# CHALLENGES FACING THE ENTRY OF GRADUATES OF TECHNICAL TRAINING INSTITUTIONS INTO SELF-EMPLOYMENT: THE CASE OF NORTH RIFT REGION

**KIBOI JAPHETH MANURA**

**THESIS SUBMITTED TO THE SCHOOL OF EDUCATION IN PARTIAL FULFILMENT OF THE REQUIREMENT OF THE AWARD OF THE DEGREE OF MASTER OF EDUCATION IN TECHNOLOGY EDUCATION**

**UNIVERSITY OF ELDORET, KENYA**

**JUNE, 2017**

## DECLARATION

**Declaration by the Student**

I, the undersigned, declare that this thesis report is my original work and has not been presented for a degree in any other University .No part of this thesis may be reproduced without the prior written permission of the author and /or University of Eldoret.

**Name…KIBOI JAPHETH MANURA……..**

**Sign…….**

**Date……10/10/2017……**

**Reg No…EDU/PGT/1004/12……**

**Declaration by the supervisors**

This thesis has been submitted for examination with our approval as university supervisors:

**…….**

**Dr. Ahmed K. Ferej** **Date ……**

**Department of Technology Education**

**University of Eldoret, Kenya**

**……..**

**Dr. Herbert O Dimo** **Date ……**

**Department of Technology Education**

**University of Eldoret, Kenya**

## DEDICATION

This thesis is dedicated to lecturers in the School of Education, department of Technology Education for giving me the opportunity to pursue graduate studies, my fellow graduate students and my family for inspiring me to accomplish this thesis.

## ABSTRACT

The importance of Technical and Vocational Education and Training (TVET) in nation building and economic development cannot be over-emphasized. Without the skilled technical manpower produced by vocational and technical institutes, industrial development would virtually grind to a standstill. TVET, if made affordable and widespread, can greatly reduce unemployment rates by giving people useful, skills for self-employment. Technical education can greatly improve efficiency in industry and can lead to brilliant innovations. The overall research problem addressed in this study is that despite an increase in the number of unemployed TVET graduates in the automotive field in Kenya's labor market, few enter self-employment. The purpose of this study was to explore and describe the challenges confronting TVET graduates wishing to enter self-employment in the North Rift region of Kenya. Focus will be based on trainees in their final year of study and graduates who have completed their courses specifically in automotive engineering and are out seeking employment in the formal and informal sector. The study was guided by the following specific objectives; establish whether technical knowledge and skills acquired during training at TVET institutions adequately prepared automotive graduates for self-employment; establish whether entrepreneurial knowledge and skills learnt at TVET institutions adequately prepared automotive graduates for self- employment; establish the effectiveness of the industrial attachment placement in imparting hands on skills necessary for self- employment and to establish availability of government support to those who become self-employed. The study adopted a survey research design with a total sample population of 250 respondents. Questionnaires were the main instrument used for data collection. Data gathered was analyzed using descriptive statistical analysis. Out of a total of 250 sampled respondents, 120 were instructors while 130 were graduates, where an overall total of 230 questionnaires were returned. The results show that the course content in automotive courses was a challenge and should be reviewed to match the developments in technology in the motor vehicle industry. Another challenge identified by the study was the low rate of employment after completing their courses. Further, despite the industrial attachment providing practical skills to trainees, the attachment was found to be insufficient and should also include experiences in the Jua Kali sector as well. Another challenge was the inadequate knowledge of Youth Enterprise Development Fund (YDEF) and Uwezo funds and the existence of the government policy to award 30% of all government tenders to women and the youth. Finally there was no provision for TVET graduates to acquire small tool kits loans for business start-ups. The study recommended that both industry and TVET institutions should work together to create opportunities for comprehensive internship programme for students and that the Government should set up start-up loans for graduates willing to enter self-employment.

## TABLE OF CONTENTS

DECLARATION ..... II

DEDICATION ..... III

ABSTRACT ..... IV

LIST OF TABLES ..... X

ACKNOWLEDGEMENTS ..... 1

**CHAPTER ONE ..... 2**

**INTRODUCTION TO THE STUDY ..... 2**

1.0 Overview ..... 2

1.1 Background of the Study ..... 4

1.2 Statement of the Problem ..... 5

1.3 Purpose of the Study ..... 7

1.4 Significance of the Study ..... 8

1.5 Objectives of the Study ..... 8

1.6 Research Questions ..... 9

1.7 Conceptual Framework ..... 9

1.8 Limitations of the Study ..... 10

**1.9 OPERATIONAL DEFINITIONS OF TERMS ..... 11**

**CHAPTER TWO ..... 13**

**LITERATURE REVIEW** ..... **13**

**2.0 Introduction** ..... **13**

2.1 TVET global perspective ..... **13**

2.2 TVET - African and Kenyan perspectives ..... **14**

2.3 Technical knowledge and skills ..... **16**

2.4 Self-employment ..... **18**

2.5 Entrepreneurial Knowledge and skills for self- employment ..... **20**

2.6 Effectiveness of industrial attachment in imparting hands-on-experience ..... **21**

2.7 Government initiatives to support TVET graduates in self-employment ..... **23**

2.7. 1 Youth Enterprise Development Fund. ..... **24**

2.7.2 Establishment of Industrial and Business Incubators ..... 24

**2.7.3 Investment strategy** ..... **25**

**2.8 Summary** ..... **26**

**CHAPTER THREE** ..... **27**

**SEARCH DESIGN AND METHODOLOGY** ..... **27**

3.0 Overview ..... **27**

3.1 Scope of the study ..... **27**

3.2 Research Design ..... **28**

3.3 Population and Sample ..... **28**

3.4 Sampling Techniques ..... **29**

3.5 Sampling Adequacy ..... **30**

3.6 Data Collection Instruments ..... **30**

3.7 Validation ..... **31**

3.8 Data Collection Procedure ..... **31**

3.9 Data Analysis ..... **32**

3.10 Ethical Considerations ..... **32**

**CHAPTER FOUR** ..... **33**

**DATA ANALYSIS AND INTERPRETATION OF RESULTS** ..... **33**

**4.0 Introduction** ..... **33**

4.1 Response rate ..... 34

4.2 Reliability Analysis for the Study Variables ..... 34

Table 4.2: Reliability analysis of variables ..... 35

4.3 Demographic Information of Instructors ..... 35

4.5 Technical knowledge and skills ..... 39

4.6 Entrepreneurial knowledge and skills ..... 43

**CHAPTER FIVE** ..... **55**

**SUMMARY, CONCLUSION AND RECOMMENDATIONS** ..... **55**

5.0 Introduction ..... **55**

**5.1 Summary of Findings** ..... **55**

**5.2 Discussion of findings** ..... **57**

**5.2.1 Technical knowledge and skills** ..... **57**

5.2.2 Entrepreneurial Knowledge and Skills ..... 58

5.2.3 Industrial attachment effectiveness ..... 59

5.2.4 Availability of government support ..... 60

**5.3 Conclusion** ..... **60**

**5.4 Recommendations** ..... **61**

**REFERENCES** ..... **63**

**APPENDICES** ..... **68**

**APPENDIX II: NACOSTI PERMIT** ..... **85**

**APPENDIX III: NORTH RIFT MAP** ..... **86**

## LIST OF TABLES

Table 4.1: Response rate ..... 34

Table 4.2: Reliability analysis of variables ..... 35

Table 4.3: Gender of instructors ..... 35

Table 4.4: Gender of final-year trainees and graduates ..... 36

Table 4.5: Level of professional qualification ..... 36

Table 4.6: Teaching experience of instructors ..... 37

Table 4.7: Current responsibility of instructors ..... 39

Table 4.8: Technical knowledge and skills ..... 40

Table 4.9: Technical knowledge and skills of final year trainees and graduates ..... 42

Table 4.10: Entrepreneurial knowledge and skills of instructors ..... 44

Table 4.12: Industrial attachment effectiveness ..... 47

Table 4.13: Industrial attachment effectiveness on final-year students and graduates ..... 49

Table 4.14: Tutors opinion on availability of government support ..... 51

Table 4.15: Trainees and graduates' opinion on availability of government support ..... 53

## ACKNOWLEDGEMENTS

I am deeply indebted to the University of Eldoret for giving me the opportunity to pursue graduate studies. My appreciation also goes to my supervisors Dr Ahmed Ferej and Dr Herbert Dimo for the guidance and commitment rendered to me during the course of my studies not forgetting my family and colleagues for their support.

