School leadership challenges in the implementation of Technical and Vocational Education Curriculum in Ghana

Daniel Osei-Asibey

Master's Thesis in Education Autumn Term 2015 Department of Education University of Jyvaskyla

Osei-Asibey Daniel. 2015. School Leadership challenges in the Implementation of Technical and Vocational Education Curriculum in Ghana. University of Jyvaskyla. Department of Education.

ABSTRACT

The purpose of technical and vocational education and training is basically to provide individuals with needed skills for socio-economic and industrial development. In most developing countries especially, TVET lays much emphasis on the kind of training that prepares the youth for self-employment. In Ghana like most developing countries, the aim of TVET is no different from the above. However, TVET in Ghana is bedeviled with a number of challenges ranging from limited funding, inadequate tools and equipment, obsolete and broken down facilities, lack of properly trained teaching and non-teaching staff to handle the programme, negative public perception and attitudes towards TVET and many others. This paper examines the challenges from the perspective of the school leadership in Ghana. It is aimed at unearthing the challenges facing TVET at the implementation level and ultimately finding a sustainable remedy in the future.

To realize the aims of the study, qualitative case study was used. Three schools were specially selected. Focus group interviews with a total of eighteen respondents were used. The analysis was thematically carried out, and was mostly driven by the data.

The results of the study most affirmed the challenges that have been highlighted by existing literatures. However, the study revealed some challenges which are either ignored or less talked about by the various stakeholders, yet the continuous existence of those challenges continue to hamper the efforts by the school leadership to address some of the fundamental challenges facing TVET in Ghana.

In this paper, I recommend that efforts to redeem the image and to make TVET useful in Ghana be made to revolve around improvement of teacher training and provision of relevant tools and equipment for various TVET schools. I also recommended that a study be conducted into finding the solution to the challenges from the perspective of the school leadership.

Key Words: Leadership, Challenges, Technical, Vocational, Education

ACKNOWLEDGEMENT

I will to express my profound gratitude to the lord almighty for his divine protection over me, and for giving me the wisdom to undertake a project such as this.

My heartfelt appreciation goes to Dr. Pekka Kanerivio, my supervisor for being there for me as a pillar behind this study. I really appreciate the support of Dr. Leena Halttunen for her guidance and knowledge impartation during the period of my studies. Madam Lea Kuusilehto-Awale, my former programs coordinator is highly acknowledged for her direction and continuous encouragement before and during my study period in Finland. Prof. Em. Alava Jukka can never be forgotten for his special tutelage in transforming me as a student and a leader.

For her patience, prayer, love and care for me throughout my stay in Finland, I *specially* appreciate my wife Owusu-Ansah Gloria Anyamesem. This acknowledgement cannot be completed without recognizing all the participants who provided data in making this study a reality. I will finally like to acknowledge my family and friends for their unquantifiable support in making this study a success.

LIST OF ABBREVIATIONS

ADF African Development Fund ADP Accelerated Development Program AU African Union CBT Competence Based Training COTVET Council of Technical and Vocational Education and Training Education For All EFA ESDP Educational sector development plan **FNBE** Finnish National Board of Education GDP Gross Domestic Product GES **Ghana Education Service** Ghana Education Trust fund GETfund Government of Ghana GoG HOD Head of Department ILO International Labor Organization JICA Japanese International Cooperation Agency JSS Junior Secondary School MOE Ministry of Education MOEYS Ministry of Education, Youth and Sports NACVET National coordination Committee on Technical and Vocational Education and Training NVTI National Vocational Training Institute OE **Occupational Education**

- OECD Organization for Economic Co-operation and Development
- PTA Parents Teacher Association
- SAP Structural Adjustment Program
- TVE Technical and Vocational Education
- TVET Technical and Vocational Education and Training
- UNESCO United Nations Educational, Scientific and Cultural Organization
- VET Vocational Education and Training
- VOCTEC Vocational Education and Training
- VTE Vocational and Technical Education
- WAEC West African Examination Council

LIST OF FIGURES

Figure 1	A diagrammatic	representation	of the	characteristics	of the	sampled
schools45	5					
Figure 2 Dat	ta collection process	5				59
Figure 3 Fac	ces of the data analy	sis				67

CONTENTS

1	INT	RODUCTION	11
2	HIS	TORICAL DEVELOPMENT OF TVET	14
	2.1	Perception of technical and vocational education and training	15
	2.2	Policy in technical and vocational education and training	16
	2.3	Purpose of technical and vocational education	18
	2.4	Content relevance of TVET and public development	20
	2.5	Infrastructure in technical and vocational Schools	22
	2.6	Funding of TVET	23
	2.7	Technical and vocational education in Ghana	25
	2.8	Financing of TVET in Ghana	27
3	SCH	IOOL LEADERSHIP, MANAGEMENT EFFICIENCY AND PRACTIC	ES31
	3.1	The paradigms of leadership	32
	3.2	Quality of teachers as leaders	33
	3	.2.1 The teacher leader as a counselor	35
	3	.2.2 The teacher leader as a motivator	35
	3.3	Preparation of teachers for TVET	36
	3.4	Teacher support services	37
4	RES	SEARCH PROBLEM	39
5	RES	SEARCH DESIGN	40
	5.1	Rational for the study	40

5.2	Aim of the study and research questions	42
5.3	Research methodology	42
5.4	Case study	43
5.5	Data collection	44
5	.5.1 Selecting data collection site	44
5	.5.2 Data collection method	47
5	.5.3 Focus group as a method of data collection	47
5	.5.4 Participants for the study	51
5	.5.5 Collecting the data	52
5	.5.6 Pre-interview	52
5	.5.7 During the interview	55
5	.5.8 Post data collection	57
5.6	Challenges during the data collection	59
5.7	Data analysis	51
5	.7.1 Thematic analysis	53
5	.7.2 Using thematic analysis in this study	54
5.8	Reliability	58
5.9	Ethical considerations	59
FIN	DINGS AND DISCUSSION	72
6.1	Negative societal perception about TVET	73
6	.1.1 The societal value and respect for various professions	73
6	.1.2 The high cost of TVET	75

6	.1.3 The cultural meaning to gender and traditional roles	77
6	.1.4 Low quality of student recruited to take TVET	77
6	.1.5 Lack of interest by the students and parent in TVET	80
6.2	Insufficient funding for TVET	81
6	.2.1 Difficulty in getting funds released at the school level	83
6	.2.2 Funding by students	84
6.3	Lack of proper infrastructure and teaching and learning materials	85
6.4	Out of date syllabus content	88
6.5	Low quality of teaching	89
6.6	Lack of teacher support service for TVET teachers	91
6.7	Bureaucracy in school leadership	93
CON	NCLUSION AND RECOMMENDATION	96
7.1	Overview of the findings and their deductive reasons	96
7.2	Thrust worthiness of the study	99
7.3	Limitations of the study	.101
7.4	Recommendations	.102
R	eferences	.104
APP	ENDICES	.114

1 INTRODUCTION

The political leadership has persistently come under intense pressure from the citizenry to provide more and better education for the people of Ghana. Formal education in Ghana began in the 18th century with arrival of the missionaries in Gold Coast, now Ghana. Not only did they build churches, they also built schools to train children for evangelism, agriculture, technical and vocational skills to take care of the social and domestic needs of the people. A group of Europeans also started cotton plantation association in Ghana using the local people including school pupils with the view of encouraging the people to appreciate the importance of manual work (Badu, 2011, p. 4.) The attention gradually shifted to the production of manpower to serve the colonial administration. The general secondary school was given much attention at the huge expense of vocational and technical education. (Dai, Tsadidey, Ashiagbor & Baku 2008, p. 2.)

The plans of Ghana to institutionalize technical and vocational education (TVE) did not end with colonization rather; it was given a face lift. After Ghana's independence from the British in 1957, a massive educational reform was undertaken with the aim of meeting the contemporary educational needs of the country describing the colonial education as being too bookish. This resulted in the accelerated development plan (ADP) initiated by Dr. Kwame Nkrumah (Ghana's first president) in 1957 and the Education Act of 1961. This legislative instrument first defined the organization, and the administration of education in the country. The Act gave the right to education to all children of school going age as determined by the Ministry of Education (MOE) and in schools accredited by the Ministry. The MOE was mandated to oversee the pre-university education and formulate policies, with regards to planning, curriculum development and supervision of pre-university education. The ADP also took care of recruitment of pupils into preuniversity schools and the massive expansion of existed structures. Notwithstanding, the standards of education at primary and secondary school kept falling in spite of the high hopes raised by the ADP. (Apeanti & Asidu-Addo, 2013, pp. 1-3.)

From Bourret (1960, p. 216), out of the 8,000,000 pounds devoted to ADP, three fourth of the amount was meant for Technical, secondary and teacher education. In spite of the improvement and the establishments of more technical and vocational schools, the prioritization of general education over the technical and vocational education did not change many years after independence. This resulted in the culture of universities offering admissions to those who offered 'academic' programs, sidelining those who offered agriculture, vocational and technical programs. This system of education again was described as too elitist.

Kwapong educational review committee was later established as a result of the challenges accompanied the ADP. Kwapong committee later recommended the introduction of continuation schools. This education system at the time was described by pandects as one of the best in Africa until it began falling during the 1970s. (Wolfensohn, 2004, p. 7-9.) To look into the falling standard resulted in the formation of many committees popular among them was the Dzobo educational review committee which was set up to establish the cause of the falling trend and to locate a point for turn around. This move which came to be known as the most ambitious educational reforms in Africa was embarked upon in 1987. (Darvas & Balwanz, 2014, pp. 41-42.)

Tetter, Puplampu, and Berman (2003, p. 158) recounts, although the government of Ghana over the years had invested heavily to better education, little emphasis was laid on technical and vocational education. However, the change in demand of the workforce and the persistent complaints by employers over school livers inability to fit into workplaces, coupled with the introduction of structural adjustment program (SAP), also led to the introduction of the 1987 educational reforms which was heavily influenced by the report of Dzobo committee though attempts by previous government to implement it had been partial. (Darvas & Balwanz, 2014, p. 42.) Structural Adjustment Program is a World Bank and IMF initiative made up of a number of policies that are hinged on many economic goals, emphasizing on economic stability and judicious use of resources in particular, (Singgel, 2005, p. 209).

Though there were nine attempts by various governments to reform the sector of education between 1957 the mid-1980s, none of them altered the fundamental pillars of the existed system of education until the 1987 educational reform which restructured preuniversity with the aim of assisting the redistribution of resources to enhance the rapid and equitable distribution of basic education in Ghana. (Acheampong, 2010, p. 164.) Ghana experienced a third wave of major educational reform that began in 1987, and this reform's attention was focused on three major areas which included; Firstly, the expansion of facilities and making accessibility more equitable at various levels of education. Secondly, the reform was meant for the reduction of pre-tertiary education by 5 years (from 17-12 years) with the instruction of 9 years compulsory basic education system consisting of 6 years primary, 3 years junior secondary and 3 years senior secondary school. Finally, the abolition of entrance examination for admission into secondary school and made automatic, the progression from basic school to secondary school, by introducing pre-tertiary curriculum that fused general academic studies with technical skills. (Acheampong, 2010, p. 164: Apeanti & Asiedu-Addo, 2013, p. 4.) These changes, were meant to correct the existed educational system perceived to be elitist and looked down on technical and vocational and agricultural education.

Despite the above interventions, the crises of youth unemployment kept deepening after twenty years of the 1987 educational reform's implementation. This was partly blamed on the negative attitude of the youth towards manual work. Guided by the principle of the philosophy of pragmatism, thus drawing the lines between "performative knowledge and informative knowledge" the 2007 educational reforms in Ghana sought to attract the commitment of the youth to TVET, emphasizing on government partnership with the private sector in raising materials and human resource for the successful implementation of the program, but this deployment has achieved very little from both the side of citizenry and government. (Badu, 2011, p. 7.)

Having a fair idea of some of the challenges of TVET as a TVET student and as an intern, I was motivated to explore in detail, the phenomena but with the focus at the implementation level. This, I believe can help design a realistic mitigating measures to arrest the challenge of TVET in Ghana.

2 HISTORICAL DEVELOPMENT OF TVET

The second international congress on technical and vocational education in Seoul adopted the term "TVET" at the 30th session of the General Conference of UNESCO in Paris. They agreed on definition of the term TVET to be the process of combining education and training in a way that acknowledge the common objective for employment as the primary goal. It involves multi-domain that require approaches involving integration and collaboration. It was also adapted that the programmes in TVET should be comprehensive and inclusive, accommodating and gender balanced. (Hiebert & Borgen 2002, p. 16.) In many different countries technical and vocational education has been given different names: vocational education and training (VET), technical and vocational training (TVE), technical and vocational education and training (TVET), vocational training education (VTE), or vocational and technical education and training (VOTEC). These terms are used by various geographic locations.

The 1999 UNESCO and ILO second international congress on technical and vocational education held in the Republic of Korea jointly agreed on the term Technical and vocational education and training. (TVET). (Maclean, & Wilson, 2009, p. lxxvii.) These names mean the same thing. Traditionally, making reference to technical and vocational education points to the direction of the form of education which involves technology, applied sciences, agriculture, business studies and visual arts. (Boateng, 2012a, p. 109.)

Vocational education program in the United States have significantly influenced the vocational education programs in many countries. Apprenticeship programs were adapted from Europe to colonial America, during early nineteenth century, schools of Pestalozzi

and Fellenberg were in Switzerland used as model schools at United States for the workstudy schools. (O'Lawrence, 2008, p. 195.) TVET has in recent times seen transformation, moving away from just the known craftwork and entered into the preparation of the youth for high-tech career involving complex scientific and technological skills and knowledge like computer networking and TVET is seen today as rigorous and relevant. (Hernadez-Gantes & Blank, 2009, p. 51.)

2.1 Perception of technical and vocational education and training

Vocational education has changed over the years, and now seen as a significant part of educational system. Measuring people by what they do is no longer realistic; rather, the quality of performance of such work is the basis for measurement. Vocational education now enjoys social conscience that dives into people being prepared to be members of the working force and those who produce goods and services. (Wang & King, 2008, p. 204.)

However, very high sections of the society still hold negative perception on TVET despite the positive attributes. McFaland (1994, p. 24) states that, because the general public and academic educators have not fully accepted vocational and technical education, there is a diffused perception that vocational and technical education classes is a "dumping ground" for student who are not performing well in academic classes.

A high number of parents, education providers and policy makers in the United States consider TVET as a form of education which is meant for the second class students and for those who are incapable of making success in the academic endeavors. (McFaland, 1994, p. 24.) Power-deFur and Orelove (1997, p. 203) reaffirm that, TVET is considered by many people including students, parents and educators as inferior to general academic program and meant for the academically weak students.

Though the United States is known for the provision of opportunities for all learners to attend college as noted by Parker (2008, p. 23), the challenge that stems from the perception that, obtaining four year University degree is the surest way of making enough money to live a meaningful economic and family life reinforces the negative image of TVET (Parker, 2008, p. 23). TVET is therefore not regarded by many people as a pathway to success. As a result, the attention and focus of the parent are on four year

University degree instead of motivating their children to pursue TVET. (Canning, 2012, p. 16.)

In China, according to Rojewski (2004, p. 83), TVET is negatively perceived by the people as a result of the low status it occupies in the society and also the believe by Chinese in the old saying that, "Being a government official is essential while being a skilled labour is superficial" and the other that says "Schooling for officialdom is glorious while for ordinary employment is shameful".

From the above, it easy for anyone to conclude that most countries, even the advanced in technical and vocational education have one way or the other suffered from the negative perception held by their own people against TVET, and it is evident, reasoning with the writers above. This means the effort to mitigate the challenges presented by TVET cannot be complete without considering the perception of the people for whom TVET is meant. It will eventually be extremely difficult to reduce or eliminate the high unemployment among the youth of today once the culture of taking TVET as second choice options by parents and students remain unchanged (UNESCO, 2013, p. 18).

2.2 Policy in technical and vocational education and training

In England, the English policy makers have constantly considered the relationship between educational achievement and social advantage in successive UK government, often understanding educational failure as a key factor in the production and reproduction of social, occupational and economic ill and therefore treating 'priority' policy formulation as an important preventive role that goes beyond the education itself to deal with issues of social exclusion. (Antoniou, Dyson & Raffo, 2012, pp. 24-31.) Receiving the backing of legislative instrument, the 2006 Education and Inspections Act as recounted by Ball, (2007, p. 13), contains almost all the key themes of the New public sector reforms, and they are projected through education policies, building on, extending and reconstructing previous policies and previous legislation.

The revival of Chinas TVET system was given a boost in 1978, when the central government adopted policies that sped up the reformation of the TVET system. Some of which included the increase in number of schools by converting some existed general

secondary school to vocational and technical schools, creation of network among TVET schools, increment in the budgetary allocation to TVET system among others. More attention was direct to school quality and efficiency. With constitutional backing, the state had to promote TVET, and provide the needed skills for citizens before they were employed; this brought back Chinas TVET on track. (Sun, Lu, & Li, 2009, pp. 977-978.)

There have been a number of educational policies in sub-Saharan Africa that seek to mitigate the socio economic challenges faced by various African countries. Key among these policies is ensuring a meaningful and relevant TVET system that is accessible whiles addressing issues of quality. Being aware of the significant role played by quality TVET system in national development, various governments in Africa have expressed interest in quality TVET system. This is seen in the various poverty alleviation strategies and development plans mapped out by various countries. These strategies aim at sharing knowledge on TVET among selected African nations, identify major challenges concerning policies and assess the relevance of TVET policies in achieving poverty reduction. (Konayuma, 2008, p. 2.)

In 2007, the meeting of the bureau of the Conference of Ministers of education of the Africa Union in Addis Ababa spelt out strategic document that sought to revitalize formal and non-formal TVET in Africa in light of the socio-economic needs of the continent, so as to find solution to the youth unemployment, build human capacity and contribute to poverty eradication. Among some of the things discussed included the need to wipe away the poor perception of TVET to make it less dead end, dealing with the gender stereotype which makes some programmes a preserve for some gender group and create a link between TVET and general education. Not only that, the need to link formal and non-formal TVET, the need to link TVET to the labour market and the need to make entrepreneurial training programmes as part of the strategy was emphasized. In addition, considering a special program for post-conflict zones that have dilapidated educational infrastructure and the need to train adequate expertise to drive and sustain TVET systems in Africa among other were prime on the agenda. (AU, 2007, pp. 34-37.)

Ghana like many other countries that aspire to solve socio-economic problems through skill development, in the COTVET Act 718 of 2006 established COTVET to coordinate all aspects of TVET including the formulation of policies. In accordance with its mandates, the first COTVET board was set up in 2007 to oversee and coordinate all aspects of TVET. Other important Acts and policies included the National Accreditation Board Act 744 of 2007, which makes provision for the establishment of the board which is tasked to give accreditation to public and private tertiary institutions by considering the content and the standards of the programme. The polytechnic Act 745 of 2007 also mandates polytechnics to provide tertiary education in manufacturing, commerce, science, and technology fields etc. and prepare a favorable platform for skill development, applied research and publication of research findings. (Gondwe & Walenkamp, 2015, p. 4.)

2.3 Purpose of technical and vocational education

The basic reason for technical and vocational education (TVE) is to prepare the youth with the needed knowledge and the skills required to making them dynamic enough to live meaningful life, and equip them to make a smooth transition from school to the working life. Many levels in life makes very important use of the skills developed, for example, individual skills influences the job security and wage on the market. The skill influences productivity for employers and ensure that the youth participate actively in the building of the society. (EFA, 2010, p. 78.)

Ruth (2008, p. 433) tries to deal with the main concept of TVET and analyses their usefulness in the process of globalization using "industrial culture approach", and explaining TVET to be a system of technical and vocational education that seek to produce skilled and qualified workforce to the existing production of a country, or train people with the requisite skills and competencies as demanded by the labor market. Rauner and Maclean (2008, p. 75) re-echoed this point by saying, technical and vocational education and training systems have the responsibility to undertake and pursue competing educational goals and again serve competing interests. In addition, TVET is tasked to train people for work.

Atchoarena and Delluc (2002, p. 17) explain that technical and vocational education has the primary objective to lead participants' practical skills and the technical know-how needed for employment in a particular field of trade or occupation, which is important to the world of work.

Fundamentally, training of skilled labour force which is competent enough to adapt to the requirement of the labour market has always been the objective of technical and vocational education (Atchoarena & Delluc, 2002, p. 37-38).

There is evidence to suggest that TVET is more effective if its provision is comprehensive enough. Comprehensive TVET is defined in this situation as: workplace training, professional career guidance, effective training of teacher who are capable of working part-time to be up to date with industrial know-how, incentive to employers to provide workplace learning and the provision of standard assessment for TVET qualifications. (IEG & World Bank, 2013, p. 42.)

In Finland, vocational education and training (VET) and vocational competence is very instrumental in the promotion of economic competitiveness and prosperity. The development of VET is rooted on the mass expectation of long-term demand for labour and educational needs, and the quality of skills required as a nation. Their ability to predict the future furnishes them with information regarding the kind of skills needed for the world of work in the future and how to achieve them through the provision of education and training. The aim is to as closely as possible meet the demands for labour by the labour market. (FNBE, 2013, p. 4.)

From the above, one may be tempted to easily conclude that, technical and vocational education and training comes with the sole aim of training the individual to acquire the knowledge and the technical skills require to usher him or her into the job market. However, some schools of thought see TVET beyond merely skill acquisition for working life.

Newly independent African countries followed TVET policies that aimed at training managers and skilled labour force needed to support the growth of modern sector. The objectives have become more divers, dwelling not only on simple economic but also social factors, taking into account the fight against poverty and striving to integrating the youth into the World of work, due to the economic recession in Africa in the 1970s which resulted in cut in public sector spending. (Atchoarena & Delluc, 2002, pp.37-38.) This means that, TVET is also expected to equip students with literacy and numeracy skills that can propels them for personal development and open a gate way for higher education.

Beyond the emphasis on personal capacity and occupational skill development, TVET can reproduce and transform society into various forms and for different purposes. These purposes are seen in the various intents for TVET institutions as may be determined by the various stakeholders. These involve assisting individuals to integrate effectively in the working life, securing personal and societal independence and change, contributing to the sustainability of enterprises and finally contributing to the national economic wellbeing, acknowledging the contribution of families, communities and public enterprises. (Seddon, Fennessy & Ferguson, 2009, p. 337.) Karling (2008, p. 13) conceives that, vocational education is capable of responding to the needs of the society in terms of skilled workforce and to equip learners with the educational foundation that can carry them through lifelong learning.

2.4 Content relevance of TVET and public development

Job-relevant skills means a set of competencies or abilities that has value in the site of employers and capable of providing self-employment, they include technical skills relevant to specified job of work, together with the needed cognitive skills for enhancement of products in a more general terms. (Almeida, Behrman & Robalino, 2012, P. 13.) Both developed and developing countries continue to see pre-employment TVET as the headway to gainful employment, considering its capability of imparting readily available job-relevant skills, and focusing on young people who are close to the end of formal school and getting prepared for the job market. (Almeida, Behrman & Robalino, 2012, p. 19.)

In Serbia, the government have adopted a national strategy complying with three aims of the 2000 Lisbon strategy namely, full employment, quality assurance and productivity, and social cohesion and inclusions in the labour market. By this framework, a combination of several programs was launched to modernize the education and training system and improving the quality through the curriculum. (OECD, 2008, p. 123.) Complementing this view point, Xu (2012, p. 289) gives broader and narrow definitions for TVET, saying TVET cultivates the peoples vocational interest and train their vocational abilities by the requirement of the society in broader sense whiles educating the labourer with different educational levels and with different vocational skills who are brought up with the basic knowledge, applied knowledge and the skills of specific labour department. (Xu, 2012, p. 289.) The Chinese vocational education emphasize on the study of theory but the training goal of the dual system of education which views worker technique as the requirement for their working station, and it enjoys support from the corporations. They are characterized by the collaboration of corporations and the vocational school, with the training by the corporations taking up to 70% of the total training period. This renders student as students and apprentices at the same time. (Xu, 2012, p. 190.)

In Germany, there is massive involvement of companies in the dual system of education which provides a wide range of opportunities for the youth between the ages of 16 and 22, offering a good job prospects with relatively good training allowances (at least \in 650 per month). Learning in schools with this system is one or two days a week, with the rest of the training in companies, consisting of about 340 professions ranging from training for engineering or construction crafts to service sector jobs such as banking or office skills without modularizing the courses. (Canning, Godfrey & Holzer-Zelazewska, 2007, P. 26.)

The vocational education and training in Finland begins with flexible and versatile preparatory programmes of study tracks that are meant for to develop transition point between basic education and upper secondary level. The aim is to successfully support the transition from one level to another and also to endorse the continuity of students' lifelong learning track. (FNBE, 2013, p. 10.) The FNBE continues to explain that, the provider of VET has the responsibility of organizing on-the-job learning places for the students. In this regard, the provider signs a written contract with employers who then absorb students to learn in the organization. In this contract, students do not have employment relationship with employers. This means that their status as students and their social benefits during this training period are retained, and employers are not paid any form of compensation in return. It is also possible for on-the-job learning to be located abroad with teachers and workplace instructors collaborating in planning and assessing students during the period of on-the-job learning. By this, the students are equipped with the requisite skills needed to be up to date with current trend of advancement. (FNBE, 2013, p. 13.)

