in 2008 (Allsop, Attah, Cammack & Woods, 2010 in Aryeetey, Doh & Andoh, 2011). Expenditure has not matched allocation, however: TVET expenditure in 2007 was only one quarter of the budget allocation, at 0.6% (ibid.). Private funding sources include international grants and fees charged to learners TVET costs are high due to a need for specialized equipment, tools and training materials (ibid.). Sustainable finance is needed to develop TVET infrastructure and services in other for it to translate into economic growth.

In the book *"financing vocational education and Training in sub-Saharan Africa"* the author Ziderman (2003) in sub-Saharan Africa, the state is a major financier of reemployment training; public training institutions provide courses free or at purely nominal fees. He goes on to give seven arguments that may justify government's role in financing TVET. The seven arguments are:

- Externalities
- Property rights in human capital within the enterprise

- Market imperfections
- Inadequate enterprise training
- Weak private training institutional capacity
- Parity of treatment between trainees and students
- Neglect of disadvantaged groups.

Contrarily Bennell's and Segerstrom's "*Vocational Education and Training in Developing Countries: Has the World Bank Got It Right?"* argue that funding and provision of VET is best left to individuals, enterprises, and private sector training institutions with government intervention kept to a minimum. This is justified on the grounds that demand-driven training systems with private sector provision have out-performed supply driven systems that rely mostly on public sector training institutions. The poor performance of a sizeable proportion of Bank-funded VET projects (particularly in sub-Saharan Africa) during the 1970s and 1980s was also a key factor in shifting opinion in the Bank against public sector VET provision (Middleton & Demsky, 1989 in Bennell & Segerstrom, 1998). Private firms are mostly driven by profit. Therefore, their suggestion will not make much sense especially in the Ghanaian context because not every youth will afford to pay a higher fee that comes with private TVET. Moreover, the number of private vocational institutions in Ghana reduced from 111 in 2011/12 to 74 in 2012/13 according to the GES report final report 2013 probably due to high costs of maintenance.

2.6 Summary of Literature

In general, the literature on technical and vocational education and training and unemployment suggest that, for the later to have a positive effect on unemployment, and hence economic growth, the government as well as industries in the country need to put their efforts together. Knowledge of the labor market by the key players in the development of TVET is pertinent because if we do not know the needs of the market and how changes occur in it, we cannot effectively train or educate TVET students to meet the market needs.

It is also important to note that despite the persistent negative perception and all other challenges that TVET faced and is still facing today, some countries, especially those in East Asia were able to grow rapidly because technical and vocational education played an important role. Moreover we have seen from literature that general education systems do not always have higher returns than the TVET systems in terms of labor market outcomes. However for it to be successful, much attention is needed to minimize the different difficulties it faces.

In Ghana and other countries in sub-Saharan Africa, not very favorable outcomes are seen but signs of hope are appearing as the government little by little speaking about restructuring the sector and getting to understand that there is a possible positive relationship between TVET and youth unemployment and productivity.

CHAPTER THREE:

METHODOLOGY

3.1 Introduction

This chapter re-states the research question, outlines the scope of the study, discusses the research design, sampling strategy and methods of data collection used for this study. The primary objective of this paper is to investigate if a focus on TVET will translate into a reduction in unemployment rate and an increase in productivity among the Ghanaian youths.

Research Question

Will focusing on Technical and Vocational Education significantly impact Youth Unemployment and Productivity in Ghana?

3.2 Scope

3.2.1 Description of Study Area

This research was conducted on Technical and Vocational Institutions in Ghana, Accra to gather primary data. Secondary data on the other hand was obtained from all over the world. This is because it allowed the researcher to make comparisons with respect to TVET and provide appropriate recommendations to policymakers

3.2.2 Description of Target Population

The target population for this research consisted of the three vocational schools in Accra registered under the National Vocational Technical

Institutions (NVTI). Current and past students of these institutions were included in the study. The researcher decided to choose these institutions because they are registered and recognized by the government and so, they are legal to operate in Ghana. The selected institutions were Hodem Vocational Institute, Jenny's school of Catering and National Community Development Vocational Institute. The researcher also obtained information from a COTVET official who is part of the Policy making structure in Ghana as far as TVET is concerned. This policy maker helped the researcher gain more understanding on the topic. This view is supported by Cantor (1985) who also included policy makers in his sample on his study on TVET in Japan

3.3 Research Design

The research design refers to the overall strategy that you choose to integrate the different components of the study in a coherent and logical way, thereby, ensuring you will effectively address the research problem; it constitutes the blueprint for the collection, measurement, and analysis of data (USC Libraries, 2013). This research was exploratory and descriptive. The main assumption of this paper is that there is a relationship between TVET and unemployment and productivity and this kind of research will aim to clarify that relationship. Such a research has not been conducted in Ghana before; therefore the researcher wanted to gain more insights and familiarity on the problem. This required the use of exploratory research design. This type of research design will also help the researcher identify why there has been a negligence of TVET and what the outcome could be regarding youth unemployment.

On the other hand, in trying to answer questions like what course currently respondent are taking, how long they have been in school and so on to guide my objectives, the researcher used descriptive research design. For easy narration, this section adopted a descriptive research to simplify methodology used for obtaining responses/answers to the stated research questions. By this approach, the researcher found clues to answer research questions therein stated. This method is supported by a research done by Dzigbede (2009) on a related topic.

The research used qualitative as well as quantitative methods for the study. Qualitative research seeks to discover and understand a phenomenon, a process, or the perspectives and worldviews of the people involved. Looking at what this research is trying to achieve, a qualitative design was appropriate. This method was used for the COTVET official who participated in the research. Quantitative design was used for currently enrolled student and graduates of selected schools.

3.4 Description of Sample

3.4.1 Sample Size

The sample size of this research was divided into three main categories. The first category included 71 youths (both boys and girls) between the ages of 15 and 25 who are currently enrolled in the selected institutions for the study. This age range is chosen by the researcher because it involves youths who are of working age and constitute a large proportion of the total population in Ghana. The second group will include 30 graduates, from 25 years and above of the selected institutions. This sample was able to

explain how TVET deals with youth unemployment from the people enrolled and how graduates fit into the labor market and the role TVET has played in their lives and new businesses. The third category of the sample was 1 COTVET official in a management position. This sample held answers to certain key objectives (such as the challenges of TVET and why it has suffered from a long period of neglect) of the researcher's study.