# CHAPTER ONE

# INTRODUCTION TO THE STUDY

## 1.0 Overview

The importance of Technical and Vocational Education and Training (TVET) in nation building and economic development cannot be over-emphasized. TVET has been recognized as constituting a vital segment of the educational system and human resource development initiative for producing the requisite skilled manpower needs for a country's overall development (Baah-Wiredu, 2008). Indeed, technical and vocational education is a major avenue for industrial development as well as for economic and social progress of any country. It is TVET that produces the critical mass of the requisite skilled, technical and professional manpower needed for national development and industrialization. Without skilled technical manpower produced by vocational and technical institutes, technical development would virtually grind to standstill. One of the most important features of TVET is its orientation towards the world of work and the emphasis of the curriculum on the acquisition of employable skills.

TVET can be delivered at different levels of sophistication implying that TVET institutions can respond to the different training needs of learners from different socioeconomic and academic backgrounds, and prepare them for gainful employment and sustainable livelihoods. The youth, the poor and the vulnerable of society can therefore benefit from TVET to improve their livelihoods. A number of African governments have adopted TVET reforms since1994.The increasing importance that African governments including the Government of Kenya now attach to TVET is reflected in the various Poverty Reduction Strategy Papers, National Development Plans and Vision Papers that governments have developed over the years (Konayuma, 2008).

TVET, if made affordable and accessible, can greatly reduce unemployment rates by giving people useful, income generating skills for self-employment. Technical education can greatly improve efficiency in many industries and can lead to brilliant innovation in others (such as renewable energy). In other words, it provides an opportunity for the youth to be self-employed and an avenue to be self-reliant in developing themselves and contributing their quota to the development of the country. Nevertheless, TVET has sometimes become a tool for addressing the economic, political, and social crises that are threatening political and economic stability of Kenya. Rising unemployment, lack of skilled workers, high dropout rates, and the changing demographic nature of the work force have placed the issue of workforce education high on the educational reform agenda. Traditionally, technical and vocational education is intended to prepare students for specific skills. However, in the present work environment, workers are expected to perform more broadly-defined jobs. Therefore, a broad-based education is required. In the new economic environment, technical and vocational education is expected to produce an educated, skilled, and motivated work force who can engage in self-employment (Seng, 2004).

An outstanding human capital assumption is that after finishing formal tertiary education, graduates should be able to make a successful transition from these institutions of higher learning to become productive workers, self-reliant entrepreneurs, responsible parents, good citizens, selfless leaders, and live healthy lives (King& McGrath, 2004).King and McGrath (2004) further assert that after graduation, young people can then develop additional skills through training and experience that could further enhance their opportunities, capabilities and second chances in life. The introduction of microelectronics, automotive scanners, internet and computers calls for training and

development of competent youths who are equipped with the various skills needed by the market. King and McGrath (2004) argued that with TVET being more diverse because of the changes in the labour market, it should be able to integrate the youth into the working world. Given the prevailing economic trend, UNESCO (2004) identified the two major objectives of TVET as the urgent need to train the workforce for self-employment and the necessity to raise the productivity of the informal sector. They point out that lack of resources have led to cuts in the volume of training provided in public institutions. These cuts are a hindrance to pursuing the critical objectives of providing training and raising production. Considering the expensive nature of TVET as a form of education, it is imperative that an expanded system with necessary and adequate facilities and equipment would lead to the effectiveness of the system.

### 1.1 Background of the Study

The informal sector locally referred to as the Jua Kali sector, since first recognized in the early seventies has become a growing destination of employment for large numbers of youth as well as older workers pursuing self-employment and job satisfaction. About two-thirds of Kenya's population is of working age and 12.7% of them are unemployed. About 80% of Kenya's unemployed are between 15 and 34 years of age. The highest unemployment rates are for people around 20 years old, at 35 % (UNDP, 2013). Initially viewed as a safety net for those unable to secure formal employment in established formal companies and other government entities, the image of the Jua Kali sector has changed with time as well as the education level of those entering the sector. The role of TVET in furnishing skills required to improve productivity, raise income levels and improve access to employment has been widely recognized (Bennel, 2009). Training in automobile mechanics is one of the training programmes offered in TVET institutions. TVET

according to most government national development plans such as Vision 2030 and sessional papers (sessional paper No. 14 of 2012 ) is expected to play the following two major roles; firstly to provide training opportunities and career advancement avenues for the increased number of school levers while the second role is to produce competent and skilled manpower capable of meeting the job challenges of technologically dynamic industry needed at all levels of the economy which should be able to lead to self-employment in the absence of salaried employment and enhance Kenya's industrialization process (Ngerechi, 2003). However, challenges faced by TVET graduates wishing to enter the informal sector as self-employed persons remain un-tackled. This study was informed by the fact that despite about 49.7% of graduates equipped with TVET training and holding certificates and diplomas and aged between 21 and 35, only 9.2% got absorbed in the informal sector annually (Kaane, 2014).

From the above observation the percentage joining the automotive sector is even lower. The question that the study seeks to answer is why a large proportion of TVET graduates especially in automotive doesn't venture into Jua kali sector as self-employed persons? Field (2013) observes that in Sub-Saharan Africa, self-employment accounts for 66% of total employment in Kenya, 83% in Mali and 85% in Madagascar and Ghana respectively. Despite these numbers, there are still few TVET graduates who engage in self-employment.

### 1.2 Statement of the Problem

The overall research problem addressed in this study is that despite an increase in the number of trainees in the automotive field joining the unemployed in Kenya's labor market, few enter into self-employment. Public tertiary institutions with technical and

vocational programs have played a small role than might be anticipated in preparing workers for informal sector employment, (Atchoarena *et al,* 2001).If the national goal of promoting youth enterprise through the entrance of TVET trainees into the informal sector is not urgently reviewed, then the whole purpose of TVET training in self-reliance and poverty reduction would be defeated. This in the long run would impact negatively on self-employment. Scholars including (Limatainen,2002), have shown that training offered in public TVET institutions is considered theoretical in focus without sufficient opportunities for practice and is biased towards formal wage sector. Many TVET systems fail because they focus on the needs of the formal economy contrary to a common tendency distinguishing the formal economy from the informal economy and developing different approaches for each of these sectors (Rioust, 2009). Although training continues to be carried out in these institutions with trainees expected to join the Jua kali sector upon completion of their courses by virtue of skills acquired, challenges facing TVET graduates entry into the sector have not been fully assessed(Rioust, 2009).

According to Johnson *et al*, (2003), World Bank review of skills development in Sub-Saharan Africa reveals that the existing public technical and vocational education and training (TVET) in Kenya suffers from critical problems including the decline in quality, lack of relevance to occupational and social realities, under enrollment and underfunding. This suggests that Kenya faces a difficult future because the importance of competency based training and skills tailored towards industry needs cannot be overemphasized as it is the expertise and technology that differentiates between the developed and the developing countries like Kenya. However, since TVET is designed to prepare individuals for self-employment and wage employment, it was necessary to establish the challenges facing TVET graduate's entry into self-employment. Youth unemployment in Africa has become a major development issue and they account for 60% of the

unemployed (African Development Bank/OECD, 2010). Large numbers of young people who are not in employment, training, or education are a threat to national security concern as witnessed in Kenya during the post-election violence of 2007/2008 general elections. Unemployed youth are likely to be recruited into armed gangs and are also easy targets for illicit activities such as drug trafficking, cyber -crime (Adams, 2008, World Bank, 2008). Youth unemployment in Kenya and other African countries is compounded by substantial levels of underemployment and poor quality jobs in the informal sector. This situation presents the youth as needy, helpless and unprepared to make any contribution to national development affaires and is consequently marginalized in national state policies and has a weak legal position (Abbink *et al*, 2005).

In spite of the contribution that TVET can make in developing the formal and informal economy, not much has been done to address the challenges the graduates' face in order for it to be more beneficial to the formal and informal sector of economy and more importantly to engage in self-employment. This study aims to explore the challenges facing the entry of graduates of technical institutions into self- employment.