The number of students enrolled in TVET program could be attributed to the relevance and the quality of training offered by the institution. Filmer and Fox (2014, p. 100) posit that, hardly can the quality of a training program be measured directly, this is because, it is hard to systematically compile proof of the quality of TVET institutions. However, there are some key indicators that are used to ascertaining the quality of training. These involve the number of student who enrolls in the program, the rate of dropout and the job opportunities available to graduates of the training. Better attendance brings about better learning and the quality of the program, the fewer the dropouts the better the program. (Filmer & Fox, 2014, p. 100.) Perhaps this explains the high enrollment and retention in Finnish vocational schools. In 2012, the number of student students enrolled in Finnish vocational schools stood at 50% as again as 41.5% enrolled in the upper general education (Sahlberg, 2015, p. 34).

2.5 Infrastructure in technical and vocational Schools

The term infrastructure is ambiguous and must be used in context (Radvanovsky & McDougall, 2013, pp. 12-13). The definition of the term infrastructure goes beyond provision of physical network such as transport, public utilities, water management and industrial site to include natural environment like nature reserves and material knowledge such us research (Atzema, Rietveld & Shefer, 2005, p. 25). Considering the definition above, it looks obvious from the above that, the usage of the term infrastructure must be done with substantial clarity. For the purpose of this study, the usage of infrastructure will be limited to physical or material structures such as buildings, tools and equipment.

In most countries, the provision of technical and vocational education is established on the basis of legislative instrument or statutory order. This takes into account the scope of the program with respect to the level, the role played by the various stakeholders involved in the provision of the relevant structures and activities of education, quality assurance function, the procedure and the criteria for selecting student to pursue the program. (ILO, 2010, p. 142.) Actually, the shape of infrastructure is dependent on the status and the infrastructure of the various academic disciplines as presented in the preparation of teachers in the trade and industry or health occupation (Grollmann & Rauner, p. 9). Countries with well-developed TVET for example, Germany, Switzerland and Denmark have vocational cultures, and their TVET systems are structured in accordance with available occupations, grouped into occupational fields and developing a training system that cover the entire field for both teachers and students. (Pahl & Rauner, 2008, p. 193.) Technical and vocational schools are not looked at with the lenses such as those used for comprehensive schools. This is due to the fact that technical and vocational schools as described by (Rauner & Maclean, 2008, p. 451) comprises sophisticated program that integrate work and learning, characterized by the use of dual infrastructure that correspond as work infrastructure on one hand and the provision of spatial, temporal material and personal resource on the other hand.

In Finland, technical and vocational programs expose students to a wide range and job specific competencies (OECD, 2003, p. 43). Cheng (2005, p. 727) recount that, there is an introduction of policies to improve the quality and efficiency of TVET in both Australia and New Zealand, by creating national competency –based training packages that links to nationally recognized and delivered providers who are registered in the training market, that provides new structures to ensure the quality of the training delivered.

Ghana's TVET is confronted with huge infrastructural challenges. This challenge however varies from one school to another. The variation is due largely to the contributions made by bodies such as PTAs and the old students associations. According to EFA (2012, p. 241), Ghana has succeeded in making TVET accessible to all, but the high cost associated with it has resulted in a situation where the schools in the urban areas have more facilities than those in the rural areas. This is because urban schools have higher student enrollment and with relatively rich backgrounds.

2.6 Funding of TVET

No Technical and vocational education and training system can be functional consistently with inadequate financing. Based on the principle that training is a service, for that matter it's directs and indirect beneficiaries must bear the cost underpin its funding. (Gasskov, 1994, p. 3.) Publicly financing TVET in many countries remains a major challenge with all the associated weaknesses, including supply-driven orientation and the absence of

feedback from employers, low flexibility and training quality, high cost of training, weak orientation towards equity and others. (McBride, 1994, p. 17.)

The TVET financing discourse must commence with three fundamental questions. Who are the potential financiers? Must the providers of TVET finance it as well, or must those who finance it produce and offer it? And finally, must those who sacrifices resources and liquidity bear the burden? (Timmerman, 2008, p, 412.)

There are three major sources from where an educational system may receive funding: the public sector, the private sector and the international community. The degree of inputs from these sources, the financial modalities in place, the beneficiaries of these resources and the mechanism of allocation are the main indicators that set these countries apart. (UNESCO, 2012a, p. 5.) Again, the nature of the finance as described by Timmerman (2008, p. 413), the nature of the finance may also be dependent on the model and the core focus of the training concept, for instance, the core of the qualification concept, the style and the component of the qualification may be pivoted on the functions of which the qualification will have, as in the case of the English function-oriented model. Financing may also be dependent on a set of qualification as recommended by researchers, as in the case of France science-oriented model. Switzerland, Germany and Australia has inclination towards the TVET model whereas China, Japan and South Korea follow a model which can be termed as enterprise-oriented. The attention of USA and Italy seems to be directed towards job requirement orientation-model.

Since the establishment of International Institute for Educational Planning in 1963, it has engaged actively in working on research and training activities with regards to costing strategies, financing and budgeting in education system. They focused on mapping changes in research environment for three areas and improving on the conceptual knowledge and methods of data collection partially in developing countries. (Ross & Hallak, 1999, 1.) To address the question of how much and what resources are available for the development of education, the most common indicator of how much public education expenditure as a percentage of the gross domestic expenditure (GDP), it is important to consider public sector investment in education since the public sector play a major role in educational provision. (Nomura & Bruneforth, 2011, p. 29.)

In England, education is administered at the national and local levels. Decentralization characterizes the system of education and different of services in education is a shared responsibility of the central government, local government, churches and other voluntary bodies. Before 2010, the overall policy for education was the responsibility of the department for Children School and Family and the Department of Innovation, Universities and skills. However, one of the responsibilities of the secretary of state assisted by the Minister of State (schools) after 2012 is the provision of educational funding. Skills Funding Agency, (a partner organization of Business Innovation and Skills Department) is also responsible for funding and commissioning post-19 education and training promoting lifelong learning in England. (UNESCO, 2012 b, pp. 2-6.)

2.7 Technical and vocational education in Ghana

The vehicle of accelerated economic development is believed to be education in Ghana. This philosophical stand has been in existence since the era of colonial rule till date. The reflection of this is seen in the successive governments of the country using education to implement developmental policies and programs. (Boateng, 2012, p. 110a.) Traditionally, technical and vocational education in Ghana is organized through apprenticeship system. The long-standing political and policy concerns over the increasing level of unemployment led to the many attempts by various governments to make school-based education more "vocationalized". (Palmer, 2009, p. 277.)

Before the introduction of formal education in Ghana by the Europeans, traditional Africa education was the means for training the youth to fit well into the society. This form of education had no classroom, teachers and other equipment so; imitation was the mode of instruction. No one was expected to read or write in this system of education, but it was functional and purposeful. The needs and aspirations of the people at time were met by the system. Learning was on the spot or on the farm. The tools and equipment used during training were the same use when they had mastered to earn a living. There was logic and consistence in the kind of training they got and the kind of work they do after training. (Badu, 2011, p. 5-6.) Inventors at the time were the craftsmen; they were the designers and technocrats who produced objects needed for everyday life in the society. They were respected and hailed by the Ghanaian society, and there no line drawn between which groups of craft occupation was more intellectually active until the

introduction of formal education by the colonialist. (Essel, Agyarkoh, Sumaila & Yankson, 2014, p. 28.)

This history behind technical and vocational education and training in did not disappear even after formalizing it. This has resulted in the running of three different forms of technical and vocational education in Ghana: the formal TVET, the non-formal system and the informal TVET system. As the name implies, the formal TVET system is institutional based, time bound and formal certification, and also provide opportunity for educational advancement, and may take place in public or private institutional support. The program is made up of short courses and does not lead to any form of certification. The informal system of TVET system is the type that offers the highest percentage of training to the youth. It is flexible and offers a very wide range of skills to the youth. Training in this system is purely apprenticeship, and it can take place in the home or at a designated workshop outside the home. (Bortei-Doku, Doh & Andoh, 2011, p. 11.)

Bortei-Doku, Doh and Andoh (2001, p. 11) write that, thought all the three forms of TVET systems in Ghana are very important, this study focuses on the formal system. Technical and vocational education is organized at three levels of the educational lather in Ghana, the basic level, secondary level and tertiary level. TVET at the basic level aims at exposing pupils to a wide range of practical technical and vocational skills, so as to familiarize them to the skill and also to develop their interest in TVET subjects, as well as giving them equal opportunities to make a career choice in technical and vocational field or general subjects.

TVET at the secondary level is focused on equipping the youth with the needed productive skill training capable of making them satisfy Ghana's manpower needs in the field of technology, industry, commerce, agriculture and business. At the tertiary level, TVET is focused on priding personnel with the technical knowledge combined with technical skills which is in line with demands of skilled labour required for the agriculture, industrial, commercial, scientific, technological and economic development. (Boateng, 2012, p. 130b.)

Ghana like any other sub-Saharan Africa country, has made several attempts to make TVE an integral part of its educational and development process. This is evident in a number of policy documents including 1987 and 2007 educational reforms (Baffour-Awuah & Thompson, 2012, p. 12). According to Baffour-Awuah and Thompson, a study conducted by the Japanese International cooperation Agency (JICA) reviews that the system of TVET in Ghana is divided and cut across various ministries in the way that even the government does not have a clear picture of its direction. Attempts made by the government of Ghana (GoG) started from the establishment of National Vocational Training Institute (NVTI) in 1970 which was primarily tasked to coordinate all activities of vocational training nationwide. The failure of NVTI led to the establishment of National coordination committee on Technical and Vocational Education and Training (NACVET) in 1990 to also coordinate a national skills development system both formally and informally. According to the research, NVTI failed due to the diversion of its attention from its core duty of coordination to training provision, but NACVET's failure was largely as a result of lack of parliamentary backing for its activities. (Baffour-Awuah & Thompson, 2012, p. 20.)

To correct this, TVET in Ghana, TVET under the auspices of the COTVET, continues to undergo series of reforms, chief among some of the reforms include the introduction and institutionalization of competence based training (CBT). This is meant to introduce a credit-based industrial attachment also known as workplace experience learning so as to enhance skill acquisition among students of TVET. (Baffour-Awuah, 2010, p. 1.) It is creditable that Ghana has come to the realization of the importance of TVET to the attainment of industrial development, but it is worth mentioning that the contents of some of TVET at some of the levels are out of date and quality of teaching and learning keeps declining, (Ansah, & Kissi, 2013, p. 173).

2.8 Financing of TVET in Ghana

Technical and vocational education and training has taken over a huge proportion of public policies, not only for education but also for social and employment policies. The diverse nature of the role of TVET in our society today is beyond the boundaries of the educational sector, but needs the involvement of key stakeholders such as decision makers in the field of education and representatives of the labour market. The increasing demand for partnership leads to the consideration of the responsibilities of the actors

involved mainly, the state, employers and learners in the area of financing. (Atchoarena, 2009, p. 1029.)

In Atchoarena's submission, the available data base indicates that, the resolution of the issues concerning financing of TVET revolves around two major things: who pays for skill development and the mechanisms in place to finance skills development. The increasing number of secondary schools enrolment is as direct results of the expansion of primary schools and significantly impact on the investment in technical and vocational education. (Atchoarena, 2009, p. 1030.)

Judging on the bases of economic rational, then it could be concluded that those who benefit from the training should bear the cost it, but examples from many countries indicate that pre-employment skill training is paid for by the government whereas whiles partners finance continuing training and education. However, the inability of the available human resources to meet the demand for trained personnel in many countries these days has made employers being seen as a source of funding. (Dunbar, 2013, p. 26.)

Though Ghana started from a similar point with the republic of Korea in the early 1970s as far as skill development is concerned, Ghana is far behind. The lack of significant progress in education over the years can partly be connected with economic challenges; however, the major reason is the insufficient investment in education, linking the planning of the economy with skill development policies. While the republic of Korea spends 4% of GDP on education, Ghana spends less than 2% of it GDP on education. (EFA, 2012, p. 107.)

In Ghana urban schools make more intensive use of equipment than those in the rural communities due to their numbers and resourcefulness. It cost twenty times higher to provide some courses in the rural areas than in the urban areas yet, the quality is poorer due to the absence of the needed equipment and infrastructure. (EFA, 2012, p. 241.) Gaddah, Munro and Quetey (2015, p. 177) examined the distribution, coverage, utilization and benefits of public education funding in Ghana and came out with the finding that, the cost and the income levels of education at all levels is a prime determinant of the school's enrollment. The rich who are mostly in the urban areas are more advantaged to access quality education than the rural poor. In short, the suggestion is that, equity in quality schooling in Ghana is affected by the cost.

The Main Government Ministry responsible for policy and decision making in TVET sector is the Ministry of Education (MoE) and to some extent the Ministry of Agriculture. Employment and Social Welfare, the Ministry of Youth and Sports, the Ministry of Local government and Rural Development and the Ministry of Health and Environment in collaboration with Ghana Education Service (GES) are responsibility the implementation of pre-Tertiary education policies formulated by the Ministry. (Gondwe, & Walenkamp, 2015, p. 6.)

In 2011, the budget statement of the government of Ghana indicated the commitment to sustain growth for development and job creation, and it spelt out the need to improve skill acquisition for the youth with TVET as the foundation. According to the educational sector development plan (ESDP), 2003-2015 contained in the project appraisal report for skill development in 2012 by the African Development Fund (ADF), it was projected that, the number of student joining TVET stream will see an increment up to fifty percent if TVET provision is improved by the year 2016. (ADF, 2012, p. 1.)

This, from ADF (2012, p. 1.), is as a result of the high rate of completion at the basic school level. This policy is directed at increasing the number of the middle level skills produced in the country by the GoG. By this, the GoG has prioritized TVET as being one of the sectors for which it will borrow to support this cause.

The cost of TVET in Ghana is five times the cost of primary education, and three times the cost general secondary education (Filmer & Fox, 2014, p. 99). However, the total budget allocation to TVET by the ministry of education youth and sports stood at 1%, for a very long time and this was seen as woefully inadequate. So, a number of proposals were made in 2002 with the aim of finding adequate and sustainable source of funding for TVET. However, many of those suggestions were rejected by the Ghana government. Some of the key suggestions that were rejected included (i) increasing the annual budgetary allocation, (ii) using the Ghana education trust fund (GETfund) to finance TVET, (iii) the use of a percentage of the district assemblies' common fund to supplement TVET activities and (iv) levying industries to establish a skill development fund. (Darvas & Palmer, 2014, pp. 74-75.)

Darvas and Palmer (2014, p. 78) goes further to propose a more sustainable Ghana based SDF, agreeing with proponents who root for levying industries who benefit from TVET, but not until genuine efforts are made to improve on the quality and relevance.

Getting the private sector to support TVET might not only take financial form, but can also be in the form of advice on how to make TVET relevant. They however warned that, until the management and control of such levies is left under the management of representatives of enterprises, employers and employee associations, the industries will be unwilling to contribute to the fund. In other words government should stay away from such fund and make contributors feel involved in the scheme of affairs.

3 SCHOOL LEADERSHIP, MANAGEMENT EFFICIENCY AND PRACTICES

Many have attempted to define the term leadership in many different ways, this might probably be due to the fact that leadership itself has a natural bell that rings in the minds of every individual, and this may be contextual and situational. This probably makes it very difficult for anyone to stick his neck out and write a universal definition for the term leadership. Few topics in organizational live might have influenced such many-sided activities of leadership range, and the approach to studying it. The volume of academic and quasi-academic studies into the area of leadership has led to some authors and editors prefacing their new studies with apology yet, follow with another study. Any genuine debate on the future of education has leadership at its center. (West-Burnham, & Davies, 2003, p. 3.)

Northhouse, (2007, p. 2) describes definitions of leadership as being many as the number of people who have attempted to define it, seeing leadership as a terms of focus group process, personality perspective, act or behavior, power relation, transformational process and skill perspective. Additionally, Gallos, explains leadership as being a complex social process that root in the values, skills, knowledge and ways of reasoning of both leaders and followers. It involves change that is adaptive, and helps us to understand present reality and forge a brighter future from it. (Gallos, 2008, pp. 1-2.)

Seeking clarification as to how best in designing the role and responsibility of school leadership and other stakeholders as partners in the school management, it is significant to understand their impact on the school governance (Pont, Nusche & Mooreman, 2008, p. 92).

Gone are the days where the exchanges between leaders and followers were mainly focused on the use of followers as tools for the attainment of goals with their corresponding rewards. Gradually, there has been an evolution in the challenges of copping with changes, because the needs of organizations have changed and the theories of transactional and transformational leadership have emerged, building on situational theories, particularly, relationship-oriented leadership and path-goal leadership behavior that motivate performance. (Bertocci, 2009, p. 48.)

3.1 The paradigms of leadership

It became clear by the mid of 1970s seventy five years of research and application could show practically very little useful knowledge about leadership. In fact researchers and authors in general nearly gave up on leadership research until the emergence of new work by House and other scholars like James McGregor Burns. Burns in fact, is known to be the inspirer of what has come to be known as leadership paradigm. (Ching, 2003, p. 31.)

The word paradigm is quite complex in its meaning, as many have defined it in several different ways. O'Hara (1999, p. 36) define paradigm in three ways firstly, as a model of behavior, a clear demonstration of how to "do good science". Secondly, as exemplary problem solution and finally, paradigm has been taken to be a set of commitments, share by members of the scientific community globally. O'Hara sees it as ideological framework or belief system. A leadership paradigm is made up of a set of rules and standards in addition to accepted leadership examples, practices and norms, laws, theories, applications and work relationships in a team or corporation. This may shift from one paradigm to another as individuals' progress over time. (Fairholm, 2000, p. xvii.)

The trend of educational development in the new millennium demands a paradigm shift in leadership as the scope, the nature, function, the process and the expected context of leadership, with regards to the targeted school constituencies. The new era is broader and significantly departs from the traditional way of thinking. (Cheng, 2005, p. 326.) The emerging language that call for change in educational leadership is quite influential in recent times, the call for a more crystallized, perhaps a basal approach to learning, pedagogy, teaching and leadership. The language of 'reform' with focus on testing and

accountability is being supervened upon by one that emphasis more on student and the quality of their learning, teachers as leaders of curriculum and pedagogy, and principals as team leaders in learning. (Duignan, 2012, p. 23.)

3.2 Quality of teachers as leaders

Generally, it is understood that the cultural values of a country has a significant influence on instructional practices, management of the classroom and teachers in its educational system. This means that each culture has its own national teaching practice. The question therefore is, how worthy is it to borrow educational system from another country? In the same vein, the internationalization of information has necessitated the need to borrow ideas from other cultures cannot be overlooked. (Gopinathan & Kam, 2003, p.733.)

Quality of teacher and teaching improvement has become the "third wave" of educational reform, with years spent by policy makers in attempt to reform school by employing increased graduation requirements, tougher standards and high stake testing on students, but until changes in the classroom improve for teaching and learning, preparation of students for self-sufficiency in the 21st century will continue to be a dream. "If teachers do not know enough, students will not learn enough". (Kaplan & Owings, 2002, p. 1.)

Traditional school teaching placed a lot of emphases on mastery and a fixed body of knowledge in every subject which did not motivate students to develop deep understanding, though some students manage to do so irrespective of how they were taught. In broad terms, intellectual quality in teaching and assessment is the extents to which students are consciously engaged in require learning task, motivating and teaching the kind of thinking used by successful adult outside school. (Killen, 2005, p. 11.) In view of this, Stronge, Tucker and Hinderman (2004, pp. 7-8) explain that, effective teaching is a continual process and competence that allows changes to connect with each year to be adapted. The successful adaptation of these changes is hinged on the teachers' ability to navigate the complexities of the classroom, based on personal abilities and experiences which is a pre-requisite, and must be demonstrated before the teacher steps foot on the school soil. Kegan and Lahey (2014, pp. 11-13) partially disagree with Tucker and Hinderman (2004, p. 7) saying, competence is achieved not too much as a result of experience instead, as a result of teachers ability to reflect on experiences however, they agree with Kaplan and Owings (2012, p. 1) adding that, the assessment of competencies using checklist is not the way, the kind of training that will help teachers to internalize the standards, thus teachers using the standards to inform instruction thereby helping teachers to assess their own efficiency.

Effective teacher leadership is necessary in providing a good service to students and also to the teaching profession. In talking about a real educational context, one has to think about there is full of dynamism and evolves at a fast pace. The pressure for schools to improve themselves, raise the standard of education and significantly raise the achievement levels of students is increasing. With the increasing level of societal problems, teachers are put on the spot to find answers to the problems using their complex dual role of fostering a culture of learning amongst difficult students and the problem of dealing with administrative issues such as bossy heads of departments and principals whose main concern is success rates. This situation calls for teachers with strong leadership abilities to survive. (Toolsee, 2011, p. 2.) With this in mind, there should be the activation of the role of the teacher as a researcher, mentor, learner and ultimately as a teacher. By this, the teacher's identity as transformational leader should be incorporated and sanitized. The seriousness of teacher leadership lies in the need to create the conditions for the exercise of agency and recognizing teachers who may have different ways of dealing with the mainstream vision and mission. (Gunter, 2003, pp. 122-123.) The role of the teacher is to come out with several strategies that accommodate various levels of competencies which in includes academic achievement, attitude, personality and educational progress (Abu-Dabat & Alhaman, 2013, pp. 83-84).

In Ghana's quest to achieve its industrial development as contained in the plans of vision 2020, would not be realized if it fails to pay a particular attention to TVET. This requires a strong and reliable teacher leader to lead student through this. But at present, many TVET institutions are not up to the task in Ghana. There is therefore the need for industrial collaboration to provide a platform for seconding teaching staff for TVET institutions to improve teaching and learning. This will help meet the divers need of teachers, students and industry. (Ansah & Kissi, 2013, p. 173.)

3.2.1 The teacher leader as a counselor

Students normally turn to those they know and can trust when they have problems. With the school acting as the extension of homes to most students, teachers are mostly seen as the next parent of student to whom they seek guidance and counseling. Lai-Yeung (2013, p. 36) recounts that, the role of the teachers as leaders is not limited to only teaching in the classroom, but they are also entrusted with guiding and counseling their student as one of their major duties these days. These two terms in the field of education have different meanings: whereas guidance refers to kind of assistance required by students in developing their entire personality, counseling refers to the form of help which is directed at dealing with a particular challenge a student may exhibit. In other words, guidance is preventive activities whiles counseling is reactive. (Lai-Yeung, 2013, p. 36.)

For Opiro (2005, p. 4), guidance and counseling programmes should not be treated as a separate and a special activity, rather it should be view as an integral part of the instructional process if we students are to successfully make a real life application with the knowledge and the experiences acquired in schools. For this reason, Opiro suggests that teachers must consciously draw up a guidance and counseling to emphasis on students' needs at the various developmental stages which include: physical, psychological, socio-emotional and behavioral development. Again, the programme must be comprehensive enough to take care of the personal development and career or vocation development needs of the students. (Opiro, 2005, pp. 4-5.)

3.2.2 The teacher leader as a motivator

The instrumental music teacher whose musicianship and the knowledge drives him to come out with performance of good music and the one whose comprehension of students motivation promotes enthusiasm and participation among his students leading to a greater development of students' musical skills, are those that can be classified as most successful teacher. Motivating students is significant part of any educational leader because the relationships that exist between teachers and their students separate successful from unsuccessful teaching outcomes. (Tierney, 2006. p. 70.) Educational research has revealed that effective teachers are those who are capable of motivating their students and establish motivating learning environments. In addition to this, effective teachers are noted as being motivational in their approach to teaching. This involves

experiences with effective instructional practices, active engagement of students and teachers offering themselves as role models. (Wiseman & Hunt, 2008, p. 13.) To be able effectively motivate your student, the teacher must be good in his area of expertise, have a relative sense of humor, good judgment and be self-motivated. Not only these, he must also be broadly educated, hardworking, patient and persistent, be cooperative, caring, a role model and a team player. (Csikszentmihalyi, 2008, p. 16.)

3.3 Preparation of teachers for TVET

115,000 TVET teachers approximately made up the TVET teacher population in the United States, and they were prepared through two pathways. The use of traditional route that deals with use of the university and system (bachelor's and master's degrees) and secondly the provision of pedagogical training for TVET students from the industries, this is due to the demand of TVET teachers especially in the area of emerging technologies. (Zirkle & Martin, 2012, p. 10.)

In Finland, the teaching profession is one is highly appreciated and it is evident in the high number of people who apply for place in teacher training institutions, receiving about 6500 applications annually from young people, with only 800 people excelling in the entrance examination. The Finnish teacher education aims at a research based orientation towards practical teaching work, guiding student teachers to learn reflection as a way of thinking and as a tool for professional development. Supporting student teachers in discovering their personal strength and constructing their personal identity is one of the central aims of teacher preparation in Finland. (Toom & Husu, 2012, p. 45.) Again, the Finnish teacher education focuses strongly on pedagogical and content knowledge, prepare teachers to be able to diagnose student with learning difficulties and to plan the appropriate approach to assisting such students, and at least a year of clinical experience in school associated with the university intended to develop and model creative practices and to engage in research in teaching and learning. Teacher education is the reason Finland is known to be world's leader in literacy, math and science. (OECD, 2011, pp. 125-126.)