3.4.2 Sampling Strategy

The sampling strategies that were used for this research were snowball sampling and purposive sampling strategies. Snowball sampling on the other hand is a method in which you select participants based upon referral from prior participants (Trochim, 2005), and it will be used for the graduates. A representative sample of at least 30 graduates was. Purposive Sampling was used to for policy maker (COTVET official) and in choosing the schools. Purposive sampling is used in cases where the researcher can select a more representative sample that can bring more accurate results than by using other probability sampling techniques. It is evident that key authorities in Technical and Vocational Education and Training would have the knowledge and expertise to provide required information. Purposive sampling was also used in the selection of the schools as the researcher needed to be watchful about the distance of schools.

3.5 The Data Collection Process

3.5.1 Data Collection Instruments

The researcher used qualitative techniques: a phone interview for the COTVET official. A face-to-face interview which was originally planned with the interviewee could not be possible due to the respondent's busy schedule. Questionnaires (both closed and opened-ended) were used to collect primary data from students and graduates of the selected schools. This method of data collection was also used by Dzigbede (2009) in a similar research on TVET. Interview and questionnaires are the most common research tools used to collect data in qualitative research. The names of respondents were not disclosed and it also involved questions on bio-data such gender and age. It also included socio-educational related factors. Semi-structured interviews were used for the COTVET official. It consisted of key questions the researcher was interested in finding out from the respondent. Secondary data from Ghana Educational Service (GES), the COTVET and other academic articles and research papers were also used in this research.

3.5.2 Data Collection Procedure

The researcher visited the schools, and distributed the questionnaires to the respondents who were willing to take part in the research. The head masters and mistresses of the school assisted the researcher in the procedure or assigned a teacher to help. Consent forms were attached every questionnaire for respondents to read and have idea about the research before answering the questions. In every discipline it is considered unethical

to collect information without the knowledge of the participant, and their expressed willingness and informed consent. The consent form was therefore to inform the participants the type of information the researcher wanted from them, why the information was being sought, what purpose it will be put to, how they are expected to participate in the study, and how it was going directly or indirectly affect them. The most important aspect was that it had to be voluntary. No respondent was forced to take part in the research. As for the interview, the interviewee was first contacted through e-mail to seek for his participation in the research. Later on, a phone interview was conducted.

3.6 Methods of Analysis

The method used to analyze interviews was content analysis. Content Analysis means analysis of the contents of an interview in order to identify the main themes that emerge from the responses given by the respondents. Content analysis is a research tool used to determine the presence of certain words or concepts within texts or sets of texts (Garbrah, 2012). Researchers quantify and analyze the presence, meanings and relationships of such words and concepts, then make inferences about the messages within the texts.

Statistical Package for Social Sciences (SPSS) was the software that was used to analyze the quantitative questionnaires. SPSS Statistics is a software package used for statistical analysis. The researcher used classification process to analyze my data. Classification is a process of arranging data in groups or classes on the basis of common characteristics

(dictionary, 2013). Classification helped the researcher easily sort out median and mean of certain variables. This process involved dividing and the deciding from findings. Charts and tables were then used to display data. Cross tables were also used to analyze the questionnaire, see the relationships between questions.

For secondary data, a comparative analysis will be used. This is the item-by-item comparison of two or more comparable alternatives, processes, qualifications or sets of data systems (Dictionary, 2012). Since various countries will be used, their educational system as far as TVET is concerned can be compared to that of Ghana's.

3.7 Ethical considerations

For ethical consideration issues, a human subject review was filled by the researcher to declare intentions and the data collection procedure, and it was approved by the board. Also, there was no disclosure of names on the questionnaire and no names were mentioned during the interviews and analysis for Confidentiality purposes. Consent forms were given to the institutions participating in the research as stated earlier, in addition the consent forms were attached to every questionnaire. The researcher ensured that the findings and data collection procedure was unbiased.

3.8 Limitations

One major challenge of this research was finding the graduate respondents. It was impossible to meet graduate students when the researcher visited the schools and so the researcher had to use referrals to

get to the graduates. It was difficult because when the researcher called the graduates via phone, some of them were unwilling to respond while others could not speak proper English and the researcher could not speak the local language which is (Twi), which made it difficult to collect information from them.

Also, the student respondents could have been biased by not wanting to say what they really feel about their education system or school. This is because the researcher asked sensitive information about how respondents felt about their education.

The researcher was able to visit only vocational schools and no technical schools. As a result, it led to the large gender disparity present in the analysis. Vocational schools involve courses such as catering, dress making and hairdressing where mostly female will be found, as opposed to the technical schools which involve courses such as mechanics and welding where mostly males are more likely to be in abundance. The respondent did not have enough time and money to visit the technical schools as they were far away.

Finding the schools was also another challenge. The schools had no sign boards present to indicate where exactly the schools could be found.

CHAPTER FOUR:

FINDINGS, ANALYSIS OF DATA AND DISCUSSION OF RESULTS

This study seeks to investigate if a focus on TVET will translate into a reduction in unemployment rate and consequently an increase in productivity among the youth in Ghana; to evaluate the contemporary challenges faced by TVET and recommend appropriate strategies to improve TVET in Ghana; to assess if TVET can improve the standard of living of the youth. This section will therefore provide answers to the above questions or objectives.

'Different questionnaires were distributed to the two main categories of respondents, who are the recent graduates and students of selected vocational schools, as well as an interview with one COTVET personnel. The schools involved in this research include:

Hodem Vocational Institute in Pokuase; this school is a small church owned vocational school, which consist of only female students, and there are about 60 students in the school. The main courses offered there are catering, home management and dressmaking. The school offers a three year training and teaching program.

Jenny's School of Catering in Haatso; Jenny's school of catering is also another small school of about 50 students owned by an individual. Catering is the only vocational course available in this school. Jenny's offer courses that lasts for 6 months for advance students and 3 years for beginners.

National Community Development Vocational Institution (NCDVI) in Madina; NCDVI is a government institution of about 120 students. The main courses

are catering and batik &dye. The school offers a 4 year program on the courses. For this school and all the other schools, majority of the students are females.

I also interviewed a respondent owns a key position at the COTVET. The Council for Technical and Vocational Education and Training (COTVET) is a national body set up by an Act of Parliament of the Republic of Ghana to co-ordinate and oversees all aspects of technical and vocational education and training in the country. The COTVET is establishing Ghana's Technical Vocational Education and Training (TVET) system to improve the productivity and competitiveness of the skilled workforce and raise the income generating capacities of people, especially women and low income groups through provision of quality-oriented, industry-focused and competency-based training programs and complementary services.