### 1.3 Purpose of the Study

The purpose of the study was to explore the challenges confronting TVET graduates wishing to enter self-employment in the North Rift region of Kenya. Focus will be on trainees in their final year of study in Technical Training Institutes and those who have completed their courses specifically in automotive engineering and are out seeking for employment in the formal and informal sectors as well those who are already self-employed.

## 1.4 Significance of the Study

The findings of this study should help to enhance better understanding of what influences graduates' entry into self-employment particularly in the informal sector as well as what contributes to their success and should provide feedback for curriculum developers, TVET instructors and policy makers. This will pave the way for redrafting national education policies to put in place mechanisms to make TVET training relevant to the ever changing labor market and to meet quality standards acceptable in the local industry. The feedback will provide periodic review of the curriculum in partnership with labour market stakeholders to include entrepreneurial skills in training and ensure TVET instructors and trainees undergo enterprise- based internships for work place on-the-job experience.

## 1.5 Objectives of the Study

The specific objectives of the study were to:

Establish whether technical knowledge and skills acquired during training at TVET institutions adequately prepared automotive graduates for self-employment.

Establish whether entrepreneurial knowledge and skills acquired at TVET institutions adequately prepared automotive graduates for self- employment.

Establish the effectiveness of industrial attachment placement in imparting experiences necessary for self- employment.

To establish availability of government support to those who become self-employed.

## 1.6 Research Questions

Specifically this study attempted to answer the following questions:

Does the technical knowledge and skills acquired during training at TVET institutions adequately prepare automotive graduates for self-employment?

Does the entrepreneurial knowledge and skills acquired during training at TVET institutions adequately prepare automotive graduates for self-employment?

Is the industrial attachment effective in preparing automotive graduates for self-employment?

What government support programmes exist to assist TVET automotive graduates who enter self- employment?

## 1.7 Conceptual Framework

The conceptual framework was developed to help the researcher perceive the interrelationships between the study variables. Technical knowledge and skills, entrepreneurial knowledge and skills, effectiveness of industrial attachment placement and availability of government support were treated as the independent variables that determine the number of graduates entering self-employment (the dependent variable). Thus the diagrammatic conceptual framework is as shown in figure 1.1.

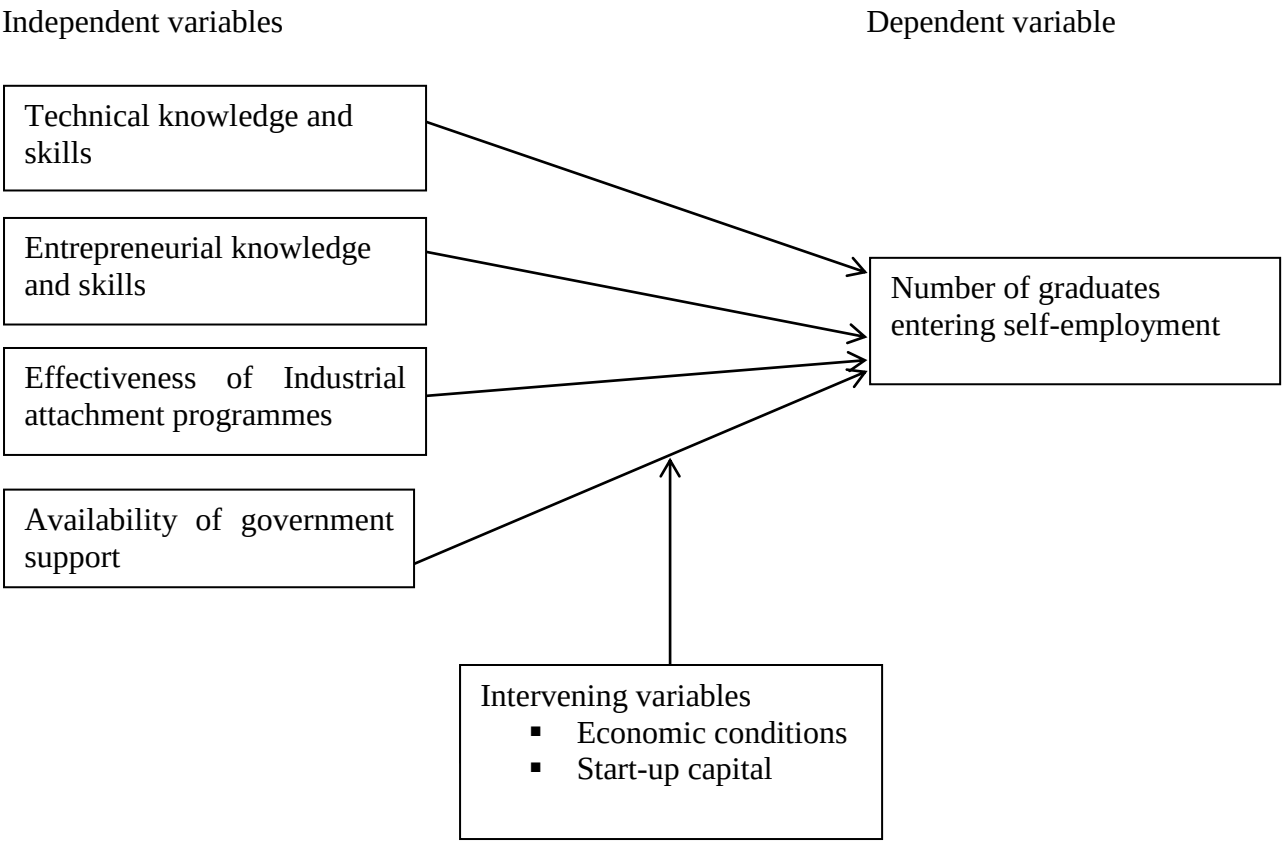



**Figure 1.1: Conceptual Framework**

**(Source: Author ,2015)**

### 1.8 Limitations of the Study

The following were the limitations of this study:-

The study was limited in terms of its generalizability to the total TVET graduates in technical training institutions. While the study sample was quite diverse, the fact remains that certain segments of the TVET graduates were not included.

A second potential limitation of the study was that the independent and dependent variables were measured as subject's perception, not actual behavior.

A third limitation was that anytime the instrument was used, the results were subject to the known reliability and validity of that instrument. Although some information about the instrument with regard to reliability and validity was known, the instrument may have

limitations in measuring what they purport to measure. Only subsequent research with other audiences and with other instruments will help further our understanding of the concepts being measured in the study.

Self-rating bias is a concern when participants are given self-appraisals. Individuals have difficulty rating their behavior with accuracy. Individuals may overrate or underrate themselves.

## 1.9 OPERATIONAL DEFINITIONS OF TERMS

**Industrial Attachment:** an Industrial Attachment is a structured, credit-bearing work experience in a professional work setting during which the student applies and acquires knowledge and skills. It involves the application of learned skills in an organization related to the students' major.

**Informal sector**: The informal sector captures one type of activity in informal employment – work that takes place in unincorporated enterprises that are unregistered or small. Unlike the formal economy, activities of the informal economy are not included in the gross national product (GNP) and gross domestic product (GDP) of a country. It is the portion of a country's economy that lies outside of any formal regulatory environment (Meier & Rauch, 2005).

**Jua kali**: hot sun (in Kiswahili), or working under the hot sun. This term is used interchangeably with informal sector in Kenya.

**Self-employment:** Self-employment is a situation in which an individual works for himself or herself instead of working for an employer that pays a salary or a wage. A self-employed individual earns their income through conducting profitable operations from a trade or business that they operate directly (Rupasingha, 2011).

**Technical Skills:** Technical skills are the knowledge and capabilities to perform specialized tasks. Technical skills are those abilities acquired through learning and practice. They are often job or task specific; in other words, a particular skill set or proficiency required to perform a specific job or task (Ighelogbo, 2016).

# CHAPTER TWO

# LITERATURE REVIEW

## 2.0 Introduction

This section examined studies and literature that have been written on the quality, relevance and adequacy of technical knowledge and skills, entrepreneurial knowledge and skills supplied by TVET institutions. The section also examined the linkage between TVET institutions and industry as well as availability or non- availability of government support to TVET graduates. The literature was expected to give an insight on challenges facing the entry of graduates of technical institutions into self- employment in the North Rift.