In recent times, the cry for change in education has reflected in Australia's "A class Act" which made it clear that: "If we are serious about enhancing the status of teachers we must ensure that new teachers are adequately prepared for the complex and demanding task ahead of them. High quality, appropriate pre-service training is essential." (Sachs, & Groundwater-Smith, 2006, pp. 196-197.) There have been some reforms in pre-service teacher education with regards to the length of the course and the management of practicum. The integrated program has seen the inclusion of internship becoming a part of the teacher training process. The aim is to recreate the professionalism in teaching through the public sector reforms connected with industrial relations. Then again, the reform is to introduce some examples of innovative practices that have evolved in response to a large political and educational policy plans bringing together all the stakeholders involved in teacher education. (Sachs & Groundwater-Smith, 2006, p. 197.)

3.4 Teacher support services

The continuous and the unending evolution of scientific knowledge and the speed with which it occurs today require that, students must learn far more than they can get from simply reading about science. They are required to *perform* and also be critical about their performances and evaluators what they learn and do. In recent times, the skill of knowledge delivery has shifted from the tradition teacher centered approach. Teachers are expected to use approaches in their lesson delivery that is unfamiliar to them. They are to be equipped with the science content and knowledge needed to guide and reshape the thinking and understanding of their students. (Loucks-Horsley & Stiles, 2001, p. 13.) The scope of teacher education in many countries in general is pivoted on two cardinal pillars: training and development. Teacher training aims at presenting to student teachers, the responsibilities of a teacher and it is often short term in nature though training may take a longer period. It prepares teachers to be inducted into the teaching profession. It primarily equips teachers with the understanding of the principles and practices in the field of teaching. Teacher development is a very important part of education since it focuses on specific duties of the teacher and supports a long-term growth and selfunderstanding as a teacher. It helps teachers to assess different dimension of themselves as teachers and form the bases of for reflective practices. (Richards & Farrell, 2005, pp. 3-4.)

Professional development is very useful for the growth and development of organization and school development. One of the important elements that enhance students learning is professional growth and staff development. The culture of training and development is different from one organization to another. In some schools and organizations, professional development of all staff is an integral part of the organizations day-to-day plans. Turning the school to a collaborative learning center for both the teachers and the students is the most effective way for professional growth. Such schools have a positive impact on students learning and the benefit is visible in the working lives of staff, classroom practices and impact on general school environment. (Bubb & Earley, 2007, pp. 13-18.) For this to be achieved, the teacher must be seen as a continuous learner. Being a leader, the teacher is expected to share leading edge instructional strategies, best practices in the classroom and also gain access to materials that support his practices. In every situation, the teacher must be seen as a master of world. They should be able to locate, articulate, model them and share with others both within and outside his working environment. (Tomal, Schilling, & Wilhite, 2014, p. 51.)

4 RESEARCH PROBLEM

One of the most important phases involved in any research is the identification of the research problem, though it could prove difficult. A research problem is precisely anything one find unsatisfactory and presents itself as a good reason for a research. It might the area of concern to the researcher, conditions that need improvement of difficulties that needs to be dealt away with. (Kumar, 2008, p. 20.)

Youth unemployment in Ghana has over the years been rising though Ghana has made several attempts in the past to arrest the situation. In all these, TVET has been identified as the means to overturn the situation. The numerous interventions made by the various governments to improve TVET have not yielded the required results, and this is mainly blamed on the negative attitude of the youth towards manual work, and the over emphasis on general education at the expense of TVET. (Badu, 2011, p. 7.)

Having been a student and a teacher of TVET, I was motivated to study the challenges of TVET from the grassroots with the school leadership being the focus. To do this, two questions were raised:

What are the challenges facing the school leadership in the implementation of the technical and vocational education curriculum?

To what extent do the challenges affect the implementation of the technical and vocational education?

5 RESEARCH DESIGN

Research process does not only involve information gathering, it also involves actively finding answers to unanswered questions or bringing to being, that which does not exist or hidden. It is seen as a process of expanding the boundaries of our ignorance. (Goddard & Melville, 2007, p. 1.) Kumar (2008, p.1) describes this process of moving beyond our boundaries of ignorance as being intensive and purposeful. Kumar describes the process as being scientific and systematic set of activities carried out to establish something, a fact, a theory, a principle or an application. (Kumar, 2008, p. 1.) This chapter is focused on the aims of the research, the research methodology, selection of participants, data collection and data analysis of this study.

5.1 Rational for the study

Constantly, innovative changes have demoed the unpredictability of the future, especially with regards to education, technology, skills and competence which are considered the backbone of economic, social and political mobility and development. Countries with high level of education are considered to be fertile ground for information based technology, (Okolocha, 2012, p. 1.) Agi (2013, p. 146) posits that, a country's economic competiveness is dependent on the skills its workers possess and the competencies of its workforce, which comes as a result of the training and education system the country has. In a way of reducing the rate of unemployment in Ghana, TVE was given prominence in the 1961 educational act, the Dzobo committee and educational reforms in 1972 and the Anfom committee and educational 1987. The 1987 educational reforms for example

placed a lot of emphasis on TVE even at the junior secondary school (JSS) Badu (2011, p. 4). Badu (2011, pp. 4-5) goes further to say that provision was made for tools and equipment in addition to construction of workshops for some schools. Teachers were also given training to handle the curriculum, yet much was not achieved. The 2007 educational reform stressed the importance of TVE as a means of reducing the high rate of unemployment among the youth. The reform aimed at offering a good option for the youth apart from the general education. Several measures were put in place including establishment of national council for TVET whose function is to guide policy making and the sensitization of the public on the need for TVET, improvement in physical structures and equipment and involvement of the private sector in improving TVET. Despite all these measures, TVET has failed to provide the intended option to the youth of Ghana with the same reasons cited for the rejection of education system inherited from the colonial masters (Badu, 2011, p. 6).

It is quite laudable having raised concerns as general public, employers and the "educational experts" however; the design of the curriculum was done without actually giving due attention to the voices of the school leadership who are the final implementers of the reforms. The study is therefore motivated by the need to hear from the school leadership, the challenges impeding the successful implementation of technical and vocational education curriculum in Ghana.

This study would be very important in Ghana especially to the Ministry of Education, Youth and Sports (MOEYS) and the Ghana Education Service (GES) because it will go beyond the general challenges which is almost always at the policy (government) level and look at the challenges from the grass root (school or implementation) level. It will also add up to the available stock of knowledge that relates to the challenges of TVET in Ghana. This study will therefore attempt to fill this gap between the views of the challenges of TVET at policy and the implementation levels. Finally, the study will serve as a point of reference for future studies on this subject.

5.2 Aim of the study and research questions

This study therefore aims at finding out the challenges in the implementation of the TVET curriculum in Ghana, from the perspective of school leadership, and to be able to describe the challenges in details at the school level

5.3 Research methodology

In an attempt to understand and to be able to comprehensively describe the challenges of TVET in Ghana from the school leadership point of view, the study espoused qualitative research method to explore the phenomena. This study tries to unearth the challenges of TVET and give a vivid description of the picture at the grassroots level hence the choice of qualitative research method.

The open ended nature of qualitative research has propelled a constant resistance against attempts to impose a single umbrella definition (Denzin, & Lincoln, 2011, p. 1). In their opinion, it is difficult to clearly define qualitative research since it come with no distinctive theory or paradigm, neither does it have any set or distinctive methodology or practices that stand entirely on its own, it makes use of semiotics, narrative, content, discourse, archive, and phonemic analysis, and it is applicable in a wide range of separate disciplines. (Denzin & Lincoln, 2011, p. 6.) Qualitative research method is described as a very broad church that embodies a wide range of techniques and methods found within different research fields of study notwithstanding the diversity and occasional conflict that underpins the assumptions about the inherent qualities that many writers have attempted to highlight the essence or the defining characteristics of qualitative research. (Richie, Lewis, Nichols & Ormston, 2014, p. 3.)

Qualitative research was adopted for the study on the bases of the description by Meriam that, qualitative research basically derives interest in *understanding the meaning people have constructed*, that is to say how people understand their world and the experiences they have in the world (Merriam, 2009. p. 13). In their interpretation, Edward and Skinner (2009, pp. 51-52) point out that, qualitative research receives data from the natural setting, where the researcher has the opportunity to observe, describe and interpret the phenomena with the researcher as only a tool for the collection of data.

According to Merriam (2009, p. 14) inferring from the philosophies of constructivism, phenomenology and symbolic interaction, qualitative research tend to place interest in the interpretation people give to their experiences, how their world could be built and attributed meaning to their encounters, and the researcher bear upon understanding the phenomenon of interest from the perspective of the participants. It allows the researcher to examine people's behavior or experiences in a much detailed way by employing techniques like in-depth interview, focus group discussions, observation, content analysis, visual methods, life histories or biographies and distinctively allows you to identify issues from the view of your study participants so as to understand the meanings and interpretations they give to behaviour, events or objects. (Hennink, Hutter & Bailey, 2011, p. 8). Qualitative data have been used for the past decade to explore and understand different social and public policy issues, either as independent research strategy or in combination with some form of statistical inquiry. (Richie & Spencer, 2002, p. 305.)

5.4 Case study

A large set of events, people, organizations or nations-states make use of extensive research to ground conclusions about phenomena. Again, a large scale surveying of people dominates extensive strategy in the collection of empirical data in sociology, political and educational science as well as many other disciplines. This might involve hundreds or even thousands of respondents, with each providing information in the form of answers to series of standardized questions which does not develop the phenomena within these respondents. They are aggregated over all respondents to create information about how they are frequently distributed and the relationship between the variables under study which eventually help in understanding and explaining the phenomena. (Swanborn, 2010, p. 2.) Alternatively, Swanborn (2010, pp. 2-3.) suggests the application of the intensive approach, where the focus of the researcher is placed on a specific instance of the phenomenon to be studied or only a handful of instances so as to give and in-depth study of the phenomena. With this, each instance is studied in its own context, collecting data from many sources such as, spokespeople, documents and behavioral observation. Variables in this instance might not be many; phenomenon is followed over time and by measuring variables repeatedly to describe and explain the history and the

changes during the period under study and the complex structure of the phenomena. Each instance or example is referred to as *'case'* and for this reason; intensive approach is called a 'case study'.

A case study is briefly explained as a research approach that permits investigators to holistically and meaningfully retain the characteristics of a real life event like individual life cycles, small group behaviours, organizational and managerial processes, neighborhood change, school performance, international relations and maturation of industries (Yin, 2014, p. 4). In his argument, Gerring defines a case study as studying of a single case or small sets of cases intensively, with the intention of generalizing across larger sets of cases of identical general type (Gerring, 2007, p. 65). The choice of various units of study is the determining factor for a case study (Flyvbjerg, 2011, p. 301). It attaches importance to multiplicity of views from the various stakeholders and participants, and pays attention to observation of occurrences in their natural setting and contextual interpretations (Simons, 2009, p. 4).

5.5 Data collection

Data collection marks the beginning of a journey in a quest to find answers to a research problem and the researcher needs to be fully aware of the various practices in the data collection journey. More often than not, the thought of qualitative data collection brings the focus on the actual types of data and the procedure for gathering them (Creswell, 2013, p. 145.) The procedure or the mode for the gathering the data refers to the channels used to establish contact with the study sample and obtaining their response to the survey questions, (Biemer, & Lyberg, 2003, p. 188). It means acquiring permission, conducting an appropriate qualitative sampling scheme, building up a means for recording information both digitally and on paper, storing the data and making provision for ethical issues that may crop up (Creswell, 2013, p. 145). This section explains the stage through the collection was passed.

5.5.1 Selecting data collection site

For the researcher to live the sense of the world of the research participants, qualitative research must take place in the real world of setting, where behaviors of concern is most

likely to be observed –natural setting-. (Hoyt & Bhati, 2007, p. 204). The appropriate scheme for data collection is influenced by the question(s) researcher seeks to find answers to (Merriam, 2002, p. 12).

For these reasons, my decision to select a site for data collection for this study was carefully thought, so as to locate a case that would be enough representation for this study. Ashanti Region of Ghana has 27 districts and Atwima Nwabiagya where this study was conducted forms one of the largest districts of the region. The district has a land area of 763.4 kilometers square, with a population of 149,025 (Ghana statistical service, 2012, p. 8). The district is located at the western part of Ashanti region and share boundaries to the west with, Aahafo Ano South and Atwima Mponua Districts, Ofinso Municipality to the north Amansie West and Bosomtwe-Atwima Kwanwoma district to the south, Kumasi metropolis and Kwabre districts to the East.

Atwima Nwabiagya is generally rural in nature, but due to its nearness to Kumasi metropolis (urban), Ofinso municipality (peri-urban) and Amasie West (deprived community). The inequality among Ghanaians schools become more evident when one tries to compare rural schools to those in the urban areas, the more rural the community is, the more deprived the school appears to be, judging from the physical infrastructure. So locating one district that combines the feature of urban, peri-urban and rural communities in Ghana for the study was the best case for research problem hence, the selection of Twima Nwabiagya district.

In line with this, three secondary and technical high schools were carefully selected for the study based on the fundamental characteristics (locations) of these schools. I represented these schools with alphabets A, B and C and these names do not represent the class the schools, however, it shows the order in which the data was collected in these schools.

School 'A' is fed mostly with student around the district with a few students coming from neighboring districts. The school runs both Day and Boarding facilities, with majority of the students and staff living in the district though very few of the students and staff commute from Kumasi on daily bases via school a school bus and public transport. In terms of infrastructure and staffing, the school is relatively better resourced compared to school 'C'. This school epitomizes semi-urban schools in Ghana hence its selection for this study.

Though school 'B' which is the largest among the three selected schools is not a complete representation of an urban school in Ghana, its nearness to the city of Kumasi, makes it exhibit several characteristics like the Ghanaian urban school. It has quite a high student population (over 1,700 students), relatively better physical infrastructure, and better transport system for students and staff. The school runs both day and Boarding facilities. Most of the students are drawn from the district and other parts of Ghana, but a very high number of the students commute to school from the city of Kumasi by school buses daily with majority of teacher and other staff members also commuting from Kumasi to school daily. Due to this the school culture is not too different from the schools in the cities, for these reasons, I selected school 'B' as part of my population.

School 'C' was selected because it is located in the remotest part of the district, and most of the students were drawn from the villages surrounding the school. It is the most deprived school among the three selected schools in terms of human resource and physical infrastructure. It runs both Day (students come to school from their homes daily) and Boarding (students live in the school) facilities with majority of the students being Day students, and this school is a typical representation of schools in Ghanaian deprived communities.

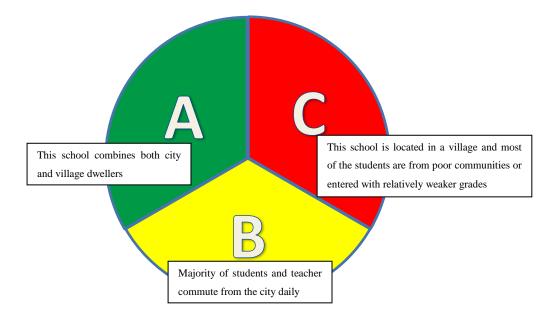


Figure 1A diagrammatic representation of the characteristics of the sampled schools

According to Patton (2002, p. 244), the sample size of qualitative research does not have any specific rule, the size is determined based on what the researcher want to know, the purpose of the inquiry, what will be useful, what will make it credible, what is at stake, the time and the resources available.

5.5.2 Data collection method

The idea of research is never conceived without the thought of data collection, and not just any data, but the one that help social researchers to answer research questions and help them to achieve research objectives (Pawar, 2004, p. 3.) In conducting case study, it could be demanding activity as a result of the non-routinized nature and the constant changes, due to the continuous interaction between theories and collected data, and there should be flexibility on the part of the researcher so as to eliminate biases and ensure proper integration of findings into theory development. (Schaffer & Waldeck, 2007, p.76.) The main advantage in designing case study is the varying range of data collection methods and its flexibility (Fitzgenrald & Dopson, 2009, p. 477).

Qualitative data refers to the kind of descriptive data normally collected using interview and observation; they are recorded usually using audio or video recordings and transcribed (Kellett, 2005, p. 99). In considering possible data collection method in a case study, Fitzgenrald and Dopson (2009, p. 478) listed some of the already established methods which include: interviews, critical incident technique, surveys and focus group This study adopted focus group as the right method to obtain its data.

5.5.3 Focus group as a method of data collection

One of the basic tools used in qualitative research studies is interview. Findings of many researchers is grounded on data collected through interviews, again, interviews are used by others as an additional method of giving other dimensions to in their study to increase reliance and validity. (Kellett, 2005, p. 69.) Interview is useful in divers ways when the interviewer adopts different questioning styles based on the purpose of a specific investigation, and it is possible to understand other people's feelings about specific issues and to find out more about their perceptions of others and how they interpreted such issues if interview is skillfully used (Kellett, 2005, p. 63.)

Since questioning which is the main tool used during interview and can exist in many forms to elicit different responses, Kellett (2005, p. 63) outlined four forms of interview namely, structured, semi-structured, unstructured and group interviews. Structured interview is adopted when the researcher intends to gain a detailed insight as to the respondents' beliefs or perceptions and account of a particular topic, (Smith, 1995, p. 9). Semi-structured interview is similar to that of structured interview, but provide a more flexibility to both the respondents and the researcher than the conventional structured interview (Smith, 1995, p. 67).

Unstructured interview on the other hand is open ended in nature and it is designed to elicit descriptive response from participants and to offer the researcher the opportunity to understand impressions at a more complex level without the imposition of categories on respondents by the researcher (Smith, 1995, p. 9). Undoubtedly, one-to-one interview comes with some advantages, but using group interview has the potential of opening up opportunities to obtain opinions or attitudes that at a different level, with the ability to reveal the social and cultural context on how the people understand things as well as their beliefs. (King, & Harrocks, 2010, p. 62.)

Many people are aware of their feelings but it is sometimes difficult to express how they may be feeling, but listening to the opinions of others in a group helps them in organizing their thoughts and opinions. Focus group traces back to Emory Bagardus in the 1926 describing group interviews in his social psychological research to unearth social distance scale, but over the past century, many purposes have employed the usage of focus group methodology, particularly the US Army. (Liampittong, 2011, p. 2.) The blanket use of focus group on nearly all the major US networks following the presidential and the vice presidential debates of 2008, focus group have grown to be a part of collective awareness of the qualitative research community, there were at times referred to as "polls" or "town hall meetings", it they were exhibition of functions of focus group at the large-scale as was understood by majority of the people. (Kamberelis & Dimitriadis, 2013, p. 1.)

Marxist revolutionaries, literacy activists and feminist activists have adopted focus group methodology as a medium champion their causes, but in all these, the methodology was academically developed as a research method and became more synonymous with market research in the 1950s. (Liamputtong, 2011, p. 2.) Additionally, Patton (2002, p.

385), explains that, the development of focus group interview was in recognition of the fact that a lot of consumer decision are made based on social context, usually emanation from discussion with other people, this is to say, market researchers used focus group interview in the 1950s as a means of stimulation the consumer group process to gain more concrete information about preferences of consumers in terms of products.

However, focus group methodology has been gaining popularity again in recent times among academic researchers in the health and social sciences. (Liamputtong, 2011, p. 2.) Focus group is broadly explained as "collective conversation or group interview, it may be large or small, directed or non-directed". (Kamberelis, & Dimitriadis, 2005, p. 887). For Patton (2002, p. 385), focus group is usually small in size, between six and ten people and the members forming the group should have similar backgrounds. Leonard (2011, p. 148) also writes that, the number making a focus group could even be between three and ten, he however pointed out that, the group should be carefully selected from a wide range of people.

The Rational for the range of group size according to (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009, p. 3), is dependent on the goal that, there should be enough participant to enhance diversity for reach information, but at the same time, too large group size could be impediment to the comfort of participant to freely express their opinion, thoughts, beliefs and experiences. Focus group flings a process which is group based interview, and it is also useful for finding out new information and or solidifying old information through multiple view with respect to participants believe, attitudes, responses or motivation on the same topic. (Fitzgenrald & Dopson, 2009, p. 481.)

In trying to understand the challenges of TVET in Ghana form the perspective of the school leadership, it was natural that the right responses could not be obtained from every school leader, therefore there was the need to identify the group of people who were believed to be in the position to provide the relevant answers to the research question hence, the choice of focus group as the data collection method. Focus group as a data collection method was adopted for the study due to several advantages that comes with it. Focus group is cost effective, that is to say, a very large amount of information could be gathered from relatively large number of participant in relatively a short time. It is able to simulate a naturally occurring conversation and social interaction, taking the researcher out of the center of proceedings, (Patton, 2002, p. 386: Kamberelis & Dimitriadis, 2005, p. 903.)

Focus group produces the kind of data that are rarely produced by individual interviews as a result of the cooperative potentials it has. This results in much clearer and interpretative insights especially the collaborative dynamism within homogenous focus group usually reveals unarticulated norm and normative assumptions, and presenting the researcher with unique opportunity to be a part of social interaction that lives particular memories, ideologies, positions, practices and desires among specific group of people. (Kamberelis & Dimitriadis, 2005, pp. 903-904.)

Quality of the data is enhances since participants tend to provide checks and balances to each other which help to flush out falsehood and extremism, and unearth relatively consistent and shared view as well as identify divergent views quickly (Patton, 2002, p. 386). It may be better to explore complex or sensitive phenomena easily with focus compared with other forms of data collection methods (Fitzgerald & Dopson, 2009, p. 479). Being in a group for interview can encourage recall of good materials and excite opinion refinement, and the very nature of being a part of a group can cause participant to re-evaluate their opinions or their existing positions. (King & Harrocks, 2010, p. 62.)

In spite of the numerous advantages associated with the use of focus group as a data collection strategy, it also comes with equally high number of demerits. A number of negatives in connection with the use of focus group which includes the following; the attempt to hear from every participants to a large extent limit the amount of time participants have to express themselves. Depending on the membership of the group, it may limit the number questions that can be asked during the interview. Facilitating and coordinating focus group demands that the coordinator is highly skilled since those who are highly vocal could dominate the proceedings if the moderator is unable to control the group. (Patton, 2002, pp. 386-387.)

Again participants who think their views are on the minority may be intimidated by others and may decline to speak up. Furthermore, focus group work best when participants do not only share though similar backgrounds, but also when they are strangers to each other, this is because group dynamics become more complex when participant share prior relationship. In focus group interview confidentiality, guaranteeing confidentiality is almost impossible. Thought it is easy identifying main themes with focus group, analyzing micro themes is very difficult. (Patton, 2002, pp. 386-387.)

5.5.4 Participants for the study

A very important stage in moving from the total design of a case study specification and implementation of data collection strategy is a careful reflection of the criteria for selecting the participants to ensure a comprehensive a representative picture (Fitzgerald & Dopson, 2009, pp. 477-478).

Eighteen participants were purposefully selected for the study; with six participants drown from each school. These participants were of different ages, different teaching experiences in terms of years taught and different gender. The participants were made up of school headmasters, assistant headmasters, and heads of technical and vocational education departments and teachers of TVET. The variation in experience and age was to bring some diversity, believing that their attachment to TVET and their varying experiences and commonalities would enhance the richness of the data. This was highlighted by Polit and Beck (2014, p. 285) that, focus group participant should share commonalities with regards to their experience, characteristic and or demographics that fit into the aim of the study to a very large extent with the reason that, the degree to which a focus group participants are homogeneous or heterogeneous has a direct effect on the quality of interaction during the interview. (King, & Harrocks, 2010, p. 66: Patton, 2002, p. 358.) Furthermore, the use of multiple focus groups is helpful in terms of assessing the data saturation has been achieved by the researcher. Data saturation is said to have been achieved when information during data collection repeatedly occurs, such that the researcher can always anticipate it, and also the data collected does not add any new information that is worth interpreting (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009, p. 4.)

Being conscious of the wide power distance in Ghanaian context, I decided to put the headmasters into one group and the heads of departments and their teachers into another group. This means that each group of six per school was sub-divided in two. This was done to ensure that participants could freely as possible to express themselves during the interview.

5.5.5 Collecting the data

Probably, the most widely used data collection instrument in qualitative research is the interview and focus group. It provides a depth and breadth depth of information if it is effectively used. (Given, 2008, p. 254.) Conducting the focus group discussion is the pivotal activity in the use of focus group as a research instrument since it is the generator of the needed data therefore, this stage become more crucial (Hennink, 2014, p. 69). With focus group also being interview, there was the need to study the appropriate form of interview that could elicit the best responses from the groups. Patton (2002, p. 342) describes three fundamental approaches to the design of qualitative data collection using the open ended interview: the informal conversation interview which hinges on the selfgenerated question in the natural flow of interaction, with participants usually not even realizing. The *interview guide* according to Patton entails highlighting of issues to be explored with each respondent before the start of the interview. Also, it serves as a checklist in the cause of the interview ensuring that some topics are not skipped. Finally, the standardized open-ended interview is made up of a carefully worded set of questions with the intention getting responses to the same set of questions from all respondents. I carefully engaged the three approaches above since it allowed in a study of this nature, though the informal approach was very minimal. Combining the various approaches are contrasting, but a conversational approach is usable within an interview guide or the guide approach can be combined with standardized method, and this can be done by specifying some key questions to all the respondents whiles reserving some of them to the discretion of the interviewer. This combined approach is relatively flexible as far probing the responses of the respondents is concerned. In this case, the interviewer determines the right time to explore other subjects in-depth. (Patton, 2002, p. 342-347.)

Preparation and planning for the data collection was one of the crucial times during the study since the success of the study largely depended on the quality of the data I receive from the field. For this reason, I divided the process of collecting the data into three sections: pre-interview, during interview and post interview sections.