The results are displayed in the following pages. The findings of the study was analyzed using excel and SPSS software, as well as content analysis for the interview.

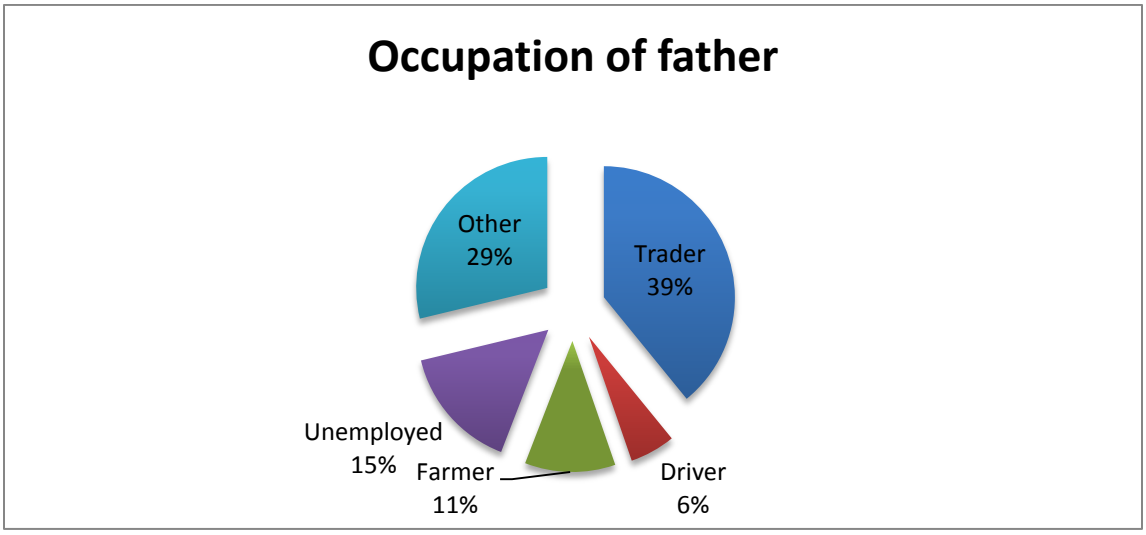
4.1 Background Information

Table 4: The table below shows a summary of the basic information collected from students and graduates.

Current Students				Graduates		
Characteristics	**Number of respondents**	**Percentages**		**Characteristics**	**Number of respondents**	**Percentages**
Gender				**Gender**		
Males	4	6%		Male	3	10%
Females	67	94%		Female	27	90%
Age				**Year of graduation**		
under 18	7	10%		1 year ago	12	40%
18 - 21	35	49%		2 years ago	2	7%
22 - 25	22	31%		3 years ago	7	30%
25 +	5	7%		4 years ago	0	0%
Discipline of study				4 years +	7	23%
catering	57	80%				
dressmaking	12	17%				
Batik dye & catering	2	3%				
Schools visited						
Hodem School	24	34%				
Jenny's School	22	31%				
NCDVI	25	35%				

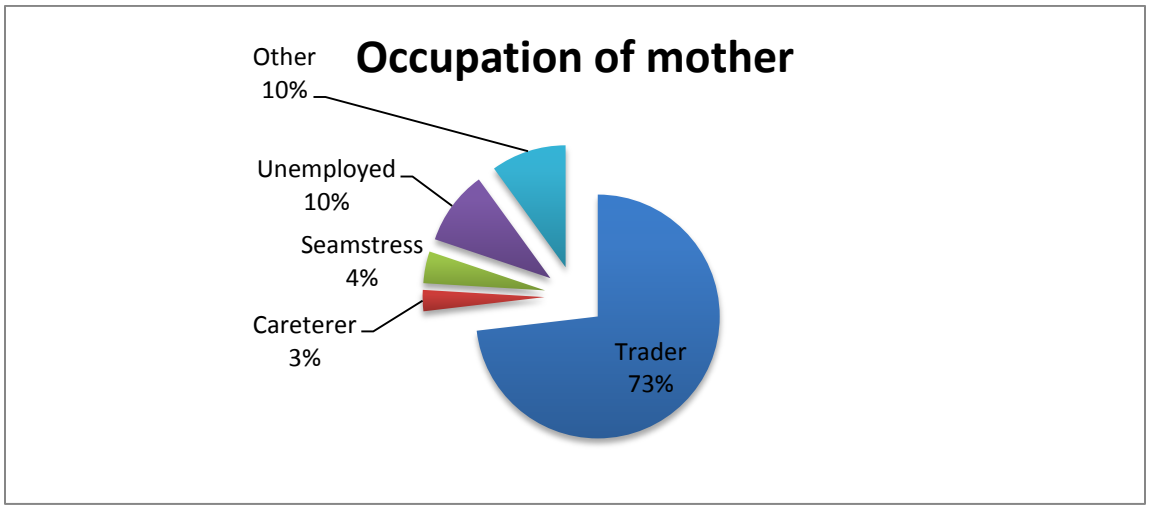
Moreover, respondents currently enrolled were asked for the occupation of their parents, and the pie charts below represent their responses.

Figure 1: Pie chart showing occupation of fathers



Source: field data

Figure 2: Pie chart showing occupation of mothers



Source: field data

From the charts above, majority of the parents were traders; 39% for fathers and 73% for mothers. Only one student had both parents unemployed. Other occupations for fathers include pastor, mason, carpenter,

policeman, teacher and civil servant. Other occupations for mothers include farmer, sectary, hairdresser and doctor. This is important because from the occupations of parents, we can clearly see that most students come from low income families, and not even one student has a parent with a white collar job.