## 2.1 TVET global perspective

TVET was regarded as a core component of the National Development Strategy in the international community prior to the 1980's but gradually lost funding due to budgetary pressures which resulted in many countries reducing the share of government budgets for public education including formal TVET. Also rate of returns studies showed that returns to general education were higher than TVET which further undermined external support for TVET (Africa Economic Outlook, 2015). However, 21$^{st}$ century's need for new skills to match advances in information and communication technology has initiated the return of TVET to the international agenda (Joo [.n.d] WBI website accessed in February 2010). Indeed the capacity of any country to attract appropriate and relevant investment is dependent on the pool of skills available (Brown *et al*. 2001).

TVET is regarded as an instrument for creating new employment opportunities and income generation activities in the formal and informal sectors of the economy, the need for which has become more acute due to financial crisis. TVET can play an important role in economic development and poverty reduction if due attention is given to customizing or targeting education and training to local needs (Netherlands Organization for International Co-operation in higher education, 2010).

Skill acquisition by TVET graduates enhances their employability both in the formal as well as the informal sector as both as employed and self- employed persons. The informal economy in Kenya comprises close to 75% of all employment and creates about 90% of all new jobs annually (GoK, 2005). According to ILO (2010), youth make up 60% of the working age in Africa and many of them are unemployed. To improve employment for young people in Africa, governments are assessing ways of developing skills through technical vocational education and training (TVET) programs. Throughout the world and in particular the countries of sub- Saharan Africa, governments are renewing efforts to promote Technical and Vocational Education and Training ( TVET) with the belief that skill formation enhances productivity and sustains competitiveness in the global economy (Atchoarena & Delluc, 2008).

**2.2 TVET - African and Kenyan perspectives**

A number of African nations have adopted TVET reforms since 1990s and this has resulted in the formulation of TVET policies (Konayuma, 2008). The trend in Africa South of the Sahara, according to research, is that it has attracted increasing attention in recent years because most governments recognize the expectations that practical skills training as offered by a number of TVET institutions effectively addresses

the need of skilled labor, artisans and technicians(King, 2006). According to Bhuwanee (2006), in recent years, concerns have been raised by most African countries about the move towards making TVET complementary to post-basic education. Abban and Quarshie (1996) pointed out that the paradigm shift towards practical skills training with TVET in Africa is increasingly being reshaped to make it more attractive, efficient and effective. One of the most important features of TVET, as recognized by African governments, is its orientation towards the world of work with the curriculum emphasizing the acquisition of employable skills (AU, 2007). King (2006) noted that TVET in Sub-Saharan Africa attracted increasing attention during the 1970s, because of the expectations that practical skills training as offered by TVET institutions would address the need for skilled labour. As a result of these developments, many African governments started technical and vocational education institutions modeled after those of their former colonial powers. The technical skills acquired were supposed to raise individuals' job prospects and productivity.

However, it seems there is a greater variance between what institutions are producing and what industry and commerce demands due to the fact that there is no symbiotic relationship between the two. Atchoarena and Esquieu (2009) maintain that as result, TVET institutions continued to attract a great deal of criticism. They maintain that TVET institutions are not able to train skilled workers with competencies that effectively meet the occupation's requirements of industry and are at times unaware of the need for continuing education. It also goes without mentioning that graduates of these institutions are part of the unemployed in most countries (Atchoarena and Esquieu, 2009).TVET play an integral role in the growth and development of human capital and the economy. TVET provide an opportunity for the youth to be self-employed and an

avenue to be self-reliant in developing themselves and contributing their quota to the development of the country.

### 2.3 Technical knowledge and skills

Within the early 1990's numerous concerns were raised about the effectiveness of TVET In Ghana (Nyakov, (2006) summarized these concerns as ; poor quality in the delivery of TVET programs, high cost of training, training not suited to actual socio-economic conditions, disregard of the needs of the informal sector, disregard of the labor market and high unemployment rates among graduates. In an attempt to address the above challenges Reddan *et al* (2010) argued that TVET institutions need to restructure their programs to be responsive to the needs of the job market especially provision of relevant skills needed in industry. To achieve this goal, TVET curricular must focus on the outcomes in terms of knowledge, skills and attitudes required in industry and the necessity to raise the productivity of the informal sector. They pointed out that lack of resources have led to cuts in the volume of training provided. King *et al* (2004) opined that with TVET being more diverse because of changes in the labor market it should be able to integrate the youth into the working world. Given the prevailing economic trend, UNESCO (2004) identified the two major objectives of TVET; to train the work force for employment in public institutions and self-employment.

Abban *et al*, (1996) opined that the paradigm shift towards practical skills training with TVET in Africa is increasingly being reshaped to make it more attractive, efficient and effective. One of the most important features of TVET, as recognized by African governments, is its orientation towards the world of work with the curriculum emphasizing the acquisition of employable skills.

TVET in Kenya is aimed at providing increased training opportunities for school leavers to enable them be self-supporting. A study carried out in Kabete Technical Training Institute by Owiti (2013) on assessing the causes of unemployment amongst TVET graduates in Kenya, reached the following conclusions; unemployment rates among TVET graduates were found to be very high as compared to graduates in other fields, most of the graduates and final year students aspired to start their own businesses on finishing training, there were no formal market surveys that were carried out before introduction of the courses, the use of outdated equipment in practical lessons resulted in acquisition of skills that were not directly applicable in the job market and hence graduates required retraining after graduation , support offered was not adequate to facilitate job linkages or business startups for the graduates, lack of relevant skills were predominant challenges faced by graduates during job searches and lack of experience and limited employment opportunities. A common criticism of the formal vocational education and training system, particularly the component covered in TVET institutions, is the relevance of the content matter. Content is often not matched to local needs and conditions.

Graduates of the systems therefore tended to be versed in operations and processes that are non-existent in many small enterprises, less so the informal or self-employment sectors (ILO, 2008). In addition, the TVET sub sector in Kenya is facing challenges posed by an inflexible and outdated curriculum, a mismatch between skills taught and those demanded by the industries, an inadequate quality assurance mechanism, inadequate physical and learning resources and low participation of the private sector, which is necessary to bridge the school to work gap and prepare graduates for employment in the formal and informal sectors of the economy (Aduda, 2006). Scholars including (Palmer, *et al*, 2007) have opined that the training provided by TVET in other

Sub-Saharan Africa countries like Uganda did not prepare graduates to tackle unfamiliar tasks. There was a glaring absence of the much needed integration of entrepreneurship and generic skills in the actual delivery of learning sessions.

The graduates felt that a narrow curriculum coupled with inappropriate teaching and preparation for the real world of work is a serious impediment to their efforts to secure and retain wage or self-employment asserts (Jjuuko, 2010). In conclusion, TVET is widely recognized as having a key role to play in tackling youth unemployment. TVET's orientation towards the world of work and the acquisition of employable skills means that it is well placed to overcome the skills mismatch issues that have impeded smooth education to employment transitions for many young people. Recent evidence suggests that TVET yields higher returns than either general secondary education or higher education, mainly because its focus is on providing work - relevant skills (Kuepie *et al*, 2009; Herschbach, 2009), but the literature on the relevance, quality and adequacy of training supplied by TVET institutions shows that the system as it is does not prepare graduates adequately for self-employment.

### 2.4 Self-employment

Self-employment provides a non-market value, and a perceived benefit of being ''one's own boss'' as measured by earlier studies (Goetz and Debertin, 2001; Hamilton, 2000; Van Praag and Versloot, 2007). More entrepreneurs mean more innovation and new ways of organizing production. People do not only provide themselves with employment, they also employ others. This creates economic growth and the larger number of self-employed will increase competition and efficiency. Taken together, this will increase the real incomes in society. For example, individuals wanting flexible working hours might

choose self-employment if a paid employment contract offering sufficient flexibility is unavailable. For some, self-employment may be chosen as the only available alternative to unemployment. Indeed in many developing economies self-employment may be viewed as a form of informal sector employment activity. Frey and Benz (2003) assessed the level of job satisfaction of the self-employed compared to those in organizational employment using individual-level longitudinal data for Germany, Switzerland and the UK. Although these data sources are not specifically concerned with explicit motivations for choosing self-employment, the authors are able to conclude that higher levels of subsequently reported job satisfaction amongst those transitioning into self-employment are associated with an absence of hierarchy and sense of independence, as proxied by the size of the former employer.