5.5.6 Pre-interview

Before I went to the field for the interview, issues concerning problem definition, the quality of my interview questions, accessibility to the data collection site and possibility

of interruption were raised. Making reference to Tench and Yeoman (2009, p. 206), I clearly defined the research problem and then generated a number of questions aimed at soliciting the right responses. A number of corrections were made after going through the questions which was vetted by my supervisor. I later developed questions guideline for myself. This was to ensure that I did not skip nor forget any of the major questions. According to Evans (2007, p. 188) a qualitative research interview is not based on formal set of questions instead; the researcher can develop an interview guide which is a list of topics that the researcher makes the attempt to cover during the interview. Developing the interview guide alone was not good enough, the delivery of the questions, clarifications and probing the responses by the moderator played a very important role. As the moderator, I was required to facilitate discussions, prompting participants to speak, controlling the discussions such that, the dominating speakers give others the opportunity to speak. I encouraged active participation by all members and took notes that lead to probing the responses (Onwuegbuzie, Dickinson, Leech, & Zoran, 2009, p. 4). This required that I was highly skilled as a moderator. It was therefore important for the questions to be tested through piloting (Hennink, 2014, p. 69).

With the above in mind, I contacted five teachers of TVET at the basic school level in Ghana whom I had worked with before, and arranged with them so I could pilot-test my questions and my skills as moderator via Skype. I also arranged with two friends in Helsinki who were once teachers of TVET for the same reason. I successfully pilot-tested with the firs group in Helsinki, however there was a little problem with the interview in Ghana due the problem of internet connection. Two of the participant during the interview kept going offline so they could not fully and actively participate in the discussions. Reflecting on both pilot interviews, I identified my short comings and needed to patch them before the real interview on the field. I obtained my recorder, tested and retested to make sure I was in total control as far as the use of the gadget was concerned.

Having prepared for the field work behind the scenes, there was the need to make efforts to gain access to the data collection site. In other words, gaining access to the "gate keepers" was a very important step to take. Gate keeper, refers the people or persons who are in the position to possibly allow or deny a researcher entry to the research field for data collection. (Jennings, 2005, p. 107.) There is not too much

literature to assist researchers in their quest to get access to data in organizations. In most cases, the researcher has to count on his experiences and that of other researchers (Jex, 2002, p. 37.) This might be due to cultural and contextual nature of our social certain, but Jex (2002, p. 37) posits that, organizations would not want to allow researchers access to collect data because data collection is normally time consuming and may also touch on sensitive areas, it is significant therefore for researchers to first build trust or establish contact through people who are trusted by the organization.

Gaining access to school B was not a problem at all since I had been in this school both as a student and as a teacher so I called one of the heads of department and told him my intension of collecting data in the school. He then linked me to the headmaster whom I had never met personally before. The headmaster, hearing that I was a former student in his school, was interested in my research topic and volunteered to help me get access to the heads of school A and C which he did. Having the verbal acceptance of the data collection site, I had to make a move to formalize the permission. I then applied for an introductory and a research permit request letters from my institute. These letters formally introduced me as a student of the institute and also highlighted my research intent. Knowing that Ghanaian schools take a break in December, I personally sent the letter of introduction and the research permit to the district Director of education on the 6th of November, 2014. I went back two days later to ascertain as to whether the permission had been granted or not.

On my arrival, I was told by an officer at the directorate that I did not need Director's permission to undertake a research of this nature instead in a secondary school. I therefore had to send the research request letters to the headmasters of the schools directly since heads of second cycle institutions are semi-autonomous in this regard and could grant permission to research requests of this nature. The same officer also broke the news to me that one of the schools I had selected for the study (school 'C') was no longer under the Atwima Nwabiagya district rather, the Amansie West District after the redemarcation of districts in Ghana. However, I could still use the school since I only needed the permission of the Headmaster. On the same day, I sent the research request letters to school A and B (8th November, 2014), and school C the following day. This was made possible with the assistance of the headmaster of school B.

In each of these schools, the permission was granted the same day, and there was the need for me to make appointment on the date the interview itself could commence as explained by Greener (2011, p. 87). However, agreeing on interview dates was a bit of a challenge since teachers were busily preparing for end of term examination, again, the heads of departments had to seek the consent the relevant teachers before we could arrange the interview dates, and this took a while in all schools. The situation was not different with the headmasters, if not worse. In two of the schools, the interview was held on different dates for both groups since it was practically impossible for the groups which made of the headmaster and his assistants to arrange the same dates with the teacher's group due to different schedules. Nonetheless, we succeeded in agreeing on suitable dates for participants.

5.5.7 During the interview

The first interview took place on the 18th of November, 2013, and to get the participants to willingly and fully cooperate with me, I needed to briefly but vividly introduce myself. Since qualitative interview is pivoted on personal interaction, the researcher identity, and how participants see him or her to be, has influence on the information which is likely to be received during the interview. Due to this, the researcher may present himself as culturally outsider or an insider to build a report. (Brenner, 2006, p. 386.) At this point, Brenner further explains that, the power distance between the researcher and the participants must be bridged. Though I was in the same rank as most of the participant (as teacher in the GES), people who get the opportunity to school in the Western World and the Americas in my opinion are put slightly in a high class in Ghanaian context, I therefore had to make them understand that we are still the same. I treated them with high level of respect, and sufficiently briefed them on the purpose of the interview. In a friendly atmosphere, I had to answer all the questions that were bordering participants before the commencement of the interview as stated by (Greener, 2011, p. 87).

One of the things I believed the participants were not fully aware before the commencement of the interview was the fact that their contributions would be recorded though I had informed the HOD who assisted me in assembling the participant. I noticed this when I began arranging my recording devices. So, I quickly had to explain to them again why I had to record and re-assured them of maximum confidentiality, siting the

reason by Brenner, (2006, p. 365) that, tape recording the interview would assist me to focus on the conversation with the participant and to be able to carry out a more vivid transcription of their actual words.

For King and Harrocks (2010, p. 69) the uncertainties that characterize group interaction influences the contributions of the participants individually, and the tendency of developing group norm by conforming, could affect some initial feelings of some participants which could render the data invalid. This also explains why participant were made clear enough about the purpose of the research, and the worth of their sincere and active contributions. Most of their questions were also, the expression of concerns that had to do with what they stood to gain from the research and issues of confidentiality.

Two recorders were used, one was meant to record the entire duration of our interaction without pausing, and the other was used with pauses in between contributions, thus pausing when conversations that were not relevant to the interaction at the time, for instance when a participant had to answer a telephone call. This was my own initiative and it was done to be able to capture the entire atmosphere during the interview and also to get the very specific answers to the question by participants. Besides recording the interaction, I also took notes of some of the contributions during and after the main interview session, as some positive contributions were not raised at all during the interview but were captured during the post-interview interaction. Again, emotions and body languages use during the interview could not have been captured by my recorders, and in this sense, note taking was very useful.

There were two interviews conducted in School 'A' the same day with the morning session being the headmaster and his assistants and it was conducted in the morning. The second part of the interview which was conducted in the afternoon had the participants being the HOD the teachers. Before the second session, teachers appeared a bit tired since they had all returned from classes. For this reason, we began the interaction with refreshment which I had made provision for in advance. There was a very cordial pre-interview interaction during the refreshment; this aided a very smooth take of the interview itself. I realized at the beginning of the interview with the teachers in school 'A', participants appeared to be too formal, as teachers did not want to put across issues when one was on the floor. I urged them to feel free to put across ideas whenever there was the need to so and also ask for clarification from others if necessary, the conversation

at this point became normalized and very natural. Again I could visibly observe the expression of sentiment from the passion with which they spoke and in their body languages.

The interview lasted for one hour as agreed in pre-discussion. However, I traveled back home with some of the participant and even other teachers at the department who were not officially sampled for the interview. Our conversation during the journey revealed some other wonderful contributions. Though it was informal, I was very interested in the new contribution so I noted the new revelations. Back home after the interview, I played the tape over and over again critically; I noted some floors in some of my moderation and questioning techniques upon reflection on my own skill. The idea was to make all the necessary adjustments to enhance the next interview.

The second interview (school 'B') took place on the 28th November and 4th of December, 2013. This interview was an improved one, compared to the first one in terms of pre-interview briefing, ground rules and questioning. The procedure was not too different from the first one; the only difference was that, the interview took place outside the school compound, the HODs residence to be specific, though it was no too far from the school compound. The first group to interview was the headmaster and his assistants followed by the HOD and teachers being the second respectively.

Like the interview in school 'B', school 'C' was a bit surrounded with some difficulty since the place was relatively far from me and the agreed date kept changing. I visited there many times for this reason, but finally, we succeeded in agreeing on the 9th and 13th of December, 2014 with the HOD and the teachers' group being the first. During the interview with the two groups in school 'C', it was so clear that data saturation had been reached since almost all their contribution at this point were re-echoing of what, had be said by the four previous groups. Data is said to have reached saturation when no new or relevant information comes forth as far as the newly constructed theory is concerned, and to the researcher, the continuous repetition of theses information is no longer useful. (Given, 2008, p. 195.)

5.5.8 Post data collection

Following the completion of the interview, there was the need to part ways with the participants, but this was not without ensuring that participants were appropriately

conditioned so as to smoothly reintegrate them back to their normal duties. In doing this, I ensure that the right steps were followed.

After each of the interview, there was the need to debrief participants. The use of the terminology *debriefing* is quite complex in many ways in terms of its application and its usefulness. Debriefings were originally a military oriented term, which was developed for emergency workers, and it was normally applied by disaster relief workers like fire fighters, ambulance services and emergency medical technicians and was adopted and used by the law enforcement agencies; also became useful for survivors of direct trauma. (Miller, 2006, p. 529.) Debriefing has however moved far beyond the context for which it was developed and now applicable to almost any life experience even the positive ones, it is useful in stressful experiences of life, maybe in support of the view that our society is stressful and traumatized one. (Raphael & Wilson, 2000, p. 2.)

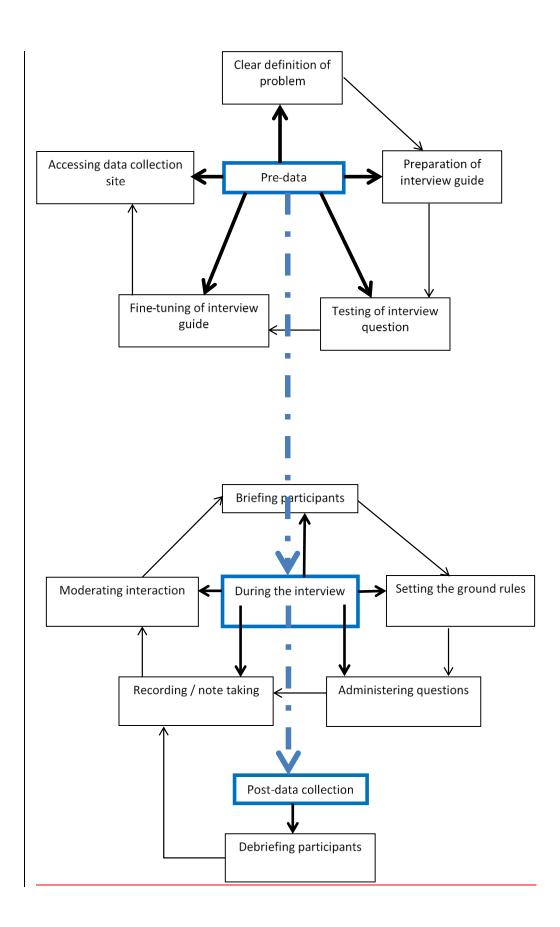
One of the reasons why I found debriefing my participants useful was the fact that, I could sense to extent that some participants were uncomfortable when they realized they were going to be tape recorded which even caused the withdrawal of some participant at the initial staged of the interview for political reason. According to Given (2008, p. 200), and Jackson, (2011, p. 49), if a researcher detect uncomfortable feeling or thoughts from the participants during the interview, it is helpful to conduct debriefing at the end of the interview to dispel their bad feelings or reposition the participant at their states of mind before the interview. This was done through the use of series of questions I posed to the participants to find out what their feeling and their impressions were on the entire exercise. Their responses at this time was very important for me sine it gave me a lot of reasons to reflect on how to conduct such an exercise next time, at the same time participants who were troubled due to the fear of victimization as a result of their contributions were reassured of anonymity of their both their own identity as well as that of their schools. This was done with the hope of putting rest any form of anxiety that might have caught up with any of the participants and also fulfill ethical requirement during the study.

5.6 Challenges during the data collection

Though the journey of the data collection appears smooth on the surface, it was not without challenges. Putting on records some of the challenges faced during the data collection process for the purposes of reflection and guidance for future studies. The major challenges I encountered during the data collection include self-learning as a first time moderator of focus group.

Moderating a focus group for the first time demanded a lot of skills from the moderator, due to this, it took me a lot of time reading about it and also watching video. Secondly, most of my participants were familiar with answering of questionnaires during studies like this, so getting to know their voices were going to recorded coupled with the fact that participants hear leaked voices on radio in Ghana nowadays, most participants in the beginning were unwilling to take part, some even pulled out though they had earlier agreed to be sampled. Though I wanted to record, there were some information the school heads agreed to let out only if I would take notes and not tape recording them.

Furthermore, since all the teachers in the school had to be conveyed to places in the same school bus, fixing a time for the interview after school was very difficult since other teachers who are not part of the interview could not wait for my participants. One of the schools which were very far from my town of residence kept changing their dates for the interview so I had to travel there several times to get them convinced and this came at a huge cost to me. Politically, one of the schools had been move to a different district, which was not the case at the time of sampling the districts however this issue was resolve with assistance of one of the school heads so accessing that school became easier than I anticipated. The diagram below illustrates the various stages followed in the data collection process.



5.7 Data analysis

Despite the existence of information on how and why to use qualitative research methodology, information on the "nuts and bolts" are relatively less, as to what to do with the data after it has been collected as many researchers feel deluged by the huge volumes of transcribed data from focus group and get confused as to how to reduce or summarize the data, (Vaughn, Schumm & Sinagub, 1996, p. 98). Data analysis presents itself as the most difficult and the complex stage in qualitative research process if a researcher is to bring into existence, findings that have the ability to transform raw data into a new knowledge. (Evans, 2007, p. 175.) This section explain what is meant by data analysis, the analysis types, and the description of the step by step processes involved in the analysis of the data gathered in this study.

Unlike quantitative data, qualitative data analysis present the kind of information which is not standardized in terms of format, as in the form of questionnaire, interview plan, or in statistical table, but it come in the form of audio tape, notes, diaries, documents, newspapers, visual image or combination of various forms. (Payne, 1999, p. 140.) Qualitative data analysis is rooted on quality as the name implies, and not on the numbers or the quantities (Witte, Meyer & Martell, 2001, p. 110). In qualitative research, researchers have a challenging task of reducing what may appear to be overwhelming amount of data received during in-depth interview, observation and written documentation, with the reliance on complex computer programs by some researchers, others are more traditional oriented, relying on the traditional manual techniques, (Adams, Khan, Raeside & White, 2007, p. 155.) Data analysis may be explained as the "categorization, the aggregation into constituent parts and the manipulation of data to obtain answers to research question or questions underlying the research project" (Smith, & Albaum, 2006, p. 195). Defining data analysis, Clamp, Gough & Land, (2004, p. 224), posits that data analysis makes use of one or more methods to activate right data for the purpose finding trends, differences or similarities. This may be achieved by the use of either the deceptive or the inductive approaches. Creswell, (2013, p. 180), posits that, data analysis in qualitative research is concerned with the preparation and the organization of data for analysis and also the transformation of data in to themes using the process of coding and subsequently condensing the codes and finally tabulating the data with figures

or discussion. Commencing the analysis of a qualitative research project using existing theories to shape the study is said to be the deductive analytic approach, but when the researcher intends to generate theory which is adequately driven by the collected data, then the approach is inductive (Saunders, Lewis & Thornhill, 2009, p. 489.)

Mostly when a study is theory driven they tend to be more structured, and for this reason, it is considered more reliable. On the other hand, a study that is data-driven is seen as being more valid due to the fact that, it is more flexible and open to discovery of themes and idea not previously considered. This leads to the emergence of theories that are "grounded" in the data. (Namey, Guest, Thairu, & Johnson, 2008, 139.) It comes with the kind of understanding that emerges from starting with specific elements

and finding connections among them. Normally, it begins from denying a particular piece of evidence and then bonds them together to form a whole (Hatch, 2002, p. 161.)

Gavin (2008, p. 273-286) confirms the wide usage of the analytic approach in the field of psychology and usual usage of this method is to explore focus group in an open way through the identification and the examination of patterns in the data. In considering the varied forms of available methods of analysis, a line is often drawn between approaches that are strongly focused on language, and those that are concerned with the content of what participants give account of. Those that are language focused are generally found within the social constructionist tradition which includes discourse and narrative analysis (King & Harrocks, p. 142.) For King and Harocks, this tradition examines how certain ends are achieved in social interaction or the creation of story that is meaningful considering some aspect of the life of the teller using the language. Those who are content minded are from either the conceptualist or realist philosophical positions, these includes, phenomenological approaches, grounded theory and or qualitative or mixed method case study. Their goal is to understand experiences participants have lived through from their own perspectives (King & Harocks, p. 142.) The analysis of this this study was mostly driven by the data obtained from the field and the focus of this section will be on thematic approach which was used in analyzing this qualitative study.

5.7.1 Thematic analysis

The demarcation of thematic analysis is the field of research is quite poor and rarely recognized yet; it is the most use qualitative analytic method within the field of psychology and should be viewed to be the foundational method for analyzing qualitative study, due to the fact that all analytic method make use of thematic principles and there is now a clear and comprehensive accounts on how to undertake a high quality thematic analysis (Braun & Clarke, 2006, P. 2.) Gavin, (2008, p. 286) and Braun & Clarke, (2006, P. 6) defines thematic analysis as the process of drawing themes that describes a particular aspect of the world from data.

In the opinion of Mcleod (2011, p. 145) any qualitative method that aims at discovering patterns of meaning from the account of participants' experiences are somehow involved in *themes* analysis. Thematic approach identifies, analyses, and report patterns found within the data, in rich details, it organized and describe the collected data (Braun & Clarke, 2006, P. 6). Again, thematic analysis can be used as a stand-alone method that satisfied to a large extent the demands of grounded theory and other methods of analyzing transcripts of interview, but with little reliance on existing theories (Mcleod, 2011, p. 146).

One important thing to understand is that, thematic analysis is not restricted to a particular theoretical paradigm in qualitative research unlike some other analytic methods; therefore, the researcher who select thematic analysis has the flexibility to decide on what exactly the meaning of the themes selects means (Carla, 2013, p. 58.) For some researcher, the identification of themes and the ability to show the relationship between them is the primary focus of qualitative inquiry. Readily, the concept of themes is understood by research readers, and they link closely the reporting of interview data in terms of themes to the experiences of participants, (Mcleod, 2011, p. 145.) In other words, the central focus of thematic analyses is to make meaning out of the transcribed data, and this requires the researcher to interpret the experience of the participants, (Joffe & Yardley, 2004, p. 64).

Thematic analysis could be described as a poorly branded method of analysis, this is because it is widely used, but its acceptance as a distinctive analytic method is not clear and also the step by step procedure used in this method is not defined. This means the researcher has the flexibility of going about it his own way. For this reason, it is not explicitly termed as a method of analysis like others, though it is argued that all methods in reality are thematic in nature. (Braun & Clarke, 2006, pp. 6-7.)

Thematic analysis has several advantages over the other forms of analysis. Pope, Mays and Popay (2007, p. 97) explain some of the advantages that come with the use of thematic analysis as being able to provide the means of organizing and summarizing the findings from a large and varying bodies of research. It also has the ability of analyzing quantitative findings since it is in large extent, a narrative approach. This makes it suitable for almost all circumstances (Pope, Mays & Popay, 2007, p. 97.) More often than not, thematic analysis encompasses other analytic traditions in a way that, their insights inform and enrich each other in forging a qualitative account of the context, (Hunter, Emerald & Martin, 2013, 117).

Despite the numerous advantages thematic presents itself with, many writers criticize it in a number of ways. Carla (2013, p. 61) drops a line that, thematic analysis imposes structure and content on people thinking through the use of interview schedule. Again, determining the size of the sample is a lot more difficult with thematic analysis. If comparing the views of two different groups is the issue the research question seeks to address, then clearly the size of the group need to be large enough to ensure that the differences identified in the analysis is a reflection of the group and not individuals (Carla, 2013, p. 61.)

5.7.2 Using thematic analysis in this study

Data collection process, data analysis and data reporting are not separate steps in the research process, but they are interrelated and usually carried out concurrently during a research project (Creswell, 2013, p. 182). Adding his voice to this, Patton (2002, p. 436) emphasized that, data collection is based on survey, standardized tests, and experimental design. A clear line between data collection and data analysis is obvious, but with the fluidity in naturalistic inquiry, the distinction between the data collection and data analysis processes is very thin. Making a specific reference to focus group analysis, Rabiee, (2004, p. 657) writes that data collection in focus group is not dissociated from its analysis. In other words, analyzing focus group starts at the same time with the data collection.

In line with the above, this study which had one research question initially, I generated one more question, which sought to dive deeper into the experiences of the participants' views. This was because, listening to the first interview over and over again, I realized that though respondents were answering the research question, their responses were not deep enough hence, the need to have the second research question beginning with "to what extent". Subsequent interviews saw deeper expressions from participant's experience s enriching the quality of the data. Again, the introduction of the second research question elicited responses which made it clear on the differences and agreements on the same issue. At this point it was becoming clearer the patterns that were emerging from the responses, making it easier to gather the initial finding. Having done this, I was also conscious of the fact that, paying too much attention to analysis whiles the fieldwork is in process has the potential of interfering with the openness of naturalistic based inquiry. So rushing to premature conclusion was avoided, living the rest of the after data collection, since repressing "in-the-field insight" gets rid of the chance to deepen data collection that would test the authenticity of those insight in the cause of field work, (Patton, 2002, pp. 346-347.)

Organizing the data

The early stage of the data analysis usually begins with the organization of the data. At this stage, data is organized into computer files, the right text units (example, a word, sentence, and an entire story) for analysis by the researcher using either computer aided or manually, (Creswell, 2013, p. 182.) The data gathered from the interview was transcribed between 1st and 31st January, 2014. A total of 41 standard page data was transcribed. During, the transcription, the main subjects under which the probing questions were asked was stated. The responses of participants from the probes of the interview I had in mind the possibility of me misunderstanding some of the contributions during the period of transcription, and might require clarification by the participant through telephone call. Again, notes were also taken during the period of the interview since not all the expressions (e.g. emotion and body languages) could be captured by the audio recordings, and there was the need to tie these notes to the responses of the reasons

above there was the need to identify each participant, their group and the schools they belong, though the study does not intend to reveal the identity of participant as well as their schools for ethical reasons.

To do this, the schools and groups were identified by letters and individual teachers and headmasters were also identified with letters and number (SA= first school, SB = second school and SC = third school), letter H and T represent the two groups in each school made up of headmaster and teachers respectively. Numbers 1, 2 and 3 were used to identify individual headmasters and teachers. These letters and numbers were also used to generate codes during the analysis. For example, SAH1= a headmaster in the first school, SBT2 = a teacher in the second school and SCT3 = a teacher in the third school. The numbers in these identifications were matched with the names and telephone numbers of the participant in my notes, for the purposes clarifications in their contributions when it became necessary to do so.

Familiarization

After transcribing the data, the stage that followed was familiarization. To achieve familiarization, I listened to the tape and read over the transcript in their entirety several times. I also read through the notes I took in my observation and off the record conversations. This was done with the aim of grasping the details and also gets sense of the data before splitting the data into various parts as suggested by Rabiee (2004, p. 567.) *Coding*

Researchers who aspire to excellence in qualitative analysis must learn to code well and with ease. The excellence of research to a large extent is dependent on coding (Strauss, 1987, p. 27.) Coding a qualitative research is the fulcrum around which qualitative data is reduced to form units that make meaning, and to combine them in a different way into groups or categories. By this, the researcher recreates the experiences of the participants with the phenomena under study, with the purpose of reducing large amount of text data into a system of hierarchically organized categories and themes on the bases of similarities in terms of information gathered, and for the identification and presentation of findings (Ivankova, p. 239, 2015.)

In coding the data in this study, the Kelle's six steps, as explained by Eriksson and Kovanlainen, (2008, pp. 108-109) were followed. Having made sure I converted the

audio data to text, I openly coded the data. In this regard, numbers in ascending order were assigned to the responses from participants in an ad hoc manner. I tried to determine pattern in the responses by participants with colors, and segmented the responses based on similarities identified. Parts of the text to which the same colors have been given were copies together with their corresponding code numbers at the left margin and the letters (SAH and SAT) representing the school and the groups of participants at right margin. I then integrated texts with the same colors and then attached memos to the ends of the integrated codes. At this stage the core categories had emerged.

Themes development

Qualitative research is interestingly underpinned by the development of themes yet its definition is not easy and so, there is not much discussion about its meaning. Probably, this is as a result of the fact that, theme identification form part of the beginning of qualitative analysis which in the end aims at developing insight into the relationship of themes, their interconnectivity and their applications. (Carla, 2013, p. 58.) A theme captures important things about the data which is related to the research questions, and also reflects some patterns of responses or meanings within the data set. During coding, the significant question to deal with is what makes up a themes / patterns or what size is enough to constitute a theme? (Braun & Clarke, 2006, p. 10.) Braun and Clarke in their response to this question, said, there are a number of instances where some items may prevail a number of times within the data but might not necessarily constitute a theme. Similarly, the fact that items appear a few times in the data does not prevent it from being used as a theme. In other words, a theme might occupy a relatively large space, little space or no space at all within the data. The right judgment of the researcher in this situation is paramount.