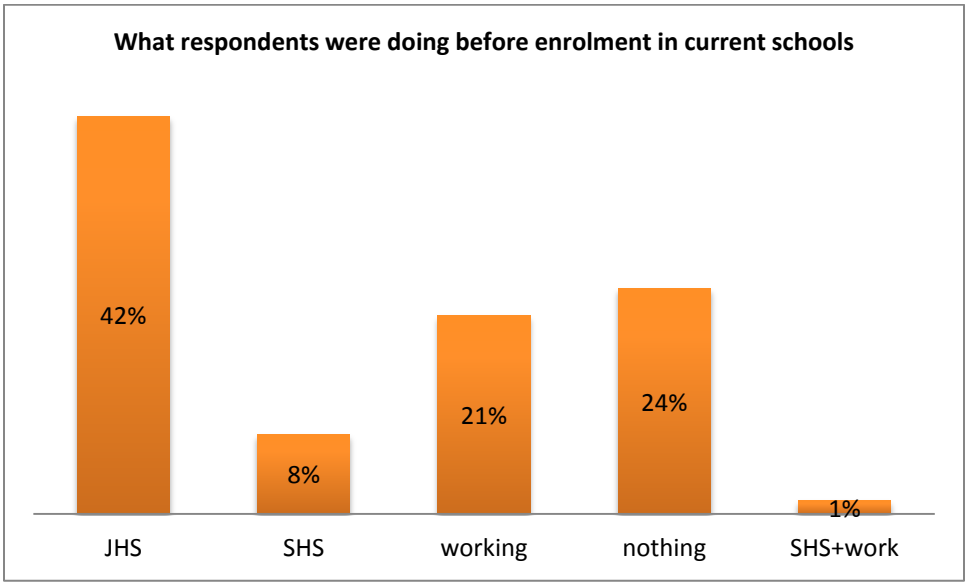
4.2 Analysis and Results

Objective 1: to investigate if a focus of TVET will translate into a reduction in unemployment rate and an increase in productivity among the youth in Ghana

To answer this objective, the researcher collected data from currently enrolled students and graduates.

Questionnaires administered to enrolled students

Figure 3: What respondents were doing before enrolment in current school?



Source: field data

Majority of the respondents were in Junior High School (JHS) which is normal because after JHS, you either go to SHS or a technical or vocational

institution. Moreover, parents or guardians of respondents could not afford 4 years of university fees. TVET was therefore the best option after JHS to quickly gain employable skills. 17 respondents out of the 71 (24%) said they were idle or doing nothing before their enrolment in the school. Form this analysis; we can say that to a certain extent, training and vocational education plays a major role in curbing the idleness of youths. The 21% of respondents who were working before joining the vocational school did so because they mainly wanted to get a certificate. They believed that with a certificate, they would find a better job than what they were doing before enrolling into the school. The other 8% of respondents who attended Senior High School (SHS) before came back to the vocational school because some were eager to get into the job market as soon as possible, while some thought that it was the best option after having failed the WASSCE examination because they could acquire employable skills than if they stayed in the normal academic system.

Table 5: Relationship between age and what respondents were doing before enrolment in current school

Age * What you were doing before enrolment in current school Cross tabulation

		What you were doing before enrolment in current school				
		JHS	SHS	Working	Nothing	No response
Age	Under 18 years	7	0	0	0	0
	18 years - 21years	19	4	5	4	1
	22 years - 25 years	3	2	7	11	0
	More than 25 years	0	0	3	2	0

	No response	1	0	0	0	1
Total		30	6	15	17	2

The table above is depicting the relationship between the age of the respondents (students) and what they were doing before their enrolment in vocational institution. Majority of the respondents that were not doing anything before their enrolments were between the ages of 22 years and 25 years old. The 19 respondents that were in JHS before enrolment in vocational school were between the ages of 18 years and 21 years old. The respondents who were more than 25 years old were either working or doing nothing (unemployed). This table is essential to my research because it gives a more specific category of the youths where much attention is needed in terms of unemployment.

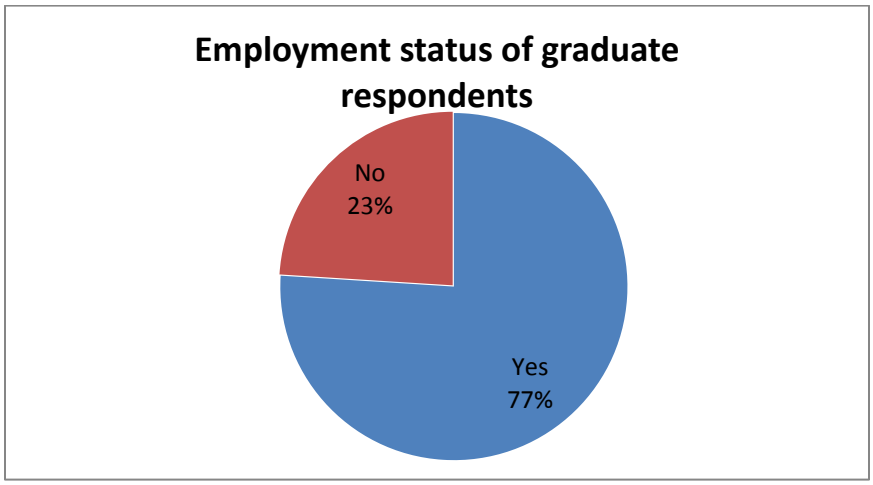
Questionnaires to graduates of the selected school

Respondents of this category were asked if they were currently employed or not. Out of 30 respondents, 23, which is 77% of the respondents said they were currently employed, and 7 respondents (23%) said they were still looking for a job. Out of those who were employed, four of them were self-employed in businesses such as tailoring and food joints. Other respondents were working as employees in restaurants and tailor shops among others as an "attachment"[1], and most of them were planning

[1] Attachment is defined by the people in technical and vocational institutions as job you get after graduation in their field of studies.

on setting up their own businesses after gaining experience from the attachment. The chart below shows the employment status of the graduates

Figure 4: Employment status of graduates



Source: field data

Table 6: Showing relationship between employment status and year of graduation

How long it took to get a job * Employment status Cross tabulation

	Are you currently employed?	
		Yes
How long it took to get a job	Less than 6 months	17%
	Between 6 months and 1 year	70%
	Between 1 year and 2 years	13%
Total		100%

From the table above, most of those who are currently employed, found a job within 6 months to a year after graduation. Only 17% respondent

from my analysis was able to get a job in less than 6 months after graduation. Three respondents had to wait for a period of 1 year to 2 years before getting employed.

Also, during my interview with a respondent from the COTVET, the respondent stated that TVET definitely plays a major role in the reduction of youth unemployment despite the challenges it faces, which will be discussed in detail in the next objective.

Objective 2: to evaluate the contemporary challenges faced by TVET and recommend appropriate strategies to improve TVET in Ghana

For this second objective, Questionnaires to current students, graduates and the interview conducted had the answer this objective, all they all had different perspectives.