However, being self-employed requires a personal commitment that is greater than what most jobs will generate. This can mean very long hours, many days of each week, and be an enormous source of pride. Self-employment is sometimes perceived to be a desperate effort of workers who have been laid off and unable to find work again; it is viewed as low-paying, and as providing little or no benefit for the local economy(Acs & Mueller, 2008). The heterogeneous nature of self-employment, and the diverse reasons for becoming self-employed can have influences both on the performance of the businesses established by the self-employed, and the skills and development needs of the self-employed themselves.

Recently there has been a surge in the number of graduates choosing to work for themselves as soon as they leave college. Rather than becoming employees they are choosing self-employment. Armed with their entrepreneurial skills they are turning their talents and passions into businesses. It seems graduates are plagued by gloomy thoughts

of leaving higher education to compete for the restricted number of jobs available. In Ghana for instance, the latest graduate unemployment figures from the Office for National Statistics in 2013 showed that around 9% of recent graduates were out of work, while a significant 47% were forced to take 'non-graduate' jobs after leaving university (Agbenyo, 2010).

### 2.5 Entrepreneurial Knowledge and skills for self- employment

Entrepreneurship is defined as the "process of bringing together creative and innovative ideas and blending this with management and organizational skills in order to combine people, money and resources to meet an identified need and thereby create wealth" (Kithae, 2011, p.15). Entrepreneurship knowledge and skills enhances the learners' capability to apply skills in their work as self-employed persons. TVET policy in Kenya (GoK, 2010) requires that all learners take up units in entrepreneurship education as a way of inculcating entrepreneurship culture which is essential for a learner to be able to create an occupation for self , others as well as promoting economic development in the country and reducing poverty.

Tertiary education in Kenya and many countries in the world do not guarantee one formal employment after graduation and many educated youth are forced into self-employment (Daniels, 2010).A Government ministry of Technical training and applied technology was established in 1988 with one of its major objective being the harnessing and developing of entrepreneurial efforts within the Jua kali sector. The development of training capacity in entrepreneurship within the country was also felt to be crucial for encouraging people to go into self-employment (Ferej, 2000). Many TVET graduates are expected to become self-employed and apply the entrepreneurial skills they have acquired in technical training institutions in their businesses. The response of TVET institutions in Kenya to the

continued training needs of business was to align training closer to the demands of the labour market. The need to link training to employment (self-or paid) is at the base of the ‘’best practice strategy’’ (Simiyu, 2010). Entrepreneurship is important in enabling TVET graduates to become involved in the mainstream of the economy. Entrepreneurship was integrated into TVET education and training as part of the curriculum so that trainees could be taught business techniques such as costing, pricing, business, preparing financial statements, keeping business records, marketing, preparing business plans etc. (Simiyu, 2010).

The curriculum should go a step further and support entrepreneurship. This means that the curriculum should equip students with self-reliance skills and the skills to start their own businesses by including extra course units on entrepreneurship. Most graduates of TVET do not have business skills and expect to be employed in the formal or informal sectors despite the opportunity for self – employment.

**2.6 Effectiveness of industrial attachment in imparting hands-on-experience**

In the context of ever changing dynamic and highly competitive business environment industry seeks for a competent and versatile graduate. In this context both academic and professional higher education institutes have to pay a very careful attention to the industrial internship programme. Industrial attachment programme is widely used technique by many academics and professional bodies in order to blend students’ theoretical knowledge with the real life working experiences. Giving trainees an opportunity to experience in a real-world working environment will offer a chance to students to apply theoretical knowledge learned in the earlier years in the institutions to related, authentic working sites (Hughes, 1998).Knowledge and experience obtained

from classrooms differ from that gained during industrial internships in that it equips trainees with first-hand experience.

On "Industrial Transformation and Development" the GoK set the target for achieving newly industrialized status by 2020 and TVET was identified as the pillar in facilitating this and the link with industry is the key to achieving this objective. Adequate collaboration between TVET and industry would lead to the acquisition by graduates of relevant hands-on skills and experience for salaried and self-employment. Despite a marked expansion of TVET institutions in Kenya and other African countries, there has been no evidence of feedback from employers to TVET institutions leading to supply driven training skewed in favor of the market. TVET graduates lack hands on experience and have poor work attitudes and are inflexible to change (Republic of Kenya, 2002). This puts the reputation of TVET to question as the mandate of the system is to produce qualified young people who will be immediately operational in the work place (World Bank, 2011).

The Kenya government, (Republic of Kenya 2009), asserted that TVET institutions should have close linkages with labour market to solicit support of industry in the enhancement of practical training through activities such as donation of equipment and tools, staff exchange programs and placement of students and staff on work experience attachment. The Institute of Analysts and Programmers (IAP) expected to develop professional and occupational competencies (Republic of Kenya, 2008). Related studies by Islam *et al* (2007) in Bangladesh revealed that both formal and non-formal TVET programs lacked an effective linkage between training and the world of work. UNESCO (2006) pointed out that among the issues where TVET needed reform was on improving relevance and linkages to employers and other stakeholders and hence recommended that

stakeholders should have more influence on VET and VET should focus more on partnerships. This includes increasing cooperation and voluntary participation based on perceived benefits and value. Makworo *et al*. (2013) points out that linkage between TVET institutions and industries is an area of great concern and the Kenyan TVET sector and industries in consultation with the government should set up policies to help better link up this two institutions. Although industrial Attachment seems to be high among the linkages existing; it still needs proper management for it to attain optimum results.

In conclusion, countries which have witnessed significant economic transformation have had dynamic industry - institutions linkage which has not been the case in a country like Kenya as the TVET sector has weak linkages with industry. Since the ultimate objective of TVET is employability and employment promotion, it is necessary to link training to the needs of the labour market especially in the informal sector, therefore this calls for TVET to be relevant and demand driven rather than supply driven.

### 2.7 Government initiatives to support TVET graduates in self-employment

The GoK has formulated various policies on TVET backed by strategies that revolve around, among others; promotion of partnerships among TVET stakeholders, provision of incentives to promote creativity and innovations, capacity building of staff, equity in access and linkages and promotion of relevant skills development that meet the needs of the market. Past experience has however shown that the government has come up with well-designed strategies for development but lack of political good will and viable implementation roadmaps have been the main set back (Nyerere, 2009).

The government has developed a framework that will require institutions to involve industry in training, joint research and providing practical skills and modern training equipment. To this end, an industrial attachment standard for all TVET trainees and trainers, for enhancing their hands-on-skills has been implemented, coordinated by Industrial Liaison Officers in each TVET institute.

### 2.7. 1 Youth Enterprise Development Fund.

The Youth Enterprise Development Fund (YEDF) was conceived by the Government in June 2006 as a strategic move towards arresting unemployment which is mainly a youth problem including TVET graduates (GOK, 2006). According to the Ministry of Youth Affairs circular (2007), the fund has the following objectives among others: Support youth oriented micro, small and medium enterprises to develop linkages with large enterprises, facilitate employment of youth in the international labor market (GOK, 2006), to attract and facilitate investment in micro-small and medium enterprises oriented commercial infrastructure such as business or industrial parks, markets or business incubators that will be beneficial to youth enterprises.

### 2.7.2 Establishment of Industrial and Business Incubators

The objectives of this initiative is to create industrial incubators in order to inspire and enable TVET graduates set up small innovative growth oriented business enterprises for self-employment and enhance transfer of technology for industrial development. TVET as an occupational field will provide the foundation for productive and satisfying careers and at the same time offer specialized preparation for initial employment including self-

employment. The linkage between technical skills, entrepreneurial skills, labor market needs and employable skills will be addressed by the program.

### 2.7.3 Investment strategy

The Ministry proposed a five year (2005-2010) investment programme for the establishment and development of business and technology incubation centers. The key role of the centers was to nurture creative talent and assist in the identification of relevant technology for adoption by TVET graduates in establishing business enterprises for self-employment. The centers were to be established close to existing TVET institutions and be provided with reasonable capacity to offer the services. Capacity building was undertaken for effective technology development services. Design and production of simple production tools fixtures and equipment was another main activity in the centers. These were to be sold TVET graduates and Jua Kali sector.

Provisions were made for TVET graduates to acquire small tool kit loans for business start-ups. Equipment and physical facilities were upgraded to capacitate incubators for business development. The TVET institutions rented equipment and machine time to start-ups within the allied/adjacent incubators. The total estimated cost for creation of industrial incubators was Kshs. 808 million in a 5-year period (Nyerere, 2009). Basically in Kenya, the education and industry sectors exist separately from each other and while the importance of the school-to-work transition of students is being advocated, discussion of these matters has failed to probe deeper, resulting in a lack of realistic policy linking school education to the labour market.