After I selectively coded the data, I derived broader themes for the categories, of which some of the themes were based on the stress made by the respondent, other were not stressed relatively much and some others were not necessarily mentioned at all by participant but I derived them by inference base on how I understood their responses and the extent to which they answered the research questions

The diagramme bellow indicates the faces I went through in the process of analysing the data.

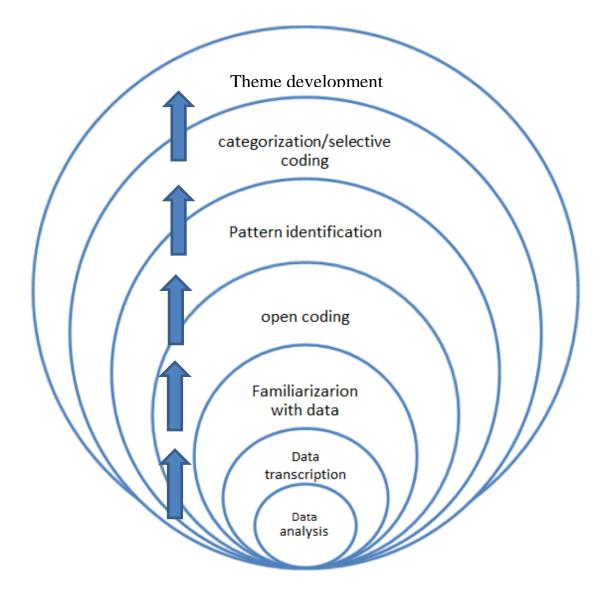


Figure 3 The faces of the data analysis

5.8 Reliability

For Polit and Beck, the extent to which the results could stand the test of time and how accurately the population under study represents to total population is referred to as reliability. In this case, if the results of a study are reproducible under a similar methodology, then the research instrument could be considered to be reliable or dependable. (Polit, & Beck, 2014, p. 323.) Positivist approach in dealing with the issues of reliability also demands that, a research can be accepted as being reliable if it can be repeated under the same condition. That is to say, giving the same context, same method and same respondents, similar findings would be made. By this, the processes involved in

the research should be written in details so that repeating the process would not posse much challenge the future researcher. (Shenton, 2004, p. 71.)

5.9 Ethical considerations

Ethics has to do with the moral aspect of human conduct. In social research, it means the moral deliberations, choice and conducts of the researcher directed at ensuring accountability throughout the research process. (Edwards & Mauthner, 2012, p. 14.) The presence of qualitative researcher intrudes into peoples settings and for that reason, they usually have to adjust to accommodate the researcher. The people may offer themselves to be interviewed or to assist the researcher to understand the norms of the group; the researchers plan must therefore aim at reciprocating this gesture. When respondents adjust their priorities in order to assist the researcher or even tolerate their presence, they are giving themselves of. This alone poses some amount of indebtedness to the researcher and he or she must be aware of this. The researcher's reciprocity may take the form of giving time to help out, providing informal feedback, being a good listener, making coffee etc. and this must fit within the constraints of the researcher. (Marchall, & Rossman, 2011, p. 121.)

For the researcher to understand and deal with the challenges connected with research, he must consider the context of ethical principles that needs to be satisfied when conducting a study in a particular context. It means, the consent of the participants involved must be obtained by the researcher and when the subjects are under aged, the parents or the families must be involved so as to provide permission on behave of the under aged participants. (Neuman, Shavit, Matui & Koren, 2014, p. 70.) In their submission, Neuman, Shavit, Matui and Koren content that, the standard principles of inform consent revolves around information, comprehension and voluntariness. By information in this context, they meant all details that the participant need to know must be made available to them, by this they will understand and be in the position to provide informed consent. Comprehension means, the participants must understand information which subsequently leads to the use of the right language and jargons. The language and jargons are very significant in communities where participants are multilingual and have

wide of socioeconomic range. (Neuman, Shavit, Matui & Koren, 2014, p. 70.) When ethical conducts are carefully observed in conducting a study of this nature, it enhances public confidence and opens doors for participants to contribute without fear of victimization, (Riele, & Brooks, 2013, p. 6).

Before the commencement of the data collection, I sent a research permit and introductory letters endorsed by the institute of educational leadership of my University to the district directorate of the Atwima Nwabeagya district GES. This is the administrative body in charge of the schools I selected for the study. This is a requirement for anyone who intends to conduct research in schools in Ghana. I was later directed by some personnel of GES in the directorate to send copies of the letters directly to the school involved since heads of second cycle school have the autonomy to accept or reject such research requests in their schools. Copies of the letters were sent to the respective school heads and the request was immediately granted by all the schools.

All the headmasters call the heard of departments in my presence and introduced me to them and also handed them with the research permit request letters for them to read and put their signatures behind it. The assistant headmaster also went through the same process; this was done to authenticate the permission. What was left was challenging was putting up the groups since the various participants seemed to have different schedules at different times. Putting up the groups for the headmasters was the most difficult task considering their heavy workload, not withstanding, I succeeded in getting the groups formed after series of meetings.

Knowing the sensitive nature of group interview, I initially recruited more participant than required, since I anticipated pull outs by some participants due to the recordings involved. Dates agreed on by the some of the schools had to be postponed a number of time for some reasons beyond my control. Some participants as anticipated pulled out of the group, after making them aware that their voices were going to be on record in spite of all the confidentiality assurance during the briefing session. Nevertheless, all the interviews were successfully conducted with the correct number of participants since I had a backup plans in place. As a sign of appreciation, I had a snack with the teachers, as posited by (Marchall, & Rossman, 2011, p. 121).

Though the heads did not join us for the snack, it was understandable since in Ghana's context, superiors do not normally dine with subordinates due to the power

distance, but the good thing was that they accepted the snack, but decided to take it in their offices. As required of group interview, I debriefed participants after the interview (Raphael & Wilson, 2000, p. 2: Given, 2008, p. 200: Jackson, 2011, p. 49). This was meant to send participant back to the states they were, before the interview stirred them up. Before I exited the field, I called all the participants to express my appreciation as demanded by Ghanaian customs, and requested for their assistance in case I needed them again. The quality assurance in research demands that confidentiality and anonymity is assured. However, it is almost impossible to guarantee confidentiality in focus group interview since responses by participants were made in the mist of other people and more so, some of their responses are reported verbatim, (Patton, 2002, pp. 386-387: King & Harrocks, 2010, p. 117). For this reason I made sure that anonymity of the participants was paramount throughout the research process (King & Harrocks, 2010, p. 117). Alphanumeric codes were used in this study to represent both participants and their respective school. In addition to this, the audio recordings were which made during the interviews were all deleted as soon as transcription of the data was completed to make sure it did not accidentally fall into wrong hands.

6 FINDINGS AND DISCUSSION

This chapter presents the findings and discussion of the findings of the study. This study aimed at finding the challenges confronting the school leadership in the implementation of the technical and vocational education curriculum in Ghana. Not only did the study seek to identify the challenges, it also sought to elicit the extent to which the challenges affect the implementation from the school leadership point of view. This chapter will describe and discuss these challenges in details. These findings were generated from the analysis of six focus group interviews conducted in three secondary technical schools in the Atwima Nwabeagya and Amansie west districts of Ghana. There were two groups from each school composed of headmasters and their assistants in a group and heads of technical and vocational departments and teachers. There were eighteen participants in all. There were two broad and open ended questions from which responses were probed. The first question sought to find out the challenges facing TVET implementation and the second question dag deeper to find the extent to which the implementation was affected by the challenges. To ensure thorough digest of these questions, a check list was made. This list contained a set of question which sought to guide me to be able to touch on all the important subjects.

For ethical reasons, the names of participants, their groups and their respective schools were to remain anonymous as we all agreed before the data collection. Since there were three school involved, letters A, B, and C were used to represent the various school. Letters S = School, H = headmaster's group and T = teacher's group. Numbers 1, 2, and 3 were used to represent particular teachers or headmasters in their respective groups. For instance, SAT1 means first teacher in school A and SBH1 represent the first

headmaster in school B. these same numbers were used in the seating arrangement. The seating arrangement, matched with the participant in their respective groups made is easier for identification of participants during the transcription process. Presenting the results by description, my comprehension of the data was keen, but I inserted in my results, extracts from the data in the form of direct quotations of the participants, thought a few things like grammatical errors were corrected.

In all, ten broad themes were generated initially, but some of these themes were merged to six, based on how related they were. Apart from these, there were also subthemes developed under the six broad themes. The broad themes include: (i) negative societal perception about TVET, (ii) inadequate funding for TVET, (iii) out of date content of the TVET syllabus, (iv) low quality teacher training and teaching, (v) lack of teacher support services and (vi) the school leadership and administrative practices. Each of the themes were presented to answer the two broad question, the "WHAT" and the "HOW"

6.1 Negative societal perception about TVET

In this section, I tried to find out the challenges that confront the school leadership in their quest to implement the TVET curriculum. The analysis revealed a number of challenges which stem out from the perceptions held by the Ghanaian society. Some of which included the value and prestige placed on various professions by the society, the image of manual work in the country, the ordinary Ghanaians understanding of gender and their roles in the Ghanaian communities, the notion of the high cost of TVET, ignorance of some teachers and some heads of schools and the information gap between senior high schools and junior high school teachers.

6.1.1 The societal value and respect for various professions

Ghanaian society like many other societies place different values on different professions that are available within the societies by way of ranking. In most cases, these rankings are based on the image in terms of acceptability of their activities and the economic viability of the profession. Though it is recognized all over Ghana that, the development of the country is largely dependent on the various contributions by the different crafts and technical people in country. These technical people include carpenters, masons, mechanics, welders, cooks, farmers, hairdressers etc. Majority of these skills are acquired traditionally (through apprenticeship). People who are recruited into this apprenticeship are mostly the poor, the uneducated and those who are academically handicapped. Unfortunately the study revealed that, these artisans do not occupy prestigious position on the societal "ranking list" of occupations. This poor public image has affected even those who get the opportunity to learn these professions through the school system. According to the respondents, parents who are economically capable only encourage their wards to undertake TVET when they are convinced that their children are incapable of pursuing any academic goals. They know that, taking these children through the school system could possibly make some difference. Most students who have genuine interest in TVET are mostly discouraged by their parents or friends arguing that, there is no sense in wasting ones time in school just to learn carpentry or how to cook when that skills could easily be acquire through wayside apprenticeship. Two participants, SCH 1 and SAT 3 recounted:

"This is a serious problem we have in vocational and technical education, people think you go in for technical and vocational education when you have low IQ and that is what is in the minds of the parents as well. There are some parents who bring their children here and say sir, my child is not doing well in school so I am bringing him to do technical". (SCH1.)

"Even with our colleague teachers, they sometimes address us as carpenters, "fitters" blacksmiths and so on. This perception has eaten deeply into the minds of most Ghanaian, and that is what is killing the program, because of this, students who even come in to do this program withdraw and go for others, but those who are able to endure are able to stand toe to toe with the so called good ones and even do better than their counterparts in other course areas when it comes to the core subjects. There, they realize that technical and vocational is not meant for those with low IQ". (SAT 3.)

This is in confirmation of the assertion by McFaland (1994, p. 24), Power-deFur Orelove and (1997, p. 203) and Canning (2012, p. 16), and that, some section of the general public have still not accepted TVET so they still hold the view that technical and vocational

education is a dumping ground for non-performing students in academic classes. This remains the perception of some students, parent and even educators.

According to the data, both teachers and students are somehow demotivated being conscious of the fact that the people around you, who are sometimes direct beneficiaries of the services they provide or aspire to provide, do not respect that same service. Analyzing the data, it was clear that the negative image of TVET has affected the implementation of the TVET curriculum so much so that, the TVET departments in all the schools have seen a very significant reduction in the number of students enrolling to take the TVET programs with exception of home economics which has seen some increase in enrollment lately. This has also contributed greatly to the high rate of student dropouts in the TVET and eventually contributing greatly to the high rate of youth unemployment in the country.

The results above affirms June, 2013 UNESCO's report which echoed that, as long as parents and students continue to see TVET as secondary option, youth unemployment rate will continue to grow (UNESCO, 2013, p. 18).

6.1.2 The high cost of TVET

In spite of the numerous challenges confronting the TVET, some subject associations for instance home economics are still determined to make sure that students do not only go through the program without any practical skills, so they undertake a lot of practical exercises as demanded by the program. With little or no financial assistance from the school or government, they keep practical lesson up to date. In this case, the study showed that, the cost of these practical lessons is footed by either the students themselves or their parent. Considering the fact that most student taking TVET are from poor socio-economic background, and the frequency with which they demand money for practical lessons, many student either refrain from the program or drop out along the line. This sends signals to the public that TVET is too expensive. This was one of the unfortunate ills expressed across all the schools. This is what one of the teachers had to say:

"Personally, I think everyone in Ghana including boys in one way or the other are taught how to cook in our homes. What is the sense in coming to learn how to cook again in school if you finish school and you can't make any difference? It is my responsibility as a teacher to make sure that my students are able to do something different from what they know from home. In that case people will appreciate the food and nutrition we do here. If I take myself as example, I have worked in many hotels as a caterer, if you come to Abuakwa (the town where she lives) today, everyone knows me because of my kebab joint, though there are many kebab joints, but I learnt all that in school. We need many practical lessons to achieve that but when you mention practical, students and parent even some of our own teachers complain so much because of the money involved as if the money they pay comes to us the teachers. These days the economy is hard Ghana, we all sympathize but we can't continue to disgrace ourselves, somebody must do the right thing". (SAT 3.)

Another teacher in different school said:

"There is another perception that the course is expensive so parents do not want their wards to do it since the cost comes back to them and parent do not like that at all. So it still comes to funding". (SCT 3.)

Besides the high number of dropouts affecting the implementation, the perceptions of the cost deter many students from enrolling. Not only that, effective teaching and learning is negatively affected by this perception as well. This is because teachers try to as much as possible cut the cost of these practical lessons, by so doing; they put students groups that are larger than the actual number required for such lessons in order to reduce cost. For the same reason, the study revealed that, some topics are deliberately either delayed or taught earlier than they are supposed to. This is done so that all year groups (example, Forms 1, 2 and 3) could take the lesson at same time so as to minimize cost. In situations like this, special arrangement has to be made so that student could skip other lesson since the general school time table does not give room for such activities. This comes back to affect the students in other subject areas in the long run. Due to the moneys involved, teachers must inform and convince students and parents in advance so that preparations could be made in that direction. It is the wish of teacher that the school admiration makes this information know to parents through their end of term school bills, but the school authorities constantly refuse, stating that it is not part of the government approved items to be billed.

6.1.3 The cultural meaning to gender and traditional roles

Traditionally Ghanaian society, believes that some type of jobs are preserved for a particular gender group. Jobs that are known to be less physical are usually preserved for feminine gender and vice versa. Regardless of various definitions given to gender, the immediate meaning a traditional Ghanaian assigns to gender is "female and male" characteristics (biological). Due to this, women are always considered the weaker limb of both sexes and so, their roles are to take professions that are considered less physical. Some of these less physical activities include: cooking, hair dressing, dress making, accounting, selling, nursing mothers etc. On the other hand, activities like farming, hunting, block laying, carpentry, and many others are meant for males because they are noted to be relatively physical and require a lot of strength (Morgan, 2013, pp. 14-16.) This traditional notion has eaten deep into the minds of Ghanaians in a way that even influences career choice somehow. From the data, the few girls who are able to cross the carpet are sometimes stigmatized and given bad names by both their fellow students and some teachers and this result in most of the students either changing the courses half way through or even abandon school entirely. One of the respondents confirmed this with passion:

"Another problem we have to think of is the gender and stigma, they think home economics is for girls. Some of the boys would genuinely want to do home economics but their friends tease them and they leave the course. The same applies to a girl doing technical, they sometimes call the girl witchcraft or as possessing features of both sexes. We have to find a way of motivation both boys and girls to do either technical or vocational if they so wish2. (SCT 1.)

The major implementation challenge here is that, the schools keep losing students of both sex who have talents, passion and unfeigned interest to excel in some fields of study, as a result of this societal perception. This contributes to the poor performance in the TVET department which ultimately worsens the bad societal image of the TVET.

6.1.4 Low quality of student recruited to take TVET

From literature, admissions into the senior high schools in Ghana is done by a complex automated system known as the computerized school selection and placement system (CSSPS). In this system, basic school students seeking admissions in the senior high and technical and vocational schools have the opportunity to choose six schools in the country as well course they wish to offer in the various schools. To qualify to gain admissions into various schools of choice, a very technical and complex process which is highly dependent on the performance of the prospective candidate at basic education certificate examination, (BECE) is followed. Due the complex nature of the CSSPS, neither students nor their parents like to make the choice of schools and courses on their own. They usually fall on teachers who have been with the student, know their abilities and are also familiar with the CSSPS (Ajayi, 2011, pp. 5-8.)

According to the data, the teachers consider the performances of these students, their locations and in collaboration with their parents choose schools and course. This is where TVET begin to suffer from the effects of negative perception and the ignorance of these teachers who help parent and their wards make choices of school and course. From the respondents, most people in Ghana hold the view that the most difficult courses to study are the sciences (i.e. Mathematics, physics, Chemistry and biology). This is followed by the businesses with TVET occupying the least difficult course position. Through the analysis, it was realized that this general perception has eaten into the teachers at the basic school level, so when they are helping the students to choose school, they are guided by the performances of these students in relation to perceived difficulty levels of the course at the senior secondary levels.

In most cases as elaborated by the respondents, the brilliant students are selected for the "sciences" (aiming at becoming doctors, nurses, pharmacists, engineers and the likes). Average student get businesses and arts subjects selected for them (aim at becoming bankers, business men, lawyers etc.) and finally the below average student get TVET (aimed at becoming carpenters, masons, cooks, artist, painters, hairdresser, etc). This is done with little regards to the interest of students and various subjects taught within the sciences, businesses, arts or the TVET programs. The neglected truth of this perception is that, Physics, Mathematic (elective), Chemistry and biology which are considered to be most difficult subjects and preserved for the very brilliant student, are also taught at the TVET departments in secondary school in Ghana. For instance, Mechanical, auto mechanics students have elective mathematics and physics as compulsory subjects. Woodwork students have elective mathematics and physics as compulsory subjects and home economics students study biology as one of the obligatory subjects.

The challenge here is that, when these poor performing students finally find themselves doing the very subjects they were to dodge due to their "weak" academic performances, the frustration becomes even more intense leading to massive dropout rate and poor performances in their final examination. This bounces back to the society, confirming their perception that, TVET will prevent students from progressing academically. This was passionately expressed in all the groups interviewed. This is what a headmaster and a teacher said concerning the above:

"I used to fight my headmaster and one of teachers who were in charge of school selection when I was teaching in the basic school. I don't understand why they kept sending the weakest students to do technical. Even when I told them my personal experience about the nature of the course, they kept discouraging the students. It was the major reason why I left that academic committee. They don't know anything about the course and they don't want to learn, all they do is keep polluting parents and students". (SAT 3.)

"I believe there communication gap between basic school teachers and those of us hear. I don't know too much about the CSSPS, but I am told that those of us heading secondary and technical schools don't receive the good material... I'm talking about the quality of students if we compare to our colleagues in only secondary aspects. Because those down there think sec techs (short way of saying secondary technical schools in Ghana) is for the weak in academics. We need to do something about it". (SBH 3.)

Teachers who teach these weak students find it very difficult in planning their lessons in a way that will make this weak and very slow learning group understand topics they teach just like their counterparts in other classes. Considering the pace of learning of these TVET students and the fact that they must take the same examinations at the same time with other, put a lot of pressure on teachers and student. TVET classes are mostly lagging behind their colleagues since their pace is sometimes much slower, but at the end of the day, they are compelled to write the same examination with other at the same time. Some teachers (especially those who teach core subjects), who do not understand the situation of these students often compare them with their mates in other department, and sometimes make unprofessional comments about these students during classes just to express their frustrations and disappointments in these TVET students. This discourages student and even some TVET teachers. SBT 1 said he isolates himself from the staff common room because the comments some colleague teacher make about them make him feel physically assaulting them. So to avoid that, he does not mingle. "This is why they say technical students are bad, they stay isolated or aggressive to prevent other students from the verbal abuse" he said.

The unfortunate thing is that, hardly do you hear about this, neither do you get to read when the challenges of TVET are listed, nor attempts made to address this social problem. The only effort is the school level resolution when problems problem arise as a result of this.

6.1.5 Lack of interest by the students and parent in TVET

The intrinsic motivation and or the zealousness and the thirst for achievement are some of the driving forces behind every successful student. Most of the students enrolled into the formal TVET system in Ghana lack the qualities stated above to pursue the program according to the analysis of this study. Diving into to recruitment process, it came to light that with the exception of a few, most of the students either selected TVET programs as their last options, last but one or did not select the TVET programs at all. Majority of those who selected TVET as first choices are interested in home economics apparently because of the possibility of them entering into the nurses training institutions. Many of the students after gaining admission with TVET courses try as much as they can to switch to either business or art programs. School authorities in most cases have no choice but to compel them to do the program. In the case it is obvious that most they may have the motivation to study the program as expected or even drop out of school. SBH 1 recounted the pressure has to endure from parents and students during admission periods.

"The worse moments being the headmaster in a Sec. Tech school is during admission period. We can go to the business class and see how student are packed. Their classrooms are meant for 35 to 40 students, but all the business classes are more than 70. Parents come here and cry just to changes their children from technical to business. They behave some times as if technical is a prison. Before I come to school, parents are already queued in front of my office wanting to change their children from technical. Every year they bring supplementary list for admission, more than half of the supplementary list is for technical department yet their classrooms are almost empty. Hwy won't there be high unemployment". (SBH 1.)

One might be tempted to overlook the relevance of the number of students and its importance to the quality of training receives by the students. One must not forget that the quality of the program which is also a contributive factor to the negative perception by the public may be measured by the number of students enrolled and the rate of drop outs by the students. This finding might not appear too obvious and logical, but it a clear evidence of the explanation by Filmer and Fox. These writers posited that it is difficult to compile evidence of the quality of TVET systemically. However, there are some prime indicators of training quality which includes attendance, dropout rates and graduation rates. They further explain that better attendance leads to better learning and high quality of training. Also, high quality TVET leads to low dropouts. (Filmer & Fox, 2014, p. 100.) Associating the idea of low quality to dropout rate and low number of students sends bad signal to the society hence, the lack of interest by prospective students.

6.2 Insufficient funding for TVET

The data revealed that, the government of Ghana in collaboration with parents mainly finance education in the country, but TVET continue to suffer insufficient funding due to modalities in the disbursement of funds. Though there are some incentive packages that is allocated to only science and TVET students at the secondary school level, the amount that goes to the TVET department is nothing worth mentioning due to student enrollment. The schools are run basically on the school fees paid by parent apart from the central government taking up training of teachers and paying salaries. There are also government subsidies that are paid to the schools termly, however, these money are disbursed to the schools base on the enrolment. With the TVET departments having very few numbers of students, the amount due them is always very small and insufficient to do any meaningful thing. Besides insufficiency of the funding, the study shows that the money is not regular. Three headmasters gave this account:

For funding, they students pay school fees like any other student and the government brings subsidies but it depends on the number of students you have. (SAH 1.)

Apart from the approved school fees we also receive subsidies from government but it is not regular, that is each term but sometimes we get to the third term before that of the first term arrives, so we have to manage like that. In some cases they government supply us with some materials for practical but in most cases they not right material we need at that particular time and it is also not regular. Even this year we haven't received any. (SCH 2.)

If it had been a business class where there are many students, then the money would have been substantial Due to the numbers involved, we don't get enough funding to run the program, this is what is happening. If you have 2300 student and on 30 doing technical, what do you expect? (SBH 1.)

Another factor that affects the funding is the ignorance of teachers about the available funds for the TVET department. The study revealed that most of the teachers at the TVET department are not aware of the available funding windows existing in the school. Across the groups interviewed, the teachers were either not aware of the availability of the funds or knew it as rumor. For this reason, most of them fail to apply for it for students practical. This is the comment by one teacher:

I'm told even though we are not involved in scheme of work, that there is a token for every student who is offering technical and vocational education, this is the reason the headmaster wants many student to do technical because they bring in something (money). As to whether the money comes or not, I can't tell. (SBT 2.)

Another factor identified by this study as contributive to the insufficient funding is the location of the schools. Though the general funding of TVET is not encouraging, the situation worsens as you move to the relatively more rural communities. It was seen that student population was much smaller in the less developed communities compared to the relatively much developed communities. The student population in school B was higher than school A. And school A, was also higher than school C. Applying the fund disbursement formula in Ghana (based on number of students), the schools in less developed communities get lesser amount of money due to their low student population.

I always want many students in the technical and vocational departments because they add some extra money but they don't want to do, we really talk a lot to maintain students in those department. (SBH 3.)