Questionnaires administered to currently enrolled students

In the questionnaire administered to this sample population, respondents were asked to choose the challenges that they faced in the school from a list provided on the questionnaire and also to add any other challenge they faced which was not part of the list. The difficulties that most respondents face in their schools are;

- Inadequate classroom and kitchen space
- Inadequate learning materials and equipment for practical
- No internet connection for further research
- Some teachers do not teach to the understanding of students
- Inadequate water supply in schools

In addition, when graduate respondents were asked to give their views on their system of education, some of them complained about a difficulty to further their education (to the tertiary level) without taking any other external exams. These challenges are similar to the ones discussed by (Amerdorme & Fiagbe, 2013) in the literature review.

Interview with COTVET official

The interview with respondent from the COTVET was fundamental for this particular objective. In response to the researcher's question about the challenges that TVET face in Ghana, some of the challenges that the respondent discussed were from a different outlook from that of the students' and graduates' responses. He discussed two main challenges; the first being from the supply side. A lot of schools offer training without being registered. He mentioned that there are a lot of people who feel that they can offer any course they want without being certified and because of that they don't follow the standard curriculum set by the NVTI. This consequently hampers the effectiveness of system especially if the quality of education or training is relatively poor.

The second challenge he talked about is the way TVET is viewed by the public, same with the findings discussed in the report by the African Union in 2007. In Ghana TVET has a negative public perception. Parents or guardians will rather prefer to send their children to academic system rather than vocational system. The value of TVET is low in the eyes of the public here in Ghana. Most people see vocational school as an option for school dropouts and so one would want to be associated with such "low standard" schools.

The respondent made mentioned that what everyone is forgetting is the fact that TVET provides skill that will promote industrial development which Ghana desperately needs.

The respondent went on to discuss how the TVET is affected by the Ghanaian market. The problem with the Ghanaian market is that, it is not competitive and efficient enough as compared to China, Brazil and other countries to absorb all the youths that graduate from vocational institutes. Ghana imports things that they themselves could produce; this somehow leads to the redundancy of vocational institutes attendees given that what they are trained for is already provided through imports.

Contrary to the point that some graduate respondents mentioned about not being able to further education after the secondary vocational institutes, the interview revealed that students could further their education if they wanted to, though it might be slow. He said that there was a clear path to lead to a higher degree but the level of awareness to the various schools was low. Training modules needs to be done so that other technical and vocational schools around the country get access to these modules and use it at the basis for training, for courses such as physics among others. The COTVET is working on this project.

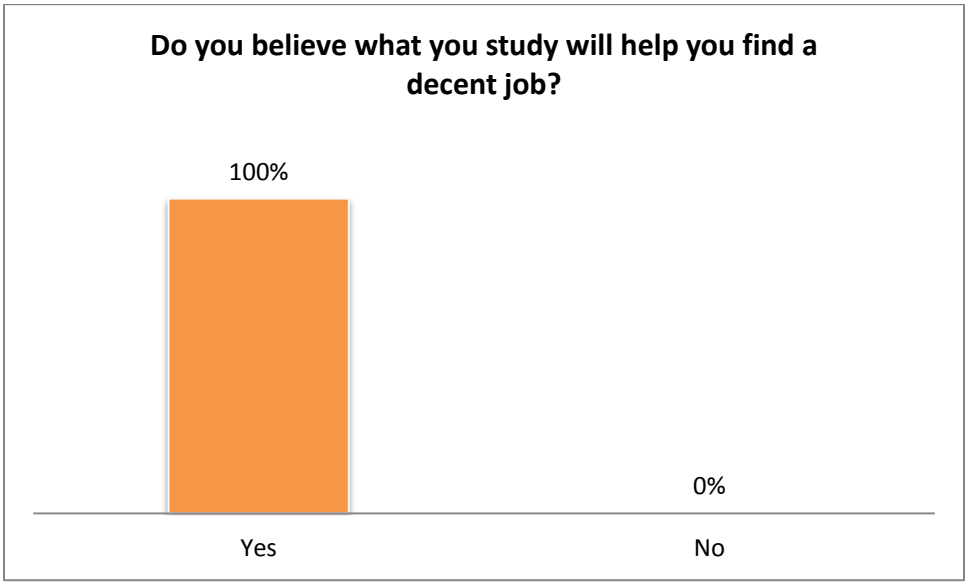
In summary for this objective, these challenges are similar to the ones discussed in the literature review. The students still have difficulties in effectively studying because all materials are not provided to them, and the negative public perception is still present.

Objective 3: to assess if TVET can improve the standard of living of the youth

Questionnaire administered to currently enrolled students

Respondents in this sample population were asked if they believe they would get a decent job after graduation, and unsurprisingly 100% of the respondents said "yes". The figure below shows the responses.

Figure 5: Do you believe what you study will help you find a decent job after graduation?

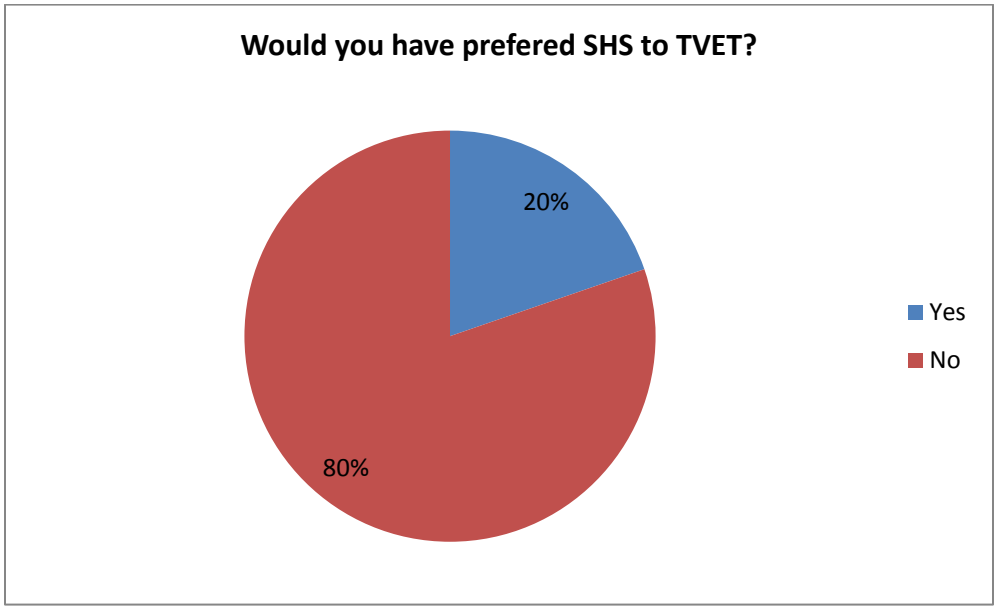


Source: field data

When respondents were asked to explain why they believed they'll get a decent job after graduation, some of the reasons were; you are able to gain employable experience while in school and so you can find a job even if it is not a white collar job, some respondent said that people will always need their service, some said because they could read and write English language, and finally because they would have a certificate. For the purposes of this research, a decent job is a job that earns more than Ghana's current

minimum wage rate which is GHc5.24. respondents were briefly explained its meaning.