## 2.8 Summary

A national workforce imbued with high-level technical, entrepreneurial, and other work-related skills is a critical success factor for national wealth creation and therefore it is the responsibility of the training institutions to ensure that their graduates are employable. This calls for strategies and mechanisms at the institutional and national levels that enhance the relevance and quality of training programs. Such strategies include regular review of the curriculum in response to the changing needs of the labor market, partnering with industry practitioners both in the formal and informal sectors to design and deliver the curriculum, introducing ICT and entrepreneurial skills into the curriculum, and ensuring that instructors and trainees periodically undergo enterprise-based internships for workplace on job experience.

Globally formal employment has continued to shrink with each passing year. While the number of graduates from TVET institutions is growing at a rapid pace, self-employment shows greater potential as an alternative source of employment. According to Fields,(2013), "Self-employment in the Developing World" and other literature available, there is controversy over the relative importance of choice versus no-choice in entering self-employment and recommends that research is needed to investigate this issue. The literature, as provided above on issues related to TVET graduates and self-employment, provides some form of guideline along which to focus this study. However, the studies only outline a few challenges facing TVET graduates yet there seems to be a lot, and this study aims to fill this gap.

# CHAPTER THREE

# SEARCH DESIGN AND METHODOLOGY

## 3.0 Overview

The intent of this section is to describe the methodology that was used in this study. Included in this section is a description of the research design, study setting, study sample, methods used for data collection procedures, and analysis of data.

## 3.1 Scope of the study

The North Rift Region in which the study was carried out is part of the greater Rift Valley province of Kenya which was among the eight provinces of Kenya before 2010. Kenya is a sovereign state situated in the African great lakes region of East Africa. Kenya lies on the equator with Indian Ocean to the South East, Tanzania to the south, Uganda to the west, South Sudan to the North West, Ethiopia to the north and Somalia to the north east. Kenya covers 381,309km$^2$ with an estimated population of 42 million in 2009 and projected to reach 65 million by 2030, (Kenya National Population and Housing Census, 2009). (The North Rift regional temperatures range from 26$^0$C to 32$^0$C in some parts of extreme north. The region is mostly highland above 1500m above sea level and experiences two rain periods, long rains from March to May and short rains from September to October (Kenya Meteorological Department, 2007). The region's economy is largely depended on livestock and crop farming with maize, wheat and tea being the main crops. Some parts of the North Rift region are arid and semi –arid with prospects of oil and mineral deposit discoveries especially in Baring, Pokot and Turkana Counties.

### 3.2 Research Design

In this study, survey research design was the methodology chosen. A survey is an attempt to collect data from members of a population in order to determine the current status of that population with respect to one or more variables (Mugenda *et al*, 2003). According to Babbie (1990), it can apply questionnaires or structured interviews for data collection. Survey research is chosen because it is economical and has a rapid economic turnaround in data collection. It also has the advantage of identifying attributes of large population from a small group of individuals (Babbie, 1990, Fowler, 2002). The research questions were answered using quantitative data which emerged from the use of questionnaires. Written questionnaires about the status of TVET graduates were utilized by asking a number of closed and open-ended questions that allow for variations (Hoplf, 1997). The study area was the North Rift region and specifically centered on three counties of Nandi, Uasin-Gishu and Trans-Nzoia where the three Technical Training Institutes of Kaiboi, Rift Valley and Kitale respectively are located.

### 3.3 Population and Sample

The target population was 1000 instructors from TVET institutions and automotive students in their fourth year of study and those already graduated. The sample for the study was 120 TVET instructors as the main respondents drawn from automotive and mechanical departments in the three technical training institutes and 130 TVET automotive graduates and trainees in their final year of study at diploma and certificate level. Thus, the total sample population was 250 respondents. Sampling size determination was based on the Krejcie and Morgan table (1970), for determining the sample size for a given population. Further interviews were conducted with 10 key

informants who were previously TVET trainees who were in self-employment at the time of the study.

### 3.4 Sampling Techniques

Purposive sampling technique was used to select TVET instructors and trainees in their final year of study since it was only a particular kind of people who had the needed information**.** Purposive sampling is a type of non-probability sampling technique (Patton, 2012). Non-probability sampling focuses on sampling techniques where the units that are investigated are based on the judgment of the researcher. In this study samples were selected based on the subjective judgment of the researcher to suit his convenience in the matter of location and contact with the units.

This sampling method was used because the researcher needed to get information from individuals who had particular knowledge**.** This knowledge was required during qualitative and quantitative research. The particular knowledge that was investigated also formed the basis of the research, and therefore the researcher had to focus only on individuals with such specific knowledge as the units in the sample. Snowball sampling technique was used to select graduates who were in self-employment as well those in formal employment. Snowball sampling allows researcher to reach populations that are difficult to sample using other sampling methods. The technique was chosen since it is simple and cost effective.

### 3.5 Sampling Adequacy

Joppe (2000) provides that the validity determines whether the research truly measures that which it was intended to measure or how truthful the research results are. Henry Kaiser introduced a Measure of Sampling Adequacy (MSA) of factor analytic data matrices. This is just a function of the squared elements of the 'image' matrix compared to the squares of the original correlations. The overall MSA as well as estimates for each item are found. The index is known as the Kaiser-Meyer-Olkin (KMO) index. The results from Kaiser-Mayer-Olkin measures of sampling adequacy were found to be 0.755 which is middling as per StataCorp (2013). The Bartlett's Test of Sphericity was found to be significant indicating that the sample was adequate for the research.

**Table 4.9:** Kaiser-Mayer-Olkin measures of sampling adequacy

| KMO and Bartlett's Test | | |
|---|---|---|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy. | | .755 |
| Bartlett's Test of Sphericity | Approx. Chi-Square | 1604.574 |
| | df | 378 |
| | Sig. | .000 |

Source: Author, 2015

### 3.6 Data Collection Instruments

A questionnaire was the main instrument used for data collection for the study. Two similar sets of questionnaires containing 20 items were designed for the two main groups of respondents, - the TVET trainers or teachers and the trainees. Another questionnaire was specifically designed for TVET graduates in self-employment and formal

employment. The questionnaire included closed-ended and open ended items and a 5-point Likert scale was used. Interviews were also used on key informants.

### 3.7 Validation

The validation of the instruments was achieved by pre-testing the questionnaire which was conducted with 24 respondents made up of students and teachers selected randomly from O'Lessos Technical Training Institute, also located in the North Rift. The Institute did not participate in the actual study. The internal consistency reliability coefficient (0.806) was determined so that it can produce a satisfactory value. Respondents were encouraged to make useful suggestions by submitting written comments on items with ambiguity.

### 3.8 Data Collection Procedure

A research assistant was selected and trained by the researcher to assist in data collection process. At each of the institutes the researcher interacted with both teachers and students expected to participate in the study. Students who sought for explanations on some statements were given necessary attention. The respondents out of the institutions were contacted with the assistance of the institute's administration where individual records are kept. The completed questionnaires were returned the same day. This made it possible to record a 100% return. The researcher conducted the interviews with key informants.

### 3.9 Data Analysis

Data gathered was analyzed using descriptive statistical analysis. The arithmetic mean was used at a decision point of 2.50. The implication was that a mean value of above 2.50 will be considered as ‘agree’ and values below 2.50 as ‘disagree’.

### 3.10 Ethical Considerations

In 2000, Cohen and Manion established that it is important to observe ethics in research in order to maintain human dignity. In this study, ethics were observed by:

-Maintaining confidentiality and honesty while dealing with respondents.

-The use of offensive, discriminatory, or other unacceptable language was avoided in the formulation of Questionnaire/Interview.

-Full consent was obtained from the participants prior to the study

-Acknowledgement of works of other authors used in any part of the thesis.

-Ensure that participation of respondents in the research is absolutely voluntary

## CHAPTER FOUR

## DATA ANALYSIS AND INTERPRETATION OF RESULTS

### 4.0 Introduction

The purpose of this study was to establish the challenges faced by TVET graduates expected to enter the Jua Kali sector as self-employed persons in the North Rift. Focus was on graduates in self-employment, graduates working in the formal sector, TVET trainers and trainees in their final year of study.