6.2.1 Difficulty in getting funds released at the school level

Apart from the insufficiency of funds for technical and vocational departments in various schools, the study also brought to bear that, even getting the small amount due them at school level was a difficult task. At the school, the bursar signs and release money with the approval of the headmaster. But the teachers involved have to fill requisition form which details what the money will be used for. This must be done by the teacher way ahead of time. In most case amount requested is slushed down after the headmaster in collaboration with bursar have gone through. The challenge to the implementation here is that, the money which is supposed to be time bound is finally released as and when the school has money, and, planned practical lessons are mostly disrupted by the delays in the release of funds. Some teachers deplored:

The process of getting funding even in the school is very difficult, very-very difficult, for example, when school reopened, we planned getting some material for the students, we met as department and discussed some of the things we needed, they will tell you to round and make enquiries before coming to them for the money as if we had not done that as department.--- they ask you to go out for invoice, without the invoice there is nothing they will give you, so it is better you sit and make a list, then you go to the market, spend more time to get the prices of items before you come to the HOD for him to also forward it to the headmaster for approval before it comes to the bursar. Even the bursar may also delay you, and can even tell you there is no money so you can't get the materials after having gone through all these process. And as at this time we still don't have the material for the students. (SAT 3.)

This frustrations expressed by the teachers make them sometimes refuse to make any request for funding. The meaning they usually read into this is that, the heads and the bursars are not much concerned about their plight because they are not of TVET backgrounds. This feeling affect their relationships with their headmasters. On the parts of the headmasters, the analysis revealed that the schools heads are not able to respond to the financial needs of the technical department promptly not only because their portion of

the government subsidy is small, but it is also due to the government failure to pay the money on time. Though the money is to be paid termly, it sometimes takes government between two to five terms to pay part. In such situations the heads of institutions are left with no options than wait since the school does not internally generate any funds.

6.2.2 Funding by students

Due to the frustrations the school leadership goes through in securing funding for practical lessons, teachers especially those teaching home economics, clothing and textile and visual arts result in levying the students some amount of money. This enables them to carry out their practical lessons at the right times. However most of these levies fall outside the monies approved by the government to be charged in schools. Not only are these levies illegal and extra burden to students, they also sent bad signals to the community deepening the perception that TVET is expensive, resulting in prospective students running away from the program. This is what was said by some teachers:

We have a lot of problems, the students have to buy their own equipment, it was just recently the headmaster was able to buy one gas cooker for us. Then when it comes to practical work, the children do their own funding. Because of this we are forced to group them so that they can cut down the cost before they are able to do some practical work. We know it is not good because a lot of the students find it difficult raising the money, but it is better than sitting down and watch to fail their final practical exam. That will be waste of their time. (SCT 1.)

I don't know about any funding from anywhere, what I know is that the students do their own funding in whatever they do, we don't even take the money because we are afraid people might term it as illegal collection of money, we only tell them what to do and they go purchase their own stuffs. (SBT 3.)

Knowing that most of the students undertaking TVET programs are from homes that are economically weak, teachers find it heart breaking to levy these students before they are able to teach them things that are realistic and meaningful, the study uncovered. Some students make use of monies given them for other purposes such as drugs, food, sanitary pads and other petty things to pay for practical lessons, SCT 2 recounted. Other students do not participate in such lessons because they simply do not have the money to do so. This explains the position of 2012 EFA global monitoring report that retreated that,

Ghana's inability to stand toe-to-toe with countries like the republic of Korea in TVET is partly due to economic challenges, but the blame should be laid squarely on the lack of government's commitment to invest in education. (EFA, 2012, p. 207.)

6.3 Lack of proper infrastructure and teaching and learning materials

For TVET to be successfully run, the need to ensure that proper structures and facilities are in place cannot be swept under the carpet. Not only must these facilities be in place, they must also be maintained and kept up to date. On the contrary, the study brought to bear that, the nature of tools and equipment that is currently available in the schools is woefully inadequate. The few that are available are obsolete and fall far behind the kind of equipment used currently in industries. One major problem connected with student inability to use machine is the restriction of students to the use of hand tools in their final practical examination. For instance, the final practical examination metalwork student by the West African Examination Council (WAEC) presents two options (the use of hand tools or machine tools) for student to make choices. Since the machines in the schools are white elephants, students are left with only one option, thus using of hand tools. Some schools have since 1990 had none of their machines used though those machines had gone rusted at the time of the study. The kind of classrooms used by TVET students is inappropriate. The kind of workshops available for TVET lack the space required to teach practical lesson. Broken down machines and tools have been left unprepared for several years. Due to lack of conducive classrooms for teaching and learning, all the schools where the study was conducted had converted their workshops to classrooms. Courses like home economics, clothing and textiles and sculpture had not had kitchen or studio since 1990. As a result of this, there is a mismatch between the skills acquire in schools and that required by the labour market. These are some of the comments made by some school leaders concerning the above:

We have serious infrastructural challenges, you can just look around over here, we have metal work, building and construction, woodwork, electricals and we have auto mechanics. Out of these five it is only woodwork and metal work that has workshops. So in terms of infrastructure we have serious problems and even those that have workshops, how equipped and spacious are they? (SBH 2.)

In all these it is also worth mentioning that, there are some courses among the TVET programs that have more tools than the students offering the courses. And within TVET programs in various schools, the study indicated that the interests of students are more skewed towards some courses than others. This is due to the possibilities of academic progression and the status enjoyed by such professions or occupational groupings of such courses in the Ghanaian society. For instance, home economics had the highest number of student among the entire course offered by TVET departments in all the schools sampled for the study. Home economics which used to have very few students have the past few years started gaining popularity since the introduction of biology which enables students to progress to the nurses training institutions. Though outmoded, woodwork had more tools than the number of student offering it in all the schools, apparently because very few number of students opt to study it. One teacher had this to say:

In some areas we don't have problems at all, here; we do woodwork, metal work, BC and last year we introduced electrical. Wood work for instance, we have tools that can cater for about 50 students but when it's time for lessons, you see two or three students with the teacher. (SAH 2.)

The issue of infrastructure, tools and equipment is closely linked to funding and invariably connected to the economic activities of the people. Since PTA is one of the major stakeholders educational funding in Ghana, the socio-economic stands of the communities within which the school is situated influences the infrastructure of the school. It was realized during the study that, the PTA assist schools in putting up assets like classroom blocks, workshops dormitories, science laboratories, buses etc. through financial contributions as agreed by the PTA. Since economic activities in Ghana dwindle as one move towards the rural areas, the schools located in the cities are better resourced than those in the rural communities. This is because, parents who are major stakeholders in financing the schools are economically active in the more urbanized areas than in rural communities.

The 2012 EFA global monitoring report shows that, TVET is accessible to all in Ghana, but those in the urban areas are more resourced that their counterpart in the rural areas (EFA, 2012, p. 241). In examining distribution, coverage, utilization and befits of public spending on education in Ghana, Gaddah, Munro and Quetey (2015, p. 127) concludes that, the urge to enrolled in school by the poor is more of price bracket than the rich at all level of education. This means that the cost of public schooling has effects on equity. It also means that, the rural folks who are mostly poor are less advantaged in getting quality education.

Inconsistent supply of materials for practical lessons

The ministry of education together with Ghana education service (GES) has the responsibility of supplying school with various materials needed for practical lessons (UNESCO, 2006, pp. 4-8). The TVET syllabuses specifying the number of practical lessons to be undertaken each term, the GES is supposed to supply these materials in advance so as facilitate smooth practical less. However, the GES have failed in this regard. In most cases the needed materials are not supplied at all. The few cases where the materials are made available to school, they either supply them at the wrong time or even wrong material. This has to a large extent stifled the smooth running of TVET programs in various schools. This was stated by almost all the groups interviewed.

Sometimes GES supply some materials but it is funny because though I am the head of this school I have no idea when the kind of materials and when they are bringing them. We don't do hair dressing in this school but sometimes the materials they bring are meant for hair dressing students. Sometime they do things as if they don't know what we study here. To my best of knowledge, these materials for practical should come to us every term but I don't remember the last time we had some. We buy them on our own. (SCH 1.)

6.4 Out of date syllabus content

The quality of the every TVET program is dependent on the content spelt out by syllabus. The content of the syllabuses have to be comprehensive, divers and up to date. For TVET to be meaningful, the content given to the students should be relevant. That is to say, it should be driven by demand and supply. The unfortunate situation is that, the prescribed content of the syllabuses like many other developing countries are out of date, and only supply the kind of workforce that is not demanded by the society (Gondwe, & Walenkamp, 2011, p. 23: NICHE, 2010, p. 5.)

Results of the study indicate that most elective subjects studied within TVET courses are too old. Since the start of the senior secondary technical schools in 1990, elective subjects like metalwork, woodwork, building and construction, sculpture, auto mechanics and others have seen no upgrade in the content of the syllabuses, though other courses have seen minor changes. Despite the fact that the courses are practical oriented and directed at self-employment, the syllabuses lack the content that is capable of awakening the entrepreneurial spirit of the students. Students usually complete with the mindset of securing employment either from the government or private sector. This undermine the very reason for 1987, educational reforms that sort to project TVET. Coupled with other challenges in implementing the content of the current syllabus, the student who receive training come out without the basic skills to work as either employee or self-employed resulting in high rate of unemployment among TVET graduates. SAT 2 and SBT 3 made these comments:

I will rate the content to about 65%-70% correct, believe me! if we will be sincere to ourselves, if not by our own research, we wouldn't even know what to teach. We don't even have the text books to teach, we are using the books written in 80s at a time when people are thinking of what is going to happen in 20 years to come, we are still in the past. (SAT 2.)

You mention a jig to a child and the child doesn't know what it is. We still use hammer and nails, whereas these things are past. The content of the syllabus is very old, and the people who are there, (leadership) what they got in those years are still the ideas we are regenerating. We are not innovating, we are not bringing anything new, and it is like re-engineering. We try to add little things to the old ones; the curriculum needs to be rejuvenated. (SBT 3.)

The content of the formal TVET at the moment is in contradiction with the contents of TVET in countries that have made it. Many countries that have excelled in TVET make sure that the content of the TVET is in tune with jobs that are available to them. In the case of Germany, Switzerland and Denmark for instance, the available occupations are grouped into occupational fields and carefully tailor the training of teachers and student towards these occupation (Pahl & Rauner, 2008, p. 193). Similarly, the provider of TVET in Finland enters a contract with available industries that assist in providing job place training for students. In this case, work place supervisors and teachers collaborate to assess student. This is to ensure that only relevant content is delivered to the students at the time of their training. (FNBE, 2013, p. 13.)

In Ghana's case, the analysis of the study shows a complete deviation from these content structures above. The cause content has seen some adjustment to ensure those students are able to progress academically. However, the content of the various occupations within the program have since 1990 not seen any changes. This was echoed by (Ansah, & Kissi, 2013, p. 173) that the content of TVET at some levels in Ghana are outdated despite Ghana recognizing of the fact that industrial development of the nation hinged on TVET. There is no formal arrangement to connect the content of the syllabus with the current practices of the various occupational groups available. This makes even the best students alien to the occupational practices when they complete the program. This is one of the reasons why students fail to gain employment after graduation.

6.5 Low quality of teaching

The quality of teaching and learning in any TVET institution is dependent on the quality and quantity of its teaching staff. Not only must the teachers be professionals, they must also be competent enough to answer all the important questions raised by the TVET system. After analyzing the responses of all the groups interviewed, it was found out on the contrary to many literatures that, the formal TVET system in Ghana face the challenge of professional teaching staff. Again, none of the groups interviewed thought the available number of teachers was a challenge facing the implementation of the program, however, all the respondent unanimously complained about the quality of teaching staff in TVET today. Though teachers in the formal TVET systems are mostly professionals who have received professional training at the university level, they lack the quality in terms of content, methods and the practical skills to be able to successfully implement the TVET as expected by the curriculum. This was confirmed by all the participants.

TVET teacher preparation

One cannot talk about the quality of teachers without touching on the kind of training given to these teachers. Though most of the headmasters interviewed had no technical and vocational training background, they all believed the teachers posted to teach in their schools do not have the type of training that will enable them effectively discharge their duties as TVET teachers. According to the data gathered, there are 10 out of the 38 teacher training colleges accredited to train TVET teachers to take care of the basic school TVET, and only one campus of the University of Education is accredited to train teachers for the secondary level TVET. Unfortunately, these training institutions are not equipped enough to give the teacher trainees the requisite knowledge and the practical skills required to enable them deliver the employable skills the students need to be functional in the society. All the teachers' groups interviewed were quick to say that they did not get the training which is good enough to give them the comfort to handle all the topics in the syllabus effectively. With the exception of very few who had had apprenticeship training outside their formal training all the rest admitted not having the practical knowledge to be able to handle practical lessons. Below is what some of the participants who had taught for over twenty years said:

If we talk of the quality, that one I will say no. Because some of the teachers if asked to go to the open market and work for themselves, it will be a problem because of the training they acquire, when we were in school we were made to stay during holidays to produce things like furniture the university needed and by doing so we acquired enough practical experiences but sort of training being organized for would be teachers at this moment is not the best, even the practical work is almost out of the system. They just give the theory and the just go out so, there times teachers say as for this area we can't go there because the practical experience is lacking. I have come across teachers who find themselves wonting so how can they arouse the interest of the students? The universities should make sure they expose teachers who are under training to some of this modern equipment so that they will be able to assist the students. (SAH 1.)

If you look at our training at the University, instead of concentrating on the actual technical or vocational areas, so many courses are added so you will not have time to go into the technical aspect of the training, meanwhile when you finish, you are going to teach technical this is the problem, little content and very little practical, so it is not our fault that we don't do practical. We can't give what we don't have, this is what I can say. (SCT 1.)

SCT 1's conviction confirms the position of Kaplan & Owings (2002, p. 1) that, "If teachers do not know enough, students will not learn enough". Teachers of TVET in Ghana mostly deliver their lessons theoretically, which is not in line with Ansah and Kissi's interpretation of the competence based training (CBT) introduce by the Japan international cooperation agency (JICA). This is not only because the schools do not have the necessary facilities, but it is also partly due to the fact that, most of the teachers themselves do not have enough technical knowhow to guide students through practical lessons. The CBT which has been adopted in Ghana demands that TVET lessons be integrated with relevant practical skills endorsed by industry (Ansah & Kissi, 2013, p. 173). This means, providing TVET teachers the opportunity for lifelong learning to help develop their career and to stay up to date becomes crucial.

6.6 Lack of teacher support service for TVET teachers

Since the teaching job involves imparting knowledge and role modeling, it is expedient and imperative on teachers who practice teaching to be involved in lifelong learning to enable them stay abreast with their career and to be able to discharge their duties effectively. Due to this, teachers must be motivated to participate in in-service career development. On the contrary, the analysis of the study revealed the absence of career development program for TVET teachers, though it existed for some other subject teachers. Putting together the challenges connected with their training as professionals, coupled with the lack of teaching and learning materials for effective implementation of the TVET program, I sought to find out the nature of support they receive, how frequent and how helpful it is to them and their students. This question was triggered by one of the respondents who doubled as mathematics teacher. SAT 3, describing the kind of inservice training and workshops organized periodically by the association of science and math's teachers and how beneficial it is to them, I wanted to find out from the TVET teacher, their need for this service and how beneficial it is to the implementation. Apart from the home economics teachers who periodically get in-service training at their own cost, none of the subject areas within the TVET departments had received in-service training since they were posted as TVET teachers. Two of the respondents SCH 3 and SBT 2, who had all taught for more fifteen years at the secondary level passionately lamented that they never received such training before though they admitted their need for it seriously.

We need to develop as teacher but I don't think we have any program like that here, but there is the need for us to have it. I remember a teacher was teaching how to make bolt and knot, but, hahaahahaha... it took the teacher himself close to one year to make a simple bolt and knot, so there is the need for us to expose our teachers from time to time refresher training causes, they can even be sent to the "magazin" (One of the largest non-formal mechanics workshops and a training center in West Africa, which is not too fare from all the three schools), or even a resource centers at district or even at the regional level, if they cannot have them all over the place. Teachers can have in-service training programs ----it also possible that the time table be altered so that the students could be sent to mechanics shop periodically to have practical training, and there are people out there who are willing to help. (SCH 3.)

None of the teachers' group interviewed thought there was any program in place meant to help teachers upgrade their professional knowledge while in service. Thought there is availability of distance learning program in Ghana to assist teachers to upgrade their knowledge; one must first enroll as a student in the respective university. Even this provision is only available for teachers with certificate and diploma qualifications who teach at the basic school levels. SBT 2 who used to be TVET coordinator at the Ghana education service admitted that occasionally, professional development programs are organized at top level but due to financial restrains, they are unable to reach the teachers who need them most. The none existence of professional development program for TVET teachers at the secondary school level is parallel to (Richards & Farrell, 2005, pp. 3-4) assertion that teacher training only prepares teachers and induct them into their responsibilities as teachers and it is only a short term, but engaging in career development activities is for professional growth and it is lifelong. The lack of professional development for TVET teachers can affect the performance of their students negatively. Bubb and Earley (2007, pp. 13-18) believes that, developing teachers professionally enhance the performance of their students. Bubb and Earley posit that professional development in some school and organizations is an integral part of their day-to-day plans, making the school a collaborative learning center for both teachers and students ((Bubb & Earley, 2007, pp. 13-18). In Ghana, the few TVET teachers who even pay on their own for their professional development have to do so outside their school environment.

6.7 Bureaucracy in school leadership

The administrative structure and the chain of command in both the school and with the Ghana education service makes it difficult for school leadership to initiate moves that can potentially improve the delivery of TVET to students. Bureaucracy systematizes administrative system and tries to do away with individual's personal intervention by introduction of rules and regulations. It is also true that bureaucracy aids efficiency in very big organization and industries. However, bureaucracy is capable of taking inordinately long time to reach a decision or make a change. (Sharma & Sharma, 2007, pp. 399-400.) Analysis of the study shows that, some headmasters and teacher could initiate plans and activities to reduce the numerous challenges that have saddled the implementation of the TVET program in Ghana, but the ills, connected with the administrative bureaucracy delays decision making, frustrate school leadership and even kills their initiative skills. When asked some of thing they can do as school leadership, some teachers and headmasters enumerated some initiatives aimed at making TVET a

little more attractive and motivating to students, but they were either disapproved by higher authorities or still in the pipe lines pending endorsement by superiors. While some leaders were still anxious, other had given up their plans due to the frustration.

To carry out practical lesson, teachers must put down their requisition and hand it over to the HOD. The HOD will then hand it over to the assistant headmaster academic, then it will be passed on the headmaster, he then go through and approve before funds would be released for those items to be purchased. This can take days, even weeks before you get the go ahead, it doesn't take me three minutes to walk to the head's office to tell him myself. Are we serious at all? (SAT 2.)

One of the headmasters lamented on how frustrating he has been in his attempt to introduce a new program to the TVET department. He said:

For the past two years I have tried to introduce Auto mechanics in this school but you wouldn't believe how difficult it is for to just get approval. I was asked to put all facilities in place for inspection before the approval. I have done all they asked me to do but it has taken them close to two years and I still don't know if they are coming today or tomorrow. Meanwhile it doesn't take them ten minutes to drive here. (SBH 1.)

SCT 2, narrated why he has reduced field trips for practical lessons to once a term, instead of once a month. Since the trips involve moving the students outside the town, he has to follow a very strict safety measures which is a tall bureaucratic order. Looking at the delays involved in getting one trip cleared, he had no option than to limit the trips to just once a term, though he insisted it was the best way to get students closely connected with what they learn in classrooms since they don't have the material to do so in school. In school B, SBT 1 said, to be able to undertake a practical lesson outside the school environment, the teacher in charge must write a letter for clearance which must be endorsed by the head of department and then forwarded to the assistant headmaster (domestic). It is only after the approval of the assistant headmaster (domestic) that such lessons could be taken. If it involves traveling with the students, the headmaster must send a copy of such approval letter to the district directorate of the GES. The process can

be completed when another letter has been sent to the transport section with endorsement by the headmaster for a bus to be released before the trip can finally be made. This process takes weeks to complete and it is sometimes frustrating if some of the parties involved is not available for some reason.

There is no doubt that Frederick Taylor's scientific management theory in maintaining effectiveness and productivity is still valid in many organization of today. As Li (2013, p. 35) maintained, application of formal structures, hierarchy, division of labor, task distribution and standardization of processes is very instrumental in present day organizations. It turns to see organizational change as rational and direct process that should be guided by a defined procedure in order to achieve the set objectives. However, the process fails to recognize the dynamics and the complexities of the changes. It is impossible to fully predict and control a change process. (Li, 2013, pp. 35-36.) The bureaucratic structure in the GES is not flexible enough to keep the pace of the global education movement. Teachers and headmasters of secondary technical institutions in Ghana from the analysis are not professionally autonomous enough to make the needed decisions to ensure the successful implementation of the curriculum.

7 CONCLUSION AND RECOMMENDATION

This chapter is a presentation of the main findings and its deductive reasons in the form of summary. It shows how the research questions were answered and discusses how the findings connect and disconnect existing theories. It touches on the research process, ethical considerations, validity, trust worthiness and limitations of the study. This chapter reflects and proposes recommendations for further studies of this kind.

7.1 Overview of the findings and their deductive reasons

The study sought to uncover the challenges that militate against the successful implementation of technical and vocational education and training (TVET) in Ghana at the school level and to describe the challenges from the perspective of the school leadership. Having had the opportunity to tour one of the TVET institutions and carefully studied vocational education in Finland, the history behind its revolution, how it is organized, its connections with the world of work today, the hopes it gives to the economy and the promises it brings to the Finnish youth gave me reasons to think about TVET in Ghana. My experiences as a student and a teacher of TVET in Ghana and my encounter with the excellent Finnish TVET system triggered questions like (i) "what is the problem with Ghana?" (ii) "Why can't Ghana do it the Finnish way" and (iii) "can Ghana learn something from the Finnish experience?" I started reading around these questions and found out that, similar studies have been conducted by several researchers. However, most of the studies appeared to deal with the challenges of all the forms of TVET systems in Ghana in general. I therefore decided to find out the challenges

confronting the implementation of the formal TVET system by limiting myself to the school level implementation. With this aim in mind, two questions were generated and answered by the study. (a) "What are the challenges facing the school leadership in the implementation of the technical and vocational education curriculum?" and (b) "To what extent do the challenges affect the implementation of the technical and vocational education?"

Qualitative inquiry was adopted for the study, and as a qualitative inquiry, the study was not meant to generalize. This is because the study deliberately sample eighteen participants from three schools in the Ashanti region of Ghana to be a representation of a very large population. This number is too small to warrant any form of generalization. (Yin, 2011, p. 226.) To solicit the right responses, open ended questions were administered on focus groups and this was very positive. The responses from the interview were thematically analyzed, and from the analysis, it became clear from the results that, the research questions were answered. Briefly, the study dived into the historical background of TVET in Ghana, throwing light on the efforts made by successive governments since colonial Gold Coast to present day Ghana in making TVET what it is now. Some literatures on the various landmarks on the evolution of TVET in Ghana were reviewed. The findings from the analysis are a confirmation of many of the literatures reviewed. Apart from this, there were some of the findings which were a departure from the know body of knowledge concerning TVET in Ghana.

It was realized from the analysis that negative perception of TVET in Ghana has serious repercussions on the quality and sustenance of TVET in Ghana. The bad perception of TVET has negatively affected the enrollment of students into the TVET program since parents and students lack interest in it. Apart from this, the perception has resulted in a situation whereby only the poor and the academically weak students are enrolled in to undertake TVET.

The perceived traditional roles for women and men in Ghanaian society have negatively affected the enrolment in TVET programs, since those who take up trades that are believed to be the preserve of the opposite sex are stigmatized. This has contributed to the low enrolment in the TVET programs. In addition, teachers and students are psychologically affected by the gross disrespect shown to TVET by the Ghanaian society. Other major challenge confronting TVET in Ghana is the lack of government's commitment in funding TVET and the unfair modalities of disbursement of funds (based on the number of students). Living TVET funding for parents and students can be unreliable and disadvantageous to student from poor economic backgrounds. Again the bureaucratic processes in securing funds for practical lessons at the school level could be frustrating to teachers resulting in many of them giving up on practical lessons.

This confirms the assertion by earlier writers that TVET is not meant for elite in the society and therefore considered as a preserve for poor and the disadvantaged in the society, dumping grounds for the academically weak students and it enjoys very little respect by many societies, (McFaland, 1994, p. 24: King, 2008, p. 204: Parker, 2008, p. 23).

Lack proper infrastructure and teaching and learning materials for TVET continue to limit the scope of TVET in Ghana and significantly contribute to the poor performances students at their final examinations and eventually limiting the number of student who could potentially make academic progression in the higher institutions of learning. The continuous use of outmoded tools and equipment and the absence of maintenance culture in secondary and technical schools in Ghana deepen the woes of TVET. This is in line with the education for all global monitoring report that laid emphasis on the poor state of TVET infrastructure in Ghana, (EFA, 2012, p. 241).

Poor quality content of the TVET syllabi and school authority inability to initiate any changes in the content on their own is the reason for the unending turning out of graduates, whose experiences are parallel to the demands of the job market, thereby increasing the rate of youth unemployment among school livers. Substandard teacher training has resulted in the production of teachers who themselves cannot handle the content of the TVET even as it is now. Besides the poor teacher training, institutions and GES, have failed to put in place a proper teacher support service for TVET teachers in order to fill the gaps in the teacher training. It is worth noting that the numerous challenges mentioned above get worse at the rural areas, confirming the positions of (EFA, 2012, p. 107: Darvas & Palmer, 2014, pp. 74-75) in chapter two.