Figure 6: Would you have preferred SHS

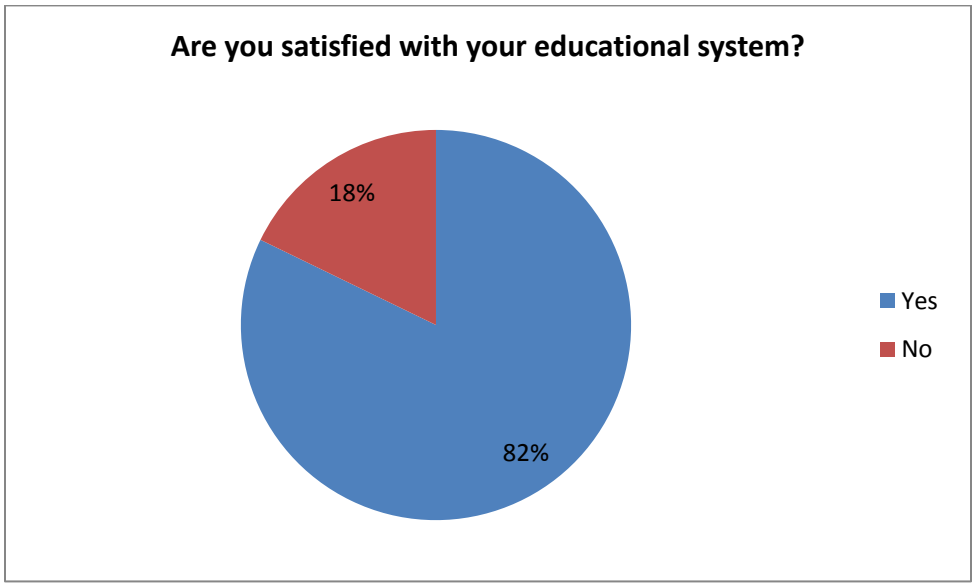


Source: field data

When the respondents were asked if they would have preferred the SHS system rather than vocational schools, only 20% said yes and the rest were comfortable with their current system of education. The 20% who responded "yes" to the question said it was because SHS had more courses and with that they will be able to speak better English, and also, they believed SHS offered a better certificate. The other 80% who said no mainly said it was because of the skills they will acquire and being ready for the job market early enough. This question enabled the researcher to have an idea about how the students in the schools felt about their system of education as opposed to SHS.

The next figure depicts whether or not respondents are satisfied with their level of education and under that there is a table that describes the relationship between the satisfaction of students with their educational system and whether or not they would have preferred the SHS system. Again this question was asked to identify the feelings of the students towards their educational system.

Figure 7: Are you satisfied with your education System of education?



Source: field data

From the chart above, 82% of the respondents said they were satisfied with their educational system reason being the same as why they would prefer the vocational school instead of SHS; that is mainly the acquisition of skills and the fact that the enjoyed what they did. On the other hand, some of the reasons why 18% of the respondents were not satisfied with their education system were due to bad conditions of studies (lack of equipment and other facilities to facilitate learning) and expensive practical fees.

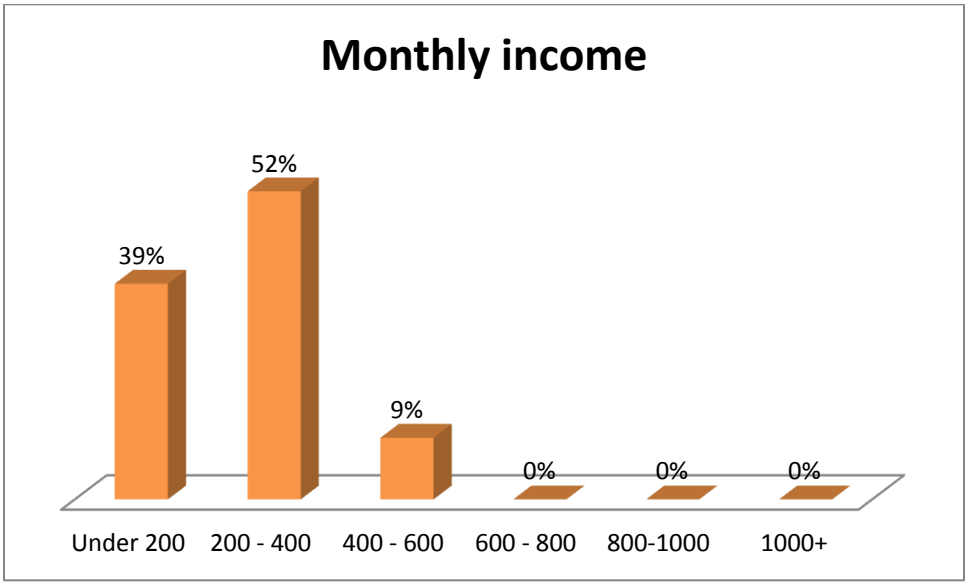
Table 7: Those who are satisfied * those who would have preferred SHS

Would you have preferred SHS to TVET? * Are you satisfied with your education system? Cross tabulation				
		Are you satisfied with your education system?		Total
		Yes	No	
Would you have preferred SHS to TVET?	Yes	14%	6%	20%
	No	67%	13%	80%
		81%	19%	100%

From the table we see that 13% of the respondents who said they were not satisfied with their education system also said that they still would not have preferred to go to the SHS system and the other 6% who said they were not satisfied still would have rather been in the general education system. In all, 67% said they were satisfied with their system of education and were happy to be there.