The study was guided by the following specific objectives:

To establish whether technical knowledge and skills acquired during training at TVET institutions adequately prepared automotive graduates for self-employment.

To establish whether entrepreneurial knowledge and skills learnt at TVET institution adequately prepared automotive graduates for self- employment.

To establish the effectiveness of the industrial attachment placement in imparting hands – on-experience necessary for self- employment.

To establish availability of government support to those who become self-employed.

The data was collected from a sample of 250 respondents who included instructors and graduates of technical education. Questionnaires were used for both instructors and students in their fourth year of study and those already graduated. The questionnaires contained both open and closed ended questions. Thus the discussion and analysis reflects qualitative and quantitative approaches. In discussing qualitative data, the direct quotations of various respondents through open ended questions were used. The findings are discussed in the following order:

### 4.1 Response rate

Demographic characteristics of the respondents are summarized in Table 4.1

**Table 4.1: Response rate**

| | Questionnaire issued | Questionnaire returned | Response rate |
|---|---|---|---|
| Instructors | 120 | 110 | 91.6% |
| Students in their final year | 95 | 76 | 80.0% |
| Graduates | 35 | 24 | 68.6% |

Source: Author, 2015

### 4.2 Reliability Analysis for the Study Variables

Reliability analysis was first conducted on the data to check reliability of the research instruments to ensure they were consistent with the study. The study established that the variables were highly consistent with the study. The Cronbach's coefficients alpha was at 0.806(80.6%) which was above the minimum required value of 0.7(70%). This ascertained that the research tools were reliable and hence further analysis could be done.

**Table 4.2: Reliability analysis of variables**

| item | Cronbach's alpha(instructors) | No. of items | Cronbach's alpha(graduates) | No. of items |
|---|---|---|---|---|
| technical knowledge and skills | 0.648 | 10 | 0.797 | 6 |
| entrepreneurial knowledge and skills | 0.669 | 6 | 0.806 | 5 |
| industrial attachment effectiveness | 0.723 | 11 | 0.795 | 9 |
| availability of government support | 0.700 | 4 | 0.812 | 5 |

Source: Author, 2015

### 4.3 Demographic Information of Instructors

Background information of the respondent serves a great purpose in shedding light as far as the sample population and the research topic is concerned.

The gender of the instructors is as shown below;

**Table 4.3: Gender of instructors**

| Gender | Frequency | Percent |
|---|---|---|
| Male | 69 | 62.7 |
| Female | 41 | 37.3 |
| Total | 110 | 100.0 |

Source: Author, 2015

All the respondents were willing to indicate their gender. Gender is important in research as males and females tend to have different opinions on various issues. In this case females may have different opinions on establishment of self-employment as compared to males. Of the instructors issued with questionnaires, 62.7% were male while 37.3% were female. This was ascertained by 69 and 41 respondents respectively

The gender of the graduate respondents is as shown below;

**Table 4.4: Gender of final-year trainees and graduates**

| Gender of final-year trainees and graduates | F | % |
|---|---|---|
| Male | 54 | 54 |
| Female | 46 | 46 |
| Total | 100 | 100.0 |

Source: Author, 2015

Of the graduates involved in the study, 54% were male while 46% were female, represented by 54 and 46 respondents respectively.

The level of professional qualification was asis shown Table 4.5;

**Table 4.5: Level of professional qualification**

| Level of professional qualification | F | % |
|---|---|---|
| Diploma in technical education | 29 | 26.4 |
| B.Ed Technology | 47 | 42.7 |
| M.Ed Technology | 19 | 17.3 |
| Other | 15 | 13.6 |
| Total | 110 | 100 |

Source: Author, 2015

Level of professional qualification was operationalized by four variables; Diploma in technical education, B.Ed. Technology, M.Ed. Technology and Other. One's level of education provides a good picture of how one understands the topic of study. Furthermore education level can provide a clue on how individuals are willing to contribute to the development of research knowledge on a given area and how they may be willing to indulge in new activities. Of the 110 instructors involved in the study, majority (42.7%) of the respondents had a Bachelor of Education degree while 26.4% (29) had a Diploma in technical education level of qualification. 17.3 % (19) had a Master of Education level of education while 13.6%(15) had other professional qualifications.

Respondents years of teaching experience were as represented Table 4.6;

**Table 4.6: Teaching experience of instructors**

| Teaching experience of instructors | | |
|---|---|---|
| 0-3 years | 35 | 31.8 |
| 4-6 years | 29 | 26.4 |
| 7-9 years | 23 | 20.9 |
| 10-12 years | 14 | 12.7 |
| 13 and above years | 9 | 8.2 |
| Total | 110 | 100 |

Source: Author, 2015

Teaching experience was also an important variable under consideration. It provides a clear picture of how well the instructors are aware of the graduates innovative capabilities and knowledge to indulge in self-employment. Further they are better aware of college factors that can affect graduates involvement in self-employment. Of the instructors interviewed, majority had below 3 years of teaching experience, represented by 31.8 %

(35) respondents. 26.4 % (29) had 4 to 6 years of teaching experience, 20.9% (23) had 7 to 9 years of teaching experience, and 12.7% (14) had 10 to 12 years of experience while 8.2% (9) had 13 and above years of teaching experience.

The instructors' current responsibility was as shown in Table 4.7;

**Table 4.7: Current responsibility of instructors**

| Current responsibility of instructors | F | % |
|---|---|---|
| Tutor/course tutor | 90 | 75 |
| Head of department | 25 | 21 |
| Principal/deputy principal | 5 | 4 |
| Total | 120 | 100 |

Source: Author, 2015

Another variable of interest was current responsibility of the instructors. Majority of the respondents were tutors with some of them being heads of department at the same time. 4% were however principals or deputy principals.

### 4.5 Technical knowledge and skills

Firstly, the study sought to establish TVET institution's view on training offered at the institutions with regard to the job market. Respondents were asked to rate their opinion on the provided statements. The responses for these factors ranged from 1 to 5 where 1 = strongly disagree, while 5= strongly agree. The mean for these responses were calculated and ranked as summarized in table 4.8;

**Table 4.8: Technical knowledge and skills**

| Characteristic of Automotive Course | Mean | Std. Dev | Skew. | Kurt. |
|---|---|---|---|---|
| Course content in automotive courses should be revised to match the developments in technology in the motor vehicle industry | 4.26 | .543 | .071 | -.491 |
| Training offered gives graduates sufficient practical experience to work in the Jua Kali sector as independent persons | 3.57 | .565 | -.362 | 1.482 |
| Instructors need periodic refresher courses on the latest car diagnostic and service technology | 3.37 | .664 | -.298 | .040 |
| Trainees need more time for practical lessons than is currently allocated | 3.22 | .816 | -.704 | .821 |
| Knowledge and skills offered in the curriculum are relevant to the needs of the informal sector | 3.10 | .713 | -.852 | 1.834 |
| Knowledge and skills offered in automotive curriculum are relevant to the job market | 3.00 | .871 | -.792 | .420 |
| Graduates may need re-training after being employed | 2.73 | .745 | .055 | -.564 |
| The college automotive workshop are equipped enough to provide quality practical training to trainees | 2.67 | .624 | .143 | .742 |
| The industry rates TVET trainees highly | 2.66 | .612 | -.491 | .092 |
| Graduates often find employment after completing their courses | 2.43 | .707 | -.362 | 1.211 |

Source: Author, 2015

Majority of the instructors were of the opinion that the course content in automotive courses should be revised to match the developments in technology in the motor vehicle industry. This was ranked first with a mean of 4.26. Training offered gives graduates

sufficient practical experience to work in the Jua kali sector as independent persons was ranked second with a mean of 3.57 while third ranking with a mean of 3.37 was the need for instructors to take periodic refresher courses on the latest car diagnostic and service technology. These were followed by the need for trainees to have more time for practical lessons than is currently allocated with a mean of 3.22. Respondents also agreed that knowledge and skills offered in the curriculum were relevant to the needs of the informal sector with a mean of 3.10. Graduates were however not found to find employment after completing their courses with a mean of 2.43. Skewness of the technical knowledge and skills variables was found to be negative on average while kurtosis value was estimated to be around 1 indicating that the values are wider spread around the mean. This implies that the data is uniformly distributed and the results are likely to be significant.