Strict bureaucratic processes in the administrative structure in GES continues to kill the creative and initiative spirits of teachers school heads, resulting in the stunted growth of TVET in Ghana. The rigidity in preparing students as compared to the flexible and the dynamism in our world of today makes it difficult for teachers effectively plan their lessons for these relatively weaker students and the results at the end of the day is poor and unripen graduate who fail to impress in the world of work, contributing to the bad image the society holds against TVET.

Generally, this study confirms major challenges of TVET such as funding, poor perception, infrastructure challenges, in Ghana as studied by others. However, it seems that, challenges such as ignorance of basic school teachers about TVET thereby selecting weaker students for TVET, frustration in securing funds internally for practical lessons and the lack of interest by student in TVET and persistent attempts to change course are not heard or very silent in most of the studies. Others such as the outmoded content of the syllabuses, teacher's inability to deliver effectively, the psychological abuses teachers and students suffer in school from other teachers and students and many others as mentioned earlier are rarely talked about. Again, the study found that it is not entirely true that, TVET teachers are unprofessional and are low in number as widely talked about. It appeared from this study that, there are enough teachers in the formal TVET system and most of them if not all are professionally trained, as all the teachers interviewed had obtained professional training up to the university level. The only challenge is the low quality of training they have.

7.2 Thrust worthiness of the study

Traditionally, validity of qualitative inquiry has to do with the determination of the extent to which claims by a researcher relates to the reality (phenomenon being studied) on the ground (Cho, & Trent, 2006, p. 320). Researchers who adopt qualitative study must strive to build confidence in their findings for researches in particular context. That is to say, making use of the truth value of data and giving appropriate interpretation ensure credibility of the results. (Polit, & Beck, 2014, p. 323.) In qualitative research, trust worthiness refers to the methodological soundness and adequacy. Possibly, researchers make the decision of trustworthiness through developing dependability, credibility, transferability and conformability with credibility being the most significant. (Holloway, & Wheeler, 2010, p. 302.) Shenton (2004, p. 64) explained the terms above with regards to ensuring that a study is trustworthy. He explained that a study could be said to be *credible* when it is internally valid. That is if the study is able to measure all the tests it set out to measure and it devoid of contradictions. *Transferability* refers to the extent to which the finding could be applied in other situations. However he noted that, since the findings of qualitative study are obtained from a small number of participants and in a particular context, it impossible to conclude that the results could be applied to other situations. Dependability or reliability is as mentioned earlier on, is the ability of the results to repeat itself using same method. But this is not without problem since the nature of phenomena under study could change in qualitative research. Notwithstanding, the close relationship between credibility and dependability, it is achievable using overlapping methods like focus group and individual interview. The concept of *conformability* is the comparable concerns of objectivity of the qualitative researcher. The main criterion for confirmability is the extent to which predisposition if the researcher is admitted by him or herself. By this, the decision made and the method adopted is recognized within the research report, the reason for selecting one method over the other and acknowledging the weakness of the method. (Shenton, 2004, p. 64.)

I ensured that the quality of the study was not compromised from the start of the study by making sure that the standards set by the writers above were all met. Knowing that my topic was of greater significance especially at this time when Ghana youth unemployment has grown to the extent that the association of graduate unemployed keeps swelling in numbers by the day. As a novice researcher, my skills and conduct to make a credible qualitative research was the main challenge (Patton, 2002, p. 64). Knowing the task ahead of me, I took seriously the various courses I studied concerning research methodologies and the various research seminars organizes by the institute of educational leadership at the university of Jyvaskyla during my study period. Not only was the above important to me, the pieces of advice given me by my supervisor, various lecturers and professors were seriously adhered to. Various oppositions and comments received from my cohorts during the series of presentations I made went a long way to assist me in putting myself together for this study.

The study was inclined to the social constructionism philosophical paradigm since the negative perception which was noted to be the root of other challenges was seen as non-existing; instead, it is the society that has collectively constructed it. To properly understand the phenomena and to ensure the richness of the data, I flew to Ghana from Finland and spent two and half months for the purposes of this study. During this period, I officially sought and obtained permission to access the research site. Observing all protocols, regarding qualitative study, conducted focus group interviews in three schools in different locations with a total of eighteen participants. For the purposes of verification, all the participants were officially informed and their acceptance was also made official. Data was systematically checked, maintaining the aim and the interpretation closely checked and confirmed, as posited Morse, Barrett, Mayan, Olson, and Spiers, (2002, p. 17). The data was later transcribed and analyzed thematically, and driven by the data obtained. I have interpreted the findings of the study descriptively as I understood it. However, I acknowledge the subjectivity my findings and have sincerely presented them to my readers (Patton, 2002, pp. 64-65).

7.3 Limitations of the study

Though study is rich and rigor the adoption of focus group interview as data collection instrument came with its own challenges. The recent history of leaked tapes and its associated victimization in of people involved in Ghana was a big blow to this study. Due to this some of the participants pulled out prior to start of the interview upon realizing that the interviews were going were to be recorded. There were some participants who failed to come out fully during the interview obviously because they were in the midst of other teachers but they were quite outspoken and open when we travelling home in the same car. This obviously had to do with confidentiality issues.

Since most of the participants were familiar with answering questionnaire, they were too formal especially in the beginning stages of the interviews though I always touched on that during setting the ground rules. This resulted in some participant dragging us back to some of the issues discussed already after they had loosened up. It was extremely difficult convincing some of the participant to make it to the school when the agreed date fell on days when some of the teachers had to come to school sole for the purpose of the interview. In situations like this, I had to bear the cost of transportation of such teacher.

There were some of the participants who thought coming from Finland for the study, I had been given huge sponsorship, so they wanted their share of the booty. It took me quite long talks to convince them. There were few times some teachers got emotional

and resulted in the use of bad languages against either government, GES or even school authorities. Controlling such people was quite difficult.

Knowing the expertise and the skill levels required to successfully carry out focus group interview, it brought me under huge pressure in learning and testing my own skill as a novice researcher

As a qualitative study, it was not possible to sample as many participants so as to generate the amount of data needed to generalize the result considering the nature of the study and time frame. For this reason, I admit though the sample was a true representation of TVET in Ghana, yet the findings were influenced by the context within which the study was conducted. I believe the results would have been enhanced if I had the capacity to use other data collection instruments such as observation and open ended questionnaire.

7.4 **Recommendations**

In spite of the numerous challenges noted above, TVET in Ghana has a number of merits that could be built on. Some of these includes: a high number of the youth who still believe TVET is the way to economic prosperity. There are still high number of indigenous personnel who are trained in craftsmanship and are willing to offer assistance to school and students if properly integrated into the TVET system in Ghana. By this, a number of funding, infrastructural and the challenge of teachers who cannot offer practical lessons could be addressed.

Apart from the strengths above as a solid foundation, any attempt to revive, TVET in Ghana in the future must start from ensuring that teachers are given the kind of training that will make them functional, even outside the classroom. TVET teacher training must take practical skill training as one of the most important elements of their training package, going forward. This will make them provide the kind of leadership that will make their student see them as their immediate mentors, and be able boost the confidence of their students. Having ensured that teachers have the right training, they must be given the autonomy at least to make changes in the *prescriptions* of the syllabuses as and when needed. This will ensure that, what students are given in school are in conformity with the current demands of the job market. Since the state of infrastructure in TVET institutions in Ghana especially at the rural areas are not in good condition, there is an immediate need for government and other stakeholders to commit to improving the infrastructure in TVET schools, if headway is to be made.

The negative perception held by Ghanaians on TVET is the root of many other challenges, and will not change if the quality of training is generally not improved in a way that will be visible to all Ghanaians. Female underrepresentation in TVET will improve especially in engineering sector if the poor perception on TVET is improved. As a matter of urgency, teachers at the basic schools must be taking through proper career guidance and counseling programs. These teachers must be educated to be abreast with the subjects taught at the secondary school so they could offer informed assistance to students and parents when selecting secondary schools.

Though to a very large extent, the process from the beginning to the end was very successful, it was not without challenges. The use of focus group in the context of the study was extremely difficult due to the issues of trust and power distance. Many of the participants were willing to give information, but upon realizing the interview was a group one, some were no longer interested resulting in some of the participants pulling out. For fear of victimization, some participants were only supporting what others say but opened up later when we were alone. Some headmasters did not find it appropriate to be interviewed in a group with their subordinates therefore; they were limited somehow with their contributions. Again many participants were very interested being a part of finding solution to the challenges and not merely telling the challenges.

For further studies, I recommend that studies be conducted into remedying the challenges at the school level using a different data collection method. During the study, it was observed that, having TVET students taking the same examination as other students at the same time seemed a bit problematic considering the load of both core and elective subject of TVET. I recommend a study into the possibility of having TVET student taking their final exams at different periods and not as it stands, currently. I believe a careful study into the above will open a new door for technical and vocational education and training in Ghana.

References

- Abu-Dabat, Z., & Alhamam, M. (2013). Teacher's Role in Counselling and Reforming the Academic Delay in Pupils of Essential Stage in the Primary School. American International Journal of Science: USE: Center for Promoting Ideas, (2)3
- Acheampong, K. (2010), Government Policy and Teacher Education. In G., Elliott, C.
 Fourali & S. Issler, (Eds.) *Education and Social Change: Connecting Local and Global Perspectives*, London: Continuum international publishing group.
- Adam, A., Khan, T., A., Raeside, R., & White, D. (2007). *Research Methods for Graduate Business and Social Science Students*. India: Sage Publication.
- ADF. (2012). Project Appraisal Report: Development of Skill for Industry. Accra: ADF Publications.
- Agi., W., C. (2013). Evaluation of Employers' Perception of the Role of Guidance and Counseling And Vocational Education in Sustainable Development in Nigeria. *Mediterranean Journal of Social Science* 4(4), pp. 461-468.
- Ajayi, K. (2011). A Welfare Analysis of School Choice Reforms in Ghana. Berkeley: University of California.
- Almeida, R., Behrman, J., & Robalino, D. (2012). *The right Skills for the Job: Rethinking Training Policies for Workers*. Washington, D.C.: World Bank Publication.
- Amansie West District Assembly, (2012). The composite Budget of the Amansie West District Assembly for 2012 Fiscal Year. http://www.mofep.gov.gh/sites/default/files/budget/Amansie%20West.pdf (Retrieved on 4th November, 2014).
- Ansah, S., K., & Kissi, E. (2013). Technical and Vocational Education and Training in Ghana: A Tool for Skill Acquisition and Industrial Development. *Journal of Education and Practice*. 4(16). pp. 172-180.
- Antoniou, L., Dyson, A., & Raffo, C. (2012). Policy Interventions to Reduce Educational Inequities: The Case of England, 1997-2010. In M., Demeus, D., Frandji, D., Greger, & J., Rochex, (Eds.) *Educational policies and Inequities in Europe*. England: Macmillan Publication.
- Apeanti, W., O., & Asiedu-Addo, S., (2013). *Educational Reforms in Ghana: What are the Views of Teachers and Parents*. University of Education Winneba, Ghana.
- Atchoarena, D. (2009). Overviews: Issues and Options in Financing Technical and Vocational Education and Training. In R., Maclean, & D., N., Wilson, (Eds.) *International Handbook of Education for the Changing world of Work: Bridging Academic and Vocational Learning*. (vol. 1) Montreal: Springer Science and Business Media.
- Atchoarena, D., & Delluc, A. (2002). Revisiting technical and Vocational Education in Sub-Saharan Africa: An Update on Trends, Innovations and Challenges. Paris: UNESCO.
- Atchoarena, D., & Delluc, A. (2002). Revisiting technical and Vocational Education in Sub-Saharan Africa: An Update on Trends Innovations and challenges. Paris: UNESCO.

- Atzema, O., Rietveld, P., & Shefer, D. (2005). Regions, Land Consumption and Sustainable Growth: Accessing the Impact of Public and Private Sector. Cheltenham: Edward Elger Publishing Ltd.
- AU, (2007). Strategy to Revitalize Technical and Vocational Education. Addis Ababa: African Union Publications. http://info.worldbank.org/etools/docs/library/243614/TVET%20Strategy%20in%20 Africa.pdf Retrieved on 28th January, 2015.
- Badu, K., G. (2011). Implications of the Influence of Traditional African Education on Technical Vocational and Agricultural education in Ghana. *International Journal of Human Development and Sustainability* (4) 1.
- Baffour –Awual, D. (2010). TVET in Ghana. *Council for vocational and Technical education in Ghana*. 2(1) pp. 1-4.
- Baffour-Awuah, D., & Thompson, S. (2012). A Holistic Approach to Technical and Vocational Skills Development (TVSD) Policy and Governance Reform: The Case of Ghana. Accra: ADEA Publications.
- Ball, S., J. (2007). 'Going Further'? Tony Blair and New Labour Education Policies. In K., Clarke, T., Maltby, & P., Kenneth, (Eds.) Social Policy Review 19: Analysis and debate in Social Policy, 2007. Bristol: The Policy Press, University of Bristol.
- Bertocci, D., I. (2009). *Leadership in Organizations: there is a Difference between Leaders and Managers.* New York: University Press of America.
- Biemer, P., P., & Lyberg, L., E. (2003). *Introduction to Survey Quality*. New Jersey: John Wiley & Sons Publications.
- Boateng, C. (2012 a). Leadership Styles and Effectiveness of Vocational Technical Institutions in Ghana. American International Journal of Contemporary Research. 2(3). pp. 128-134.
- Boateng, C. (2012 b). Restructuring Vocational and Technical Education in Ghana: The Role of Leadership Development. *International journal of Humanities and Social Studies*. 2(4). pp. 108-114.
- Bortei-Doku, E., Doh, D., & Andoh, P. (2011). *From Prejudice to Prestige: Vocational Education and Training in Ghana*. London: City and Guild Institute of London.
- Bourret F., M. (1960). *Ghana: The Road to Independence 1919-1957*. California: Stanford University press.
- Braun, V., & Clarke, V. (2006). Using Thematic analysis in Psychology. *Qualitative Research in Psychology*. 3 (2). pp. 77-101.
- Brenner, M., E. (2006). Interviewing in Educational Research. In J., L., Green, G., Camilla, & P., B., Elmore, (Eds.) *Handbook of Complementary Methods in Educational Research*. USA: Lawrence Erlbaum Associate Publications, pp. 357-368.
- Bubb, S., & Earley, P. (2007). *Learning and Managing Continuing Professional Development. Second Edition.* California: Sage Publications.
- Canning, M., Godfrey, M., & Holzer-Zelazewska, X. (2007). Vocational Education in the EU Member States: Enhancing labor Market outcomes and Fiscal Efficiency. Washington D.C. World Bank Publication.
- Canning, R. (2012) *Re-conceptualising* Vocational Education: The Transition from Powerful to Useful Knowledge. In M., Pilz, (eds.). *The Future of Vocational Education and Training in a Changing World*. Berlin Heidelberg: Springer, pp. 43-61.

- Carla, W. (2013). *Introducing Qualitative Research in Psychology*. Third edition, Berkshire: Open University Press.
- Cheng, Y., C. (2005). New Paradigm for Re-engineering Education: Globalization, Localization and Individualization. Dordrecht: Springer Publication.
- Ching, T., T. (2003). A Journey of a Thousand Miles Begin with a Step, In M., Sashkin,
 & M., G., Sashkin, (Eds.) Leadership that Matters: The Critical Factors for making Difference in People's Lives and Organizations Success. San Francisco: Berrett-Koehler Publishers Inc.
- Cho, J., & Trent, A. (2006). Validity in Qualitative Research Revisited. *Qualitative research* 6(3) pp. 319-340.
- Clamp, G., L., Gough, S., & Land, L. (2004). *Resource for Nursing Research: Annotated Bibligliography*. Fourth Edition. London: Sage Publication.
- Creswell, J., W. (2013). *Qualitative Inquiry and Research Design: Choosing Among Five Approaches*. (3rd Ed). Los Angeles: Sage Publications.
- Csikszentmihalyi, M. (2008). *Flow: The Psychology of Optimal Performance*. New York: Basic Books Publications.
- Dai, K., A., Tsadidey, S., Ashiagbor, I., Baku, M., D. (2008). Graduate unemployment in Ghana: possible case of poor response of university programs to the demands of the job market. Education Research Network for West and Central Africa (ERNWACA), Ghana.
- Darvas, P., & Balwanz, D. (2014). Basic Education beyond the Millennium Development Goals in Ghana: how Equity in Service delivery Affect Educational and Learning Outcomes. Washington D.C.: World Bank
- Darvas, P., & Palmer, R. (2014). *Demand and Supply of Skills in Ghana: How can Training Programs Improve Employment and Productivity?* Washington DC: Word Bank.
- Denzin, N., K., & Lincoln, Y., S. (2011). The Discipline and Practice of Qualitative Research. In N., K., Denzin, & Y., S., Lincoln, (2011). (Eds.). *The Sage Handbook* of *Qualitative Research*. Washington DC: Sage Publications.
- Duignan, P. (2012). Educational Leadership: Together Creating Ethically Inspired Learning Environment. Cambridge: Cambridge University Press.
- Dunbar, M. (2013). *Engaging the Private Sector in Skill Development*. Oxford: Oxford Policy Management.
- Edwards, A., & Skinner, J. (2009). *Qualitative Research in Sport Management*. Oxford: Elsevier Ltd.
- Edwards, R., & Mauthner, M. (2012). Encouraging Participation: Ethics and Responsibilities. In T., Miller, M., Birch, M., Mauthner, & J., Jessop, (Eds.) *Ethics in Qualitative Research. Second Edition.* London: Sage Publications.
- EFA. (2010). Reaching the Marginalized. UNESCO.
- EFA. (2012). Youth and Skills: Putting Education to Work. EFA Global Monitoring Report 2012. Paris: UNESCO Publications.
- Eriksson, P., & Kovalainen, A. (2008). *Qualitative Methods in Business Research*. London: Sage Publications.
- Essel, O., Q., Agyarkoh, E., Sumaila M., S., & Yankson, P., D. (2014). TVET
 Stigmatization in Developing Countries: Reality or Falacy. *European Centre for Research Training and Development*. 1(1). pp. 27-42
- Evans, J. (2007). Your Psychology Project: The Essential Guide. London: Sage Publications.
- Fairholm, G., W. (2000). *Perspectives on Leadership*. USA: Greenwood Publishing Group.

- Filmer, D., & Fox, L. (2014). *Youth Employment in Sub-Saharan Africa*. Washington DC. World Bank.
- Finnish National Board of Education (FNBE). (2013). Vocational Education and Training in Finland: Vocational Competence, Knowledge and Skills for Working Life and Further Studies. UNESCO Publications.
- Fitzgerald, L., & Dopson, F. (2009). Comparative Case Study: Their Utility and Development in Organizational Research. In D., A., Buchman & A., Bryman (Eds.) *The Sage Handbook of Organizational Research*. Paperback edition. pp. 465-483.
- Flyvbjerg, B. (2011). Case Study. In N., K., Denzin & Y., S., Lincoln (Eds.) The Sage Handbook of Qualitative Research. California: Sage Publication. Fourth Edition, pp. 301-314.
- Gaddah, M., Munro, A., & Quartey P. (2015). The Rich or the Poor: who gains from Public Education Spending in Ghana?. *International Journal of Social Economics*. (42)2, pp. 112 – 131.
- Gallos, J. (2008). Business Leadership. San Francisco: Josey-Bass Publication.
- Gasskov, V. (1994). *Alternative Schemes of Financing Training*. Geneva: ILO Publication.
- Gavin, H., (2008). Understanding Research Methods and Statistics in Psychology. California: Sage Publications.
- Gerring, J. (2007). *Case Study Research: Principles and Practices*. New York: Cambridge University Press.
- Ghana Statistical Service. (2012). 2010 Population and Housing Census Final Results. Accra: Statistical Service of Ghana. http://www.statsghana.gov.gh/docfiles/2010phc/2010_POPULATION_AND_HOUS ING_CENSUS_FINAL_RESULTS.pdf (Retrieved on 2nd November, 2014)
- Given, L., M. (2008). The Sage Encyclopedia of Qualitative Research Methods. Vol. 2, Califonia: Sage Publications.
- Goddard., W, & Melville, S. (2007). *Research Methodology: An Introduction*. Panorama: FPP productions.
- Gondwe, M., & Walenkamp, J. (2015). Alignment of Higher Education with the Needs of the Local Labour Market: The Case of Ghana. The Hague. In UNESCO, (Ed.) *World TVET Database: Ghana*. Paris: UNESCO-UNEVOC Publications.
- Gondwe, M., and Walenkamp, J. (2011). *Alignment of Higher Professional Education with the Needs of Local Labour Market: The Case of Ghana.* The Hague University of Applied Sciences.
- Gopinatham, S., & Kam, H., W. (2003). *Issues and Concerns Regarding Teaching, Teachers and Higher Education*. Dordrecht: Kluwer Academic Publication.
- Greener, L. (2011). *Designing Social Research: A Guide for the Bewildered*. London: Sage Publications.
- Grollmann, P., & Rauner F. (2007). *International Perspectives on technical and Vocational Education*. Dordrecht: Springer Publication.
- Gunter, H., M. (2003). Teacher Leadership: Prospect and Possibilities. In M., Brundrett, N., Burton & R., Smith, (Eds.). Leadership in Education. London: Sage Publications. pp. 118-132.
- Hatch, J., A. (2002). *Doing Qualitative Research in Educational Setting*. New York: State University Press.
- Hennink, M. (2014). *Focus Group discussion: Understanding Qualitative Research*. New York: Oxford University Press.

- Hennink, M., Hutter, I., & Baley, A. (2011). *Qualitative Research Methods*. London: Sage Publication.
- Hiebert, B., & Borgen, W. (2002). *Technical and Vocational Education and Training in the Twenty-First Century: New Roles and Challenges for Guidance and Counseling*. Paris: UNESCO.
- Holloway, I., & Wheeler, S. (2010). *Qualitative Research in Nursing and Healthcare*. 3rd Edition. Chichester: Willey & Sons Publishers.
- Hoyt, W., T., & Bhati, K., S. (2007). Principles and Practices: An Empirical Examination of Qualitative Research. *Journal of Counseling Psychology*, 54 (2), 201-210. *https://www.google.fi/webhp?sourceid=chrome-instant&ion=1&ie=UTF-8&rct=j#q=bonn* Retrieved on 1st March, 2015.
- Hunter, L., Emerald, E., Martin, G. (2013). *Participatory Activist Research in the Globalized World: Social Change through the Cultural Professions*. Dordrecht: Springer Science and Business Media.
- IEG & World Bank. (2013). Youth Employment Programs an Evaluation of World Bank and IFC support. Washington DC: World Bank.
- ILO, (2010). General Survey concerning Employment Instruments, first edition. Geneva: ILO Publication.
- Ivankova, N., V. (2015). *Mixed Methods Applications in Research: From Method to Community Action*. Los Angeles: Sage Publications.
- Jackson, S., L. (2011). *Research Methods and Statistics: A Critical Thinking Approach*. Fourth Edition. Belmont USA: Wadsworth Cengage Learnin.
- Jennings, G., R. (2005). Interviewing: A Focus on Qualitative Techniques. In B., W., Ritchie., & C., Palmer., (Eds.). *Tourism Research Methods: Integrated theory With Practice*. Oxfordshire: CABI Publishing.
- Jex, S., M. (2002). *Organizational Psychology: A Scientist-Practitioner Approach*. New York: John Wiley and Sons Publications.
- Joffe, H., & Yardley, L. (2004). Content and Thematic Analysis. In D., F., Marks, & L., Yardley (Eds.). *Research Methods for Clinical and Health Psychology*. London: Sage Publications. pp. 56-66.
- Kamberelis, G., & Dimitriadis, G. (2013). *Focus Groups: From Structured Interview to Collective conversations*. Abingdon: Routledge Publications.
- Kamberelis, G., K., & Dimitriadis, G. (2005). Strategic Articulations of Pedagogy, Politics, and Inquiry. In N., K., Denzin & Y., S., Lincoln, (Eds.). *The Sage Handbook of Qualitative Research*. Third Edition. London: Sage Publication. pp. 887-914.
- Kaplan, L., S., & Owings, W., A. (2002). Teacher Quality, Teaching Quality and School Improvement. Bloomington: Phi Delta Kappa International.
- Karling, G., J. (2008). Participation in Dual Enrolment Vocational program and the Perceived Psycho-Social in Relation to the Educational Engagement of Participating High School Student: A case study in a rural setting. An applied dissertation submitted in partial fulfillment of the degree requirements of Doctor of Philosophy in Educational Leadership and Policy Analysis at the University of Wisconsin Madison.
- Kegan, R., & Lahey, L. (2014). Assessing the Complexity of Teaching. In A., L. Costa, R., J., Garmston, & D., P., Zimmerman, (Eds.). *Investing in Teacher Quality*. New York: Teacher College Press.