Questionnaires to graduates

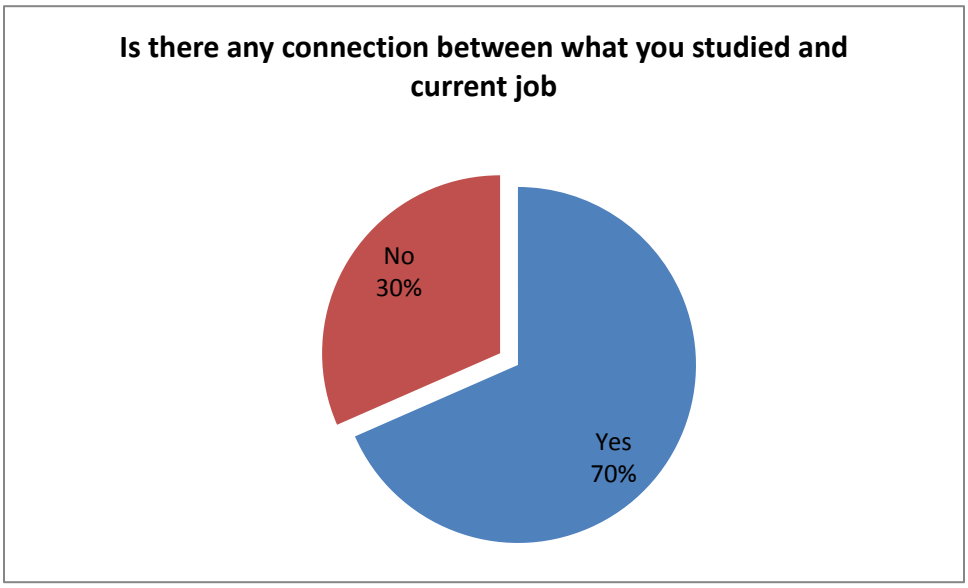
Figure 8: Monthly income in Ghana Cedis



Source: field data

Respondents from this group were asked to tick a range that best suits their monthly income and slightly more than half of them (52%) earned a monthly income between GHc200 and GHc400. When this range is converted to daily income, it gives between GHc6.5 and GHc13.15. Currently, the minimum wage rate in Ghana is GHc5.24 meaning that the income the respondents within this rage earn is decent enough. 37% of the respondents earned under GHc200 monthly. Any monthly income below GHc160 which is GHc5.26 daily is not good. 11% of the respondents had a monthly income between GHc400 and GHc 600. No other respondent had more than this amount.

Figure 9: Showing the connection between what you studied and current job



Respondents were further asked if there was any direct relationship or connection between what they studied in school and what they are currently doing as employment. 70% agreed that there was a relationship between their job and what they studied in school. However, 30% of the respondents said there was no connection between the two. In other words, even if they didn't go to the vocational school, they still would have gotten a job. This question helped the researcher determine other external forces that could have helped respondents get a job aside being enrolled in a TVET.

Table 8: Relationship between monthly income*connection between what you studied and current job

Monthly income * Has your education system helped you find a job? Cross tabulation				
		Has your education system helped you find a job?		Total
		Yes	No	
Monthly income	Less than Ghc200	5	2	7
	Between Ghc200 - Ghc400	7	3	10
	Between Ghc400 - Ghc600	1	1	2
Total		13	6	19

From the table above showing the relationship between the monthly income of the respondents and whether there was a connection between what you studied and current job, only one respondent who said yes to the latter earned a monthly income within the range of Ghc400 - Ghc600, similarly, one respondent only one respondent who said no to the fact that what he did in school did not help in finding a job earned within Ghc400 - Ghc600 of monthly income. Slightly more than half of the respondents who said yes and half of the respondents who said no earned a monthly income of Ghc200 - Ghc400.

Other findings from Interview with COTVET personnel and graduates students

During the interview session, my respondent made mention of the fact that despite the challenges that TVET faces, we need those trainees in our society. My respondent went ahead to give an example, in a situation where

a car breaks down, if the people who did physics or auto mechanics in vocational schools are not there to fix the car, who will fix it? We need this middle-level manpower in our society. Also, according to my respondent, there is not much literature in Ghana on training and vocational education regarding all the chances that are taking place in this sector and so it may be easy to be misled.

When the my school graduates respondents were asked to give their views on TVET, most of them gave positive responses and sounded satisfied with what they studied there and how it had helped them in life. Those who brought up complaints said that the school or TVET System is not serious because exams are not challenging enough for the students; there aren't enough learning materials as mentioned before and teachers do not teach to the understanding of students.

CHAPTER FIVE:

CONCLUSION AND RECOMMENDATIONS

5.1 Conclusion

TVET has played a key role in reviving and industrializing Asian countries such as China, japan and recently India (Harris, 1996). From the results of the analysis, TVET plays a significant role in the reduction of youth unemployment in Ghana. If the sector is made more attractive in terms of quality education, getting high paying jobs, parents, and more students will start patronizing this education system. This sector of education is especially important for low-middle income to low income families, as we saw that the occupation of the parents and guardians of respondents were traders, farmers, teacher, caterers, drivers or even unemployed. Such families may not be able to afford the cost that comes with taking a child through SHS and university. This sector of education faces a lot of challenges, but if the challenges are addressed as it should be, this educational system will be more appealing not just for low income families but also middle to high income families who have a passion for some of these trades that TVET offer.

5.2 Recommendation

From the data analysis we see that there are a lot of challenges that have to be addressed before the technical and vocational education can fully perform its duty in helping the Ghanaian economy develop as far as the industrial sector is concerned. For these reasons and from the responses I got from respondents, I recommend the following:

- Awareness should be created on the benefits of technical and vocational education, not just to the individuals but to the country as a whole. The COTVET and the ministry of education and training should work together on this. It was brought to my attention during the interview with the COTVET official that there is a clear path that exists in the transition from the vocational institution to a higher level of education; however a lot of students and administrators of TVET were not aware of this. Workshops and the like should be organized to inform these participants this and other benefits.

- Furthermore, there should be a regular check of TVET to see if they meet standards. The checks could be conducted annually or semi-annually in the different regions in Ghana. Schools that do not meet set standards should either be closed or forced to enhance their teaching to meet standards. The inspection will also help discover and do away with uncertified schools.