- Kellett, M. (2005). *How the Develop Children as Researchers: A step-step- Guide to Teaching the Research Process.* London: Sage Publication.
- Killen, R. (2005). *Programming and Assessment for Quality Teaching and Learning*. Southbank Victoria, Australia Thomson Science Press.
- King, N., & Harrocks, C. (2010). *Interview in Qualitative Research*. London: Sage Publications.
- Konayuma, G., S. (2008). *Policy Framework: Major Policy Issues in TVET in Africa*. Livingstone, Zambia: Gakon Publications.
- Kumar, C., R. (2008). Research Methodology. New Delhi: APH Publishing cooperation.
- Lai-Yeung, S., W., C. (2013). The Need for Guidance and Counselling Traning for teachers. Hong Kong: Procidia-Social and Behavioral Science, 111 (2014). pp. 36-43. ELSEVIER Publications.
- Leonard, E. (2011). Librarian as a Marketer: Learning to Promote Reference and Outreach Service. In Zabel, D. (Eds.). *Reference Reborn: Breathing New Life into Public Services Librarian*. California: ABC-CLIO.
- Li, H. (2013). Educational Change towards Problem Based Learning: An Organizational Perspective. Aaborg: Rivers Publishers.
- Liampittong, P. (2011). *Focus Group Methodology: Principles and Practices*. London: Sage Publications.
- Loucks-Horsley, S., & Stiles, K. (2001). Professional Development Designed to Change Science Teaching and Learning. In J., Rhoton, P., Bowers, P., Shane (Eds.). *Professional Development: Planning and Design*. Arlington: NSTA Press.
- Maclean, R., & Wilson, D., N. (2009). International Handbook for the Changing World of Work: Bridging Academic and Vocational Learning. Vol. Montreal: Springer Science and Business Media.
- Marshall, C., & Rossman, G., B. (2011). *Designing Qualitative Research*. Fifth Edition. London: Sage Publication.
- McBride, P. (1994). Towards a Skill Revolution: A Summary and Critique of the CBI

Report of 1989 in Vocational Aspect of Education. XLII(112).

- McFaland, L. (1994). Vocational Education and Training for Youth: Towards Coherent Policy and Practice, Paris: OECD Publication.
- Mcleod, J. (2011). Qualitative Research in Counseling and Psychology. Second edition, London: Sage Publications.
- Merriam, S., B. (2002). *Introduction to Qualitative Research*. San Francisco: Jossey-Bass Publication.
- Merriam, S., B. (2009). Qualitative Research: *A Guide to Design and Implementation*. San Francisco: Jossey-Bass Publication.
- Miller, J. (2006). Critical Incidence Debriefing and community Based Clinical Care. In A., Lightburn, & P., Sessions, (Eds.) *Handbook of Community-Based Clinical Practice*. New York: Oxford University Press.
- Morgan, G. (2013). Women in TVET: Input into Ghana's COTVET Strategy Dialogue. Global Learning Center. https://www.academia.edu/4351797/Women_in_TVET_Input_into_Ghana_s_COTV ET_Gender_Strategy_Dialogue (Retrieved on 4th June, 2015)
- Morse, J., M., Barrett, M., Mayan, M., Olson, K., & Spiers, J. (2002). Verification Strategies for Establishing reliability in Qualitative Research. *International Journal* of Qualitative Method 2002. 1(2) pp. 13-20.

- Namey, E., Guest, G., Thairu, L., & Johnson, L. (2008). Data Reduction Techniques for Qualitative Data set. In G. Guest, & K., M., MacQueen, (Eds.) *Handbook for Team-Based Qualitative Research*. UK: Altamiral Press.
- Neuman, G., Shavit, I., Matsui, D., & Koren, G. (2014). *Ethics of Research in Pediatric Emgency Medicine*. Vol. 17. Switzerland: Springer Publishers.
- NICHE, (2010). *NICHE Strategy on Technical and Vocational Education and Training* (*TVET*). Netherlands: NUFFIC.
- Nomura, S., & Bruneforth, M. (2011). *Financing Education in Sub-Saharan Africa: Meeting the Chllenges of Expansion, Equity and Quality.* Paris: UNESCO.
- Northhouse, P., G. (2007). Leadership Theory and Practice. Fourth Edition, London:

Sage Publications

- O'Lawrence, H. (2008). Workforce competencies: A Comparison of U.S. and Jamaican Experiences In V., C., X., Wang, & K., P., King, (Eds.). *Innovation in Career and Technical Education: Strategic Approaches towards Work Competencies around the Globe*, USA: Information Age Publishing, Inc.
- O'Hara, P., A. (1999). *Encyclopedia of Political Economy*. New York: Routledge Publication.
- OECD, (2003). *Review of National Policies for Education: Polytechnic Education in Finland.* Paris: OECD Publication.
- OECD, (2008). *Black Sea and Central Asia: promoting Work and Well- being*. Paris: OECD Publication.
- OECD, (2011). Strong performance and Successful Reformers in Education: Lessons from PISA for the United State. USA: OECD, publishing.
- Okolocha., C., C. (2012), Vocational Technical Education in Nigeria: Challenges and Way Forward. *Business Management Dynamics*, 2(6), pp. 1-8.
- Onwuegbuzie, A., J., Dickinson, W., B., Leech, N., L., & Zoran, A., G. (2009). Qualitative Framework for Collecting and Analyzing Data in Focus Group. *International Journal of Qualitative Method*, 8(3), pp. 1-15.
- Opiro, W., G. (2005). *Guidance and Counseling for Primary Teacher Colleagues*. Ministry of Education and Sports, Uganda: Super Project Publications.
- Pahl, J., P., & Rauner, F. (2008). Research in Vocational Disciplines. In F., Rauner, & R., Maclean, (Eds.). *Handbook of Technical abs Vocation Education and Training Researc*. Bremen: Springer Publication.
- Palmer, R. (2009). Initiative to Link TVET to Self-employment in Ghana. In R., Maclean, & D., N., Wilson, (Eds.) *International Handbook of Education for the Changing world of Work: Bridging Academic and Vocational Learning*. (vol. 1). Montreal: Springer Science and Business Media.
- Parker E., L. (2008). Factors that contribute to a Successful Secondary Vocational Education Program in the State of Mississippi. A Dissertation submitted to the Graduate Studies Office in Partial Fulfillment of the requirements for the Degree of Doctor of Philosophy in the University of Southern Mississippi.
- Patton, M., Q. (2002). *Qualitative Research and Evaluation Methods*. Third edition, London: Sage Publications.
- Pawar, M. (2004). A Pluralistic Approach to Data Collection Methods. In M., Pawar, (Eds.) *Data collection Methods and Experiences: A Guide to Social Researchers*. New Delhi: New Dawn Press Group.

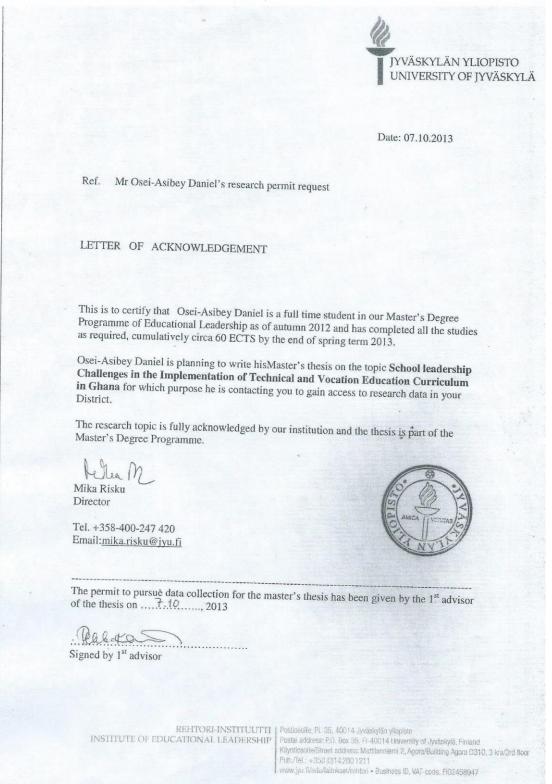
- Payne, J. (1999). *Researching Health Needs: A Community –Based Approach*. London: Sage Publications.
- Polit, D., F., & Beck, C., T. (2014). Essentials of Nursing Research: Appraising Evidence for Nursing Practice. 8th Edition. Philadelphia: Lippincott Williams & Wilkins Publications.
- Pont, B., Nusche, D., & Mooreman, H. (2008). Improving school leadership, OECD
- Pope, C., Mays, N., & Popay, J. (2007). Synthesizing Qualitative and Quantitative Health Evidence: A Guide to Methods. Berkshire: Open University Press.
- Power-deFur L., A., & Overlove, F., P. (1997). *Inclusive Education: Practical Implementation of the Least Restrictive Environment*. USA: An Open Publication.
- Rabiee, F. (2004). Focus-Group Interview and Data Analysis: Proceedings of the Nutrition Society, (63), pp. 655-660
- Radvanovsky, R., & McDougall, A. (2013). *Critical infrastructure: Homeland Security* and Emergency Preparedness. Third Edition, USA: CRC Press.
- Raphael, B., & Wilson, J. (2000). Introduction and Overview: Key Issues in the Conceptualization of Debriefing. In B., Raphael, & J., Wilson, (Eds.) *Psychological Debriefing: Theory, Practice and Evidence*. Cambridge: Cambridge University Press.
- Rauner, F., & Maclean, R. (2008). *Handbook for Technical and Vocational Education and Training research*. Bremen: Springer Publication.
- Richards, J., C., & Farrell, T., S., C. (2005). *Professional Development for Language Teachers: Strategies for Teacher Learning*. Cambridge: Cambridge University Press.
- Richie, J., & Spencer, L. (2002). Qualitative Data Analysis for Applied Policy Research, In A., M., Huberman, & M., B., Miles, (Eds.) *Qualitative Research Companion*. California: Sage Publication.
- Richie, J., Lewis, J., Nicholls C., M., & Ormston, R. (2014). Qualitative Research Practice: A Guide for Social Science Students and Researchers. London: Sage Publications.
- Riele, K., & Brooks, R. (2013). *Negotiating Ethical Challenges in Youth Research*. New York: Routledge Publications.
- Rojewski, J., W. (2004). *International Perspectives on Workforce and Development*. USA: Information Age Publications.
- Ross, K., N., & Hallak, H. (1999). *Needs-Based resource Allocation in Education via Formula Funding of Schools*. Paris: UNESCO.
- Ruth, K. (2008). The Contribution of TVET to Innovative Practices. In F., Rauner, & R., Maclean, (Eds.) *Handbook of Technical and Vocational Education and Training Research*. Netherlands: Springer Publication.
- Sachs, J., & Groundwater-Smith, S. (2006). The Changing Landscape of Teacher Education in Australia. In D., Hartley & M., Whitehead (Eds.) *Teacher Education: Major Themes in Education*. New York: Routledge Publications.
- Sahlberg, P. (2015). *Finnish Lessons: What can the World Learn from Educational Change in Finland?* Second edition. New York City: Teachers College Press.
- Saunders, M., Lewis, P., & Thornhill, A. (2009). *Research Methods for Business Students*. Fifth Edition, Lombarda: Pearson Education.
- Schaffer, U., & Waldeck, T. (2007). *The Effect of Team Composition on Strategic Sensemaking*. Frankfurt: Springer Publications.

- Seddon, T., Fennessy, K., & Ferguson, K. (2009). New Learning Space in TVET: The Contribution of Social Partnership. In M., Maclean, & D., Wilson, (Eds.). *International Handbook of Education for the Changing World of Work: Bridging Academic and Vocational Learning*. Vol. 1.
- Sharma, U., & Sharma S., K. (2007). *Principles and Theory of Political Science*. New Delhi: Atlantic Publications.
- Shenton, A., K. (2004). Strategies for Ensuring Trustworthiness of Qualitative Research Project Education for Information. 22(2). pp. 63-75.
- Simons, H. (2009). Case Study Research in Practice. London: Sage Publications.
- Singgel, E. (2005). *Developing Economics: A policy Analysis Approach*. England: Ashgate Publications.
- Smith, J., A. (1995). Semi-Structured Interviewing in Qualitative Analysis. In J., A., Smith, R., Harre & L., V., Langenhove, (Eds.) *Rethinking Methods in Psychology*. London: Sage Publication. pp. 10-27.
- Smith, S., M., & Albaum, G., S. (2006). Basic Data Analysis. In R., Grover, & M., Vriens, (Eds.) *The Handbook of Marketing Research: Misuses, and Future Advances.* Sage Publications. pp. 195-230
- Strauss, A., L. (1987). *Qualitative Analysis for Social Scientists*. Cambridge: Press Syndicate of the University of Cambridge.
- Stronge, J., H., Tucker, P., D., & Hinderman, J., L. (2004). *Handbook for of Effective Teachers*. USA: ASCD Publications
- Sun, D., Lu, J., & Li, J. (2009). New Policy and Government Role: Chinas Reaction of TVET systems Since the 1980s, In R., Maclean, & D., N., Willson, (Eds.) *International Handbook of Education for Changing World of Work, Vol. 1.* Springer Publication
- Swanborn, P. (2010). *Case Study Research: What, Why and How?* London: Sage Publication.
- Tench, R., & Yeomans, L. (2009). *Exploring Public Relations*. Second Edition, England: Pearson Education Publications.
- Tetter W. J., Puplampu J., P., & Berman B., J. (2003). *Critical Perspectives on Politics* and Socio-economic Development in Ghana. Leiden, Netherlands: Brill publication.
- The World Bank. (2004). Books, Buildings, and Learning Outcomes: An Impact Evaluation of World Bank Support to Basic Education in Ghana. Washington D.C.: World Bank.
- Tierney, W. (2006). *Trust and the Public Good: Examining the Cultural Conditions of Academic Work*. New York: Peter Lang Publications.
- Timmerman, D. (2008). National System of Financing TVET. In F., Rauner, & R., Maclean, (Eds.) Handbook of Technical and Vocational Education and Training. London Springer publication.
- Tomal, D., R., Schilling, C., A., & Wilhite, R., K. (2014). The Teacher Leader: Core Competencies and Strategies for Effective Leadership. London: Rowman & Littlefield Publications.
- Toolsee, A. (2011). Teacher Leadership: Theoretical Foundations in Educational Leadership and Management. Norderstedt: GRIN Verlag, Publications.
- Toom, A., & Husu., J., (2012). Finnish Teachers as Makers of the Many: Balancing between Broad Pedagogical Freedom and Responsibility. In H., Niemi, A., Toom, & A., Kallioniemi, (Eds.) *Miracle of Education*. Rotterdam: Sense Publication.

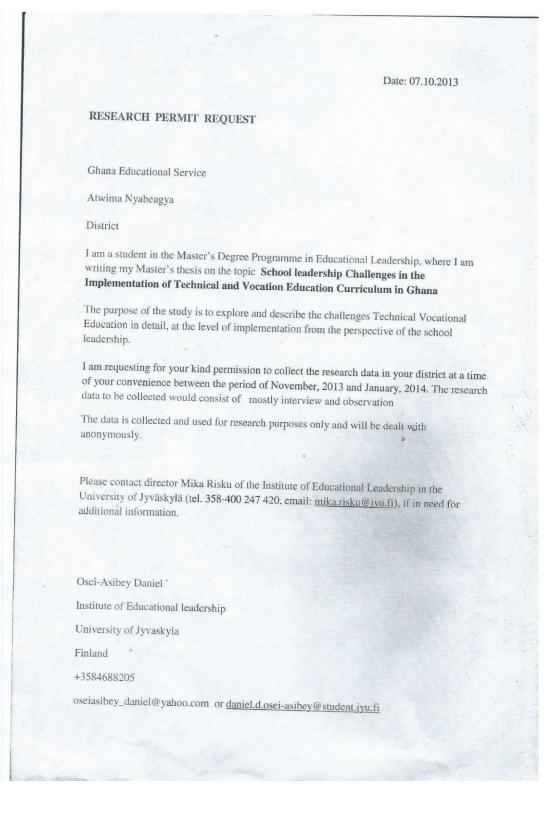
- UNESCO, (2006). World Data on Education. Sixth Edition. Paris: UNESCO Publication. http://www.ibe.unesco.org/en/services/online-materials/world-data-oneducation/sixth-edition-2006-07.html (Retrieved on 1st June, 1015).
- UNESCO, (2012 b). Building Education Finance statistics: Lessons Learnt from the Experiences of Three Latin American countries. Institute for statistics, UNESCO.
- UNESCO, (2012a). World Data on Education. 7th Edition, Paris: UNESCO Publication.
- UNESCO, (2013). Taking Youth Unemployment through TVET: Report on UNESCO UNEVOC online Conference. on 25 June, 2013. Bonn: UNESCO.
- Vaughn, S., Schumm, J., S., & Sinagub, J. (1996). *Focus Group Interview and Psychology*. California: Sage Publications.
- Wang, V., C., X., & King, K., P. (2004). Innovation in Career and Technical Education: Strategic Approach towards Workforce Competencies around the Globe. USA: Information Age publication.
- West-Burnham, J., & Davies, B. (2003). *Handbook of Educational Leadership and Management*. Great Britain: Pearson educational Publications.
- Wiseman, D., G., & Hunt, G., H. (2008). Best Practices in Motivation and Management in the Classroom. Second edition Springfield Illinois: Charles C Thomas Publishers.
- Witte, K., Meyey, G., & Martell, D. (2001). *Effective Health Risk Message: A Step-by-Step Guide*. London: Sage Publications.
- Wolfensohn, J., D. (2004). Books, Buildings and learning Outcomes: An Impact Evaluation of the World Bank Support to Basic Education in Ghana. Washington, D.C., World Bank.
- Xu, M. (2012). Development of Dual Educational System of Germany in China, In W., Zhang, (Ed.) Advanced Technology in Teaching: Selected Papers from 2012 International Conference on Teaching and Computational Science (ICTCS 2012). Berlin: Springer Publication.
- Yin, K., R. (2011). *Qualitative Research from Start to Finish*. New York: The Guilford Press.
- Yin, R., K. (2014). *Case Study Research: Design and Methods*. Fifth Edition, California: Sage Publication.
- Zirkle, C., & Martin, L. (2012). Challenges and Opportunities for Technical and Vocational Education and Training (TVET) in the United States. In M., Pilz (Ed.) *The Future of Vocational and Technical Education and training in Changing World*. Wiesbaden: Springer Publication.

APPENDICES

Appendix 1: Letter of acknowledgement



Appendix 2: research permit request letter from researcher to the district directorate



Appendix 3 Stages in the analysis process (Sampled)

Stge 1: raw transcribed based on similarity of responses by participants

FUNDING

We lack funding, students pay school fees like any other student and the government bring subsidies but it depends on the number of students you have, but concerning funds for only technical students, I'm not aware--- to carry out practical teachers must put down their requisition and hand it over to the HOD, the HOD will then hand it over to the assistant headmaster academic, then it will be passed on the headmaster, he the go through and fund would be released for those items to be purchased. And that is what we have to follow.- funding is not enough, sometimes when you send the requisition you will be told there is no fund, in that case there is little you can do, so you either cut it down or reduce the number of projects you want to do.

The funding, at times the central government will also supply some materials, so that is what I will add. But it is not often, even this year, nothing has been supplied, once a while they supply some materials for the technical department but it is not frequent.

The subsidy is supposed to be regular, that is each term but sometimes two or three terms will pass and it will not be inn, so we have to manage with system.

Infrastructure

We have been given a workshops but most of the equipment are broken and other stolen over the years and getting them replaced is also very difficult so if the government can give us modern equipment like the one in <u>Twene Amanfo</u> it would have been very good, because over there are modern equipment, this can arouse the interest of the students since they can do many things with them.

Stage 2: Coding the summary of main ideas at the margine.

Funding

We lack funding, students pay school fees like any other student and the government _____ Comment [p1]: SAH 1- funding by Parents funds for only technical students, I'm not aware. to carry out practical teachers must put down their requisition and hand it over to the HOD, the HOD will then hand it over to the assistant headmaster academic, then it will be passed on the headmaster, he the gothrough and fund would be released for those items to be purchased.

Funding is not enough, sometimes when you send the requisition you will be told there is no fund, in that case there is little you can do, so you either cut it down or reduce the number of projects you want to do.)

The funding, at times the central government will also supply some materials, so that is what I will add, But it is not often, even this year, nothing has been supplied, once a while they supply some materials for the technical department but it is not frequent.

The government subsidy is supposed to be regular, that is each term but sometimes two or three terms will pass and it will not be inn, so we have to manage with the system

The process of getting funding even in the school is very difficult, very very difficult, for example, when school reopened, we planned getting some material for the students,

Infrastructure

We have been given a workshops but most of the equipment are broken and other stolen over the years and getting them replaced is also very difficult so if the government can give us modern equipment like the one in Twene Amanfo it would have been very good, because over there are modern equipment, this can arouse the interest of the students since they can do many things with them

Infrastructure

We have serious infrastructural challenges, you can just look around over hear we have metal work, building and construction, woodwork, electricals and we have auto mechanics. Out of these five it is only woodwork and metal work that has workshops. So in terms of infrastructure we have serious problems and even those that have workshops, how equipped and spacious are they?

The studio for visual Art students have been turned to classroom so now there is studio for practicals and this is a big challenge for us again there is nothing like kiln for sculpture, when we do clay works we have to go outside for kiln to fire our works, there are no tools for us to calve our works, for example wood calving, there are only two vices that was meant for the few students who actually started this school but the number have grown to a certain level which require additional tools and other

Comment [p54]: SBH1 Small workshop space Comment [p55]: SBH1 obsolete and broken Comment [p56]: SBH1 Demotivation of students due to the dysfi onal and obsolete nature of the tools and equipment Comment [p57]: SBT 2 Lack of workshops for TVET courses

Comment [p3]: SAH 2 High bureaucracy in

Comment [p4]: SAH 2 Frustration in securing

Comment [p5]: SAH 2 Government inconsistent supply of teaching and learning material for practical lessons

Comment [p6]: SAH 2 Delay in provision of

Comment [p7]: SAT 1 Difficulty in getting funds

haidies by g

the school l

Comment [p53]:

funding due to inadequate funds

securing fu

Comment [p58]: SBT1, the continuous con version of workshops to classrooms due large school population growth shows the disregard for the program by school leadership

Comment [p59]: SBT3, the problem of transporting students from one place to another for lessons has its own difficulty since the time table does not make provision for it Stage 3: grouping the coded summaries based on similar pattern of responses and theming them at the right side.

Funding

1-SAH 1- funding by Parents is not enough

15-SBT 3 government subsidies for TVET students is not adequate and regular

2-SAH 1 Government funding is not reliable

3-SAH 2 High bureaucracy in securing funds

4-SAH 2 Frustration in securing funding due to inadequate funds in schools

6-SAH 2 Delay in provision of subsidies by government

10-SBH 1 annual **Subsidies** and scholarship scheme for TVET students is not dependable

7-SAT 1 Difficulty in getting funds at the school level

9-SAT 2, unfair Modalities of funds disbursement

11-SBH 1 the numbers of TVET student influence the funding of the program negatively

17-SBT3 Teachers lack the capacity to initiate fund generating lessons / activities

12-SBH1 alternative sources of funding does not receive support from authorities

13-SBT 1 Student fund practicals themselves which is not good enough

14-SBT 2 non-availability of funds specifically for TVET

16-SBT 2 internally generations of funds by the students through the TVET is not supported

19-SCT2 little or no knowledge about **funding** sources except that from **student**

Lack of adequate funding

Lack of infrastructure, tools and equipment

Tools and equipment / Infrastructure

50-SAH2, some course are resourced enough

51-SAH2, most of the courses sunned the TVET department are heavily under resourced

52-SBT1, unavailability of workshops and teaching and learning materials

53-SBH1 Small workshop space

54-SBH1 obsolete and broken down machines and tools

55-SBH1 Demotivation of students due to the dysfunctional and **obsolete nature of the tools and equipment**

56-SBT 2 Lack of workshops for TVET courses

57-SBT1, the continuous con version of workshops to classrooms due large school population growth shows the disregard for the program by school leadership

59-SBT3 **insufficient tool** for the increasing number of students

61-SCT1 Lack of workshops for all TVET courses

58-SBT3, the problem of transporting students from one place to another for lessons has its own difficulty since the time table does not make provision for it

63-SCT3, Ill resourced workshop

66-SCT3, the state of **infrastructure** gets worse the more deprived the school community is

67-SCT2, material and infrastructure are relatively bad at the rural areas depends on the location of the school

69-SCT1 Student feel reluctant in releasing their tools and equipment for practical work

68-SCT1 the school relies on students for the provision of basic tools and equipment

64-SCT 4, the problem of infrastructure in terms of, classrooms, workshops and equipment

71-SBT 1, Insufficiency of tools and equipment

142-SBT3, **lack of tools and equipment** or practical lessons has compelled teachers treat the courses like a theory based one

140-SBT1, Delay in the supply of TLMs

Teacher Quality

98-SCH2, too much attention is given to pedagogy

95-SCT3, there is too much **emphasis on theories** during our training but the teaching demands more practical, so teachers are ill equipped

94-SCT3, teachers have no option but to deliver theoretical due to the training they get at the universities

92-SCT2, the training received at the universities **is theory based** but the syllabus demands practical based teaching

73-SAH1, the quality of the teachers is not up to the expected

74-SAH1,

75-SAH1, TVET teachers training now is not enough

76-SAH2, Teachers have very little or no **practical experience**

77-SAT1, about 65-70% of the re required training of TVET teachers is received

78-SAT2, **the materials** used **during training** are old fashioned and the knowledge obtained is already outmoded

86-SCT2, the **training teachers receive** at the universities do not match with the **expectations at the secondary** schools

80-SAT2, Old ideas are still regenerated in teachers training schools and the universities

85-SCH1, teachers lack the needed skills to motivate the students

87-SCH2, the exposure teachers receive is **inadequate**, at the **training** institutions

82-SAT3, the scope of the teachers training is too broad

90-SCH2, the training teachers get is inapplicable in today's world of technology (**nature of training**)

83-SCT1, the scope of the technical teacher education itself is an impediment to the quality of teachers produced

108-SCH1, Most of the teachers lack the **basic practical knowledge** to deliver their lessons effectively