- Basic technological equipment should be included in the administration of TVET to help the students acquire certain information and skills faster. In addition to the inclusion of technology in administering TVET, a conscious effort should be made by administrators to provide learning materials, maintain and renew them when it gets old.

- Finally, the government especially should encourage industrial development. TVET is mostly concerned or related with industries in an economy. If Ghana does not produce or encourage production locally, TVET will be insignificant in our society. There has been rising awareness among citizens and leaders on the disadvantages of too many imports and little exports and the government is already putting measures in place to curb imports and encourage citizens to produce more.

5.3 Further Research

Due to the ambiguity that came up as I was conducting my research on the path that exists to transit from the technical and vocational institutions to tertiary education, I recommend that further research should be done on;

- The transition from technical and vocational education to tertiary education in Ghana.

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Appendix A: Consent form

Consent Form

Please consider this information carefully before deciding to participate in this research.

Research Topic: Investigating the Impact of Technical and Vocational Education on Youth Unemployment in Ghana.

Purpose of the research: The thesis research method that we are adopting gives us the opportunity to observe 'theory' in practice within an actual (live) organization. We are interested in finding the relationship that exists between Technical and Vocational Education and unemployment. Our hope is that this information will provide the organization with some information needed to and encourage it to engage in research driven management.

What you will do in this research: Our research method will require that you [partake in an interview and/or fill a questionnaire and show us round your establishment]

Time required: Participation will take approximately 15 minutes to complete.

Risks There are no anticipated risks associated with participating in this study.

Benefits: At the end of the study, we will provide a thorough explanation of our findings at a presentation where a representative of your organization will be invited so they can collect the information, seek clarification etc. If you will want a copy of our findings as well, please insert your e-mail address here [_____].

Confidentiality: Your participation in this study will remain confidential, and your identity will not be stored with your data. Your responses will be assigned a code number, and the list connecting your name with this number will be kept with the faculty member under lock and key and destroyed immediately they data collected has been analyzed.

Participation and withdrawal: Your participation in this study is completely voluntary, and you may refuse to participate or choose to withdraw at any time without penalty or loss of benefit. You may withdraw by informing the experimenter that you no longer wish to participate and no questions will be asked. You may also skip any question during the interview, but continue to participate in the rest of the study.

To Contact the Researcher: If you have questions about this research, please contact [Alida Inès Ouandji, student at Ashesi University College. Tel: 0547613406 email: Alida.ouandji@ashesi.edu.gh]. You may also contact the faculty member supervising this work: Dr. Stephen Armah E-mail: sarmah@ashesi.edu.gh

Agreement:
The nature and purpose of this research have been sufficiently explained and I agree to participate in this study.

Signature: _____ Date: _____

Appendix B: Questionnaire for graduates

TOPIC: Investigating the Impact of Technical and Vocational Education on Youth Unemployment in Ghana.

Dear Respondent,

This study is being conducted on the above topic for academic purposes and the researcher would be grateful if you could provide answers to the questions below. Please note that strict confidentiality is assured with respect to answers given, as facts are needed for academic purposes.

INSTRUCTIONS

This questionnaire consists of 8 questions. Attempt all items on this form by either (✓) ticking your response where appropriate or providing short answers and stating freely your opinion.

Please return the completed questionnaire to the Administrator of this form promptly.

(a) Age: Gender: Male ☐ Female ☐

(b) Year of graduation

☐ 1 year ago

☐ 2 years ago

☐ 3 years ago

☐ 4 years ago

☐ More than 4 years ago

(c) Are you currently employed?

Yes ☐ No☐

If No, move to question (h)

(d) How long did it take you to find a job after graduation?

☐ Less than 6 months

☐ Between 6 months and 1 year

☐ Between 1 year and 2 years

☐ More than 2 years

(e) Where do you work?

.....

(f) How much do you earn monthly

☐ Less than GHc 200

☐ GHc200 – GHc 400

☐ GHc 400 – GHc 600

☐ GHc 600 – GHc 800

☐ GHc 800 – GHc 1000

☐ More than GHc 1000

(g) Is your current job directly related to what you studied in school?

Yes☐ No ☐

(h) What are your views on TVET in Ghana?

……

……

……

……

Appendix C: Questionnaire for students

TOPIC: Investigating the Impact of Technical and Vocational Education on Youth Unemployment in Ghana.

Dear Respondent,

This study is being conducted on the above topic for academic purposes and the researcher would be grateful if you could provide answers to the questions below. Please note that strict confidentiality is assured with respect to answers given, as facts are needed for academic purposes.

INSTRUCTIONS:

This questionnaire consists of 11 questions. Attempt all items on this form by either (✓) ticking your response where appropriate or providing short answers and stating freely your opinion.

Please return the completed questionnaire to the Administrator of this form promptly.

Fill In Your Bio- Data:

(a) Gender: Male ☐ Female ☐

(b) Age:

☐ Under 18 years

☐ 18 years - 21 years

☐ 22 years – 25 years

☐ More than 25 years

(c) Occupation of Parents: (ii) Mother …… (ii) Father…….

(d) Your Hobby/Interest ….……..……

(e) Your Career Choice/Discipline of Study……..

(f) What you were doing before enrolment in your current school

☐ Enrolled in JHS

☐ Enrolled in SHS

☐ Nothing

Other…….

(g) Do you think your education system will help you find a decent job after graduation?

Yes ☐ No ☐

Explain why?

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

(i) What are the major challenges that you face in your school or for being enrolled in a Technical and Vocational Institution? Select as many as you can from the following.

☐ Inadequate classroom space
☐ Inadequate learning materials and equipment
☐ No teacher
☐No internet connection in school

Other……

(j) Do you prefer SHS to Vocational and Technical Institutions?

Yes ☐ No ☐

Explain why

……

……

……

(k) Are you satisfied with you educational system?

Yes ☐ No ☐

Explain why

……

……

……

Appendix D: Interview guide

Investigating the Impact of Technical and Vocational Education on Youth Unemployment in Ghana.

Dear Respondent,

This study is being conducted on the above topic for academic purposes and the researcher would be grateful if you could provide answers to the questions below. Please note that strict confidentiality is assured with respect to answers given, as facts are needed for academic purposes.

1. How long have you worked for the COTVET?
2. Should the government give more focus to TVET?
3. What role do you think TVET Plays in the reduction of youth unemployment in Ghana?
4. Why has it being neglected for so long?
5. What are some of the challenges you face?
6. What is the government doing to address these challenges?