Further results from graduates on technical knowledge and skills were as provided below. The graduates were asked to rate their knowledge and experience with the given statements. The results are as shown in table 4.9;

**Table 4.9: Technical knowledge and skills of final year trainees and graduates**

| Technical Knowledge and Skills | Mean | Std. Deviation | Rank | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Have good basic knowledge and skills of vehicle assembly | 3.97 | 1.455 | 1 | -.634 | .468 |
| Good knowledge of engine repair and testing | 3.85 | 1.236 | 2 | -.579 | .343 |
| Good knowledge and skills of good metal processing | 3.62 | 1.856 | 3 | -.365 | .302 |
| Good knowledge of manual and automatic transmission systems | 3.62 | 0.986 | 4 | -.835 | 1.128 |
| Good practical skills and knowledge of vehicle service and body work repair | 3.59 | 0.856 | 5 | -.937 | .432 |
| Training met my expectations | 2.42 | 0.563 | 6 | -1.075 | .631 |

Source: Author, 2015

Graduates and students in their final year of study agreed that they had good basic knowledge and skills of vehicle assembly and supported by respondents with a mean of 3.97. Such skills included good knowledge and skills of vehicle spare parts specification and procurement, and also good knowledge and skills to work in the motor repair workshop in the local informal sector. Secondly ranked, respondents agreed to having good knowledge of engine repair and testing. These included such tasks as good knowledge and skills of engine measurements, use of specialized engine measuring tools such as dial gauge, micrometer and Vernier Caliper and also good knowledge and skills of engine tear down, inspection and rebuild. Respondents also agreed to having good

knowledge and skills of good metal processing, good knowledge and skills of manual and automatic transmission systems and good practical skills and knowledge of vehicle service and body work repair. These were ranked third, fourth and fifth and represented by a mean of 3.85, 3.62 and 3.62 respectively.

The respondents however, felt that the training did not meet their expectations. Skewness for the same was estimated to be negative while the kurtosis was estimated to be moderately peaked. Interview results from key informants already in self-employment indicated that the course offered had not been satisfactory to equip graduates with necessary entrepreneurial skills that help them to create self-employing business. Some of the reasons for the problems were found to be: inadequate time given and lack of paying due emphasis for the course and trainees' background information about entrepreneurship education at elementary or secondary school level are some of the aforementioned problems reported by the respondents. They further indicated that they had to seek addition advice elsewhere on how to be self-employed.

### 4.6 Entrepreneurial knowledge and skills

There was also need to establish the adequacy of entrepreneurial knowledge and skills imparted at the TTI. Respondents were asked to rate their opinions on a scale of 1-5.

**Table 4.10: Entrepreneurial knowledge and skills of instructors**

| Entrepreneurial knowledge and skills of instructors | Mean | Std. Deviation | Rank | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Trainees are confident enough to enter into self-employment in their areas of their specialisation | 4.38 | 2.456 | 1 | -.823 | 1.565 |
| The annual TVET fair has had a positive impact in terms of motivating trainees to venture into self-employment | 4.31 | 2.123 | 2 | -1.185 | 2.898 |
| Entrepreneurship training offered in TVET institutions has a positive impact on graduates upon completion of their training | 4.25 | 1.862 | 3 | -.692 | .608 |
| Trainees can present a fundable business proposal | 4.12 | 1.526 | 4 | -.790 | 1.076 |
| Trainees from TVET institutions are rated highly by the industry on managerial, team work ability, self-drive, punctuality and self-discipline after attachment | 4.06 | 1.325 | 5 | -1.286 | .957 |
| Availability of a collaborative program to engage industry players in automotive industry to talk to trainees | 3.97 | 1.122 | 6 | -.093 | -1.157 |

N (110)

Source: Author, 2015

The instructors majorly agreed that trainees are confident enough to enter into self-employment in their areas of their specialization. This was ranked first with a mean of 4.38. The annual TVET fair was found to have a positive impact in terms of motivating

trainees to venture into self-employment and ranked second with a mean of 4.31. Entrepreneurship training offered in TVET institutions was also found to have a positive impact on graduates upon completion of their training and trainees were found to be able to present a fundable business proposal, with means 4.25 and 4.12 respectively. Trainees from TVET institutions were found to be rated highly by the industry on managerial, team work ability, self-drive, punctuality and self-discipline after attachment with mean of 4.06. A collaborative program to engage industry players in automotive industry to talk to trainees was also found to be available with a mean of 3.97. Skewness value was estimated to be negative while the kurtosis value was estimated to be highly peaked.

Results from graduates on entrepreneurial knowledge and skills indicated Table 4.11.

**Table 4.11: Entrepreneurial knowledge and skills of final year trainees and graduates**

| Entrepreneurial knowledge and skills | Mean | Std. Deviation | Rank | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Good interpersonal skills | 4.21 | 1.364 | 1 | -1.305 | 4.335 |
| Have good knowledge and skills with regard to cultivating new friends, taking interest in new products, seizing a new opportunity that benefits | 4.01 | 1.145 | 2 | -.542 | .161 |
| Envisage starting own business in future | 3.25 | 1.012 | 3 | -1.025 | 2.774 |
| Usually updates oneself with business-related issues in automotive industry | 3.23 | 0.985 | 4 | -1.178 | 2.446 |
| Often seek advice of more than two people before making a major decisions | 3.18 | 0.754 | 5 | -1.406 | 4.089 |

(Source: Author 2015)

Respondents agreed to have good interpersonal skills in terms of entrepreneurial field. With respect to this, respondents preferred being independent at work, hard worker and team player. This was represented by a mean of 4.21. Second ranking with a mean of 4.01 respondents agreed to having good knowledge and skills with regard to cultivating new friends, taking interest in new products, seizing a new opportunity that benefits them

Respondents were however undecided on starting own business in future. They were also unsure of updating themselves with business-related issues in automotive industry and seeking advice of more than two people before making a major decision. Skewness value was estimated to be negative while the kurtosis is highly peaked. Results from key informants already in self-employment acknowledged the impact of entrepreneurial skills before going into self-employment. They agreed that the entrepreneurial knowledge they got however little has helped them continue with self-employment.

4.7 Industrial attachment effectiveness

The study further sought to examine the effectiveness of industrial attachment schemes. Instructors were asked to rate their opinion on students' performance and experience after the attachment.

**Table 4.12: Industrial attachment effectiveness**

| Industrial attachment effectiveness | Mean | Std. Deviation | Rank | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Industrial attachment placement is effective in imparting hands on practical experience to trainees | 4.25 | 2.458 | 1 | -1.71 | 7.831 |
| Trainees possess basic practical skills to identify and use correctly different workshop tools and equipment after attachment period | 4.21 | 2.598 | 2 | -1.46 | 5.51 |
| Trainees should be attached to the Jua Kali sector as well | 4.13 | 2.156 | 3 | .079 | -1.09 |
| Trainees possess practical experience and skills to disassemble, rebuild and test the engine and other systems | 4.02 | 2.789 | 4 | -.545 | .898 |
| Trainees are able to handle and use electronic engine diagnostic equipment and interpretation of various codes and engine data | 3.95 | 1.956 | 5 | -.727 | 1.257 |
| Trainees possess knowledge of spare parts specification and procurement | 3.77 | 1.876 | 6 | -.349 | -1.17 |
| Trainees follow guidance of supervisors, operation manuals and safety standards | 3.74 | 1.977 | 7 | .138 | -1.52 |
| Trainees have good practical experience of job planning and evaluation of workshop organisation | 3.70 | 1.865 | 8 | -1.406 | 4.089 |
| Trainees show good team work ability | 3.70 | 1.764 | 9 | -1.155 | 1.362 |
| Trainees show good skills of quality control | 3.56 | 1.752 | 10 | .242 | -1.385 |
| Trainees prefer being attached to large formal establishment | 3.50 | 1.652 | 11 | -1.129 | 2.425 |

(Source: Author, 2015)

From the results, industrial attachment placement was found to be effective in imparting hands on practical experience to trainees with a mean of 4.25. Trainees were also found to

possess basic practical skills to identify and use correctly different workshop tools and equipment after attachment period. This was ranked second with a mean of 4.21. Instructors were also of the idea that trainees should be attached to the Jua Kali sector as well and that they possess practical experience and skills to disassemble, rebuild and test the engine and other systems. These were ranked third and fourth with a mean of 4.13 and 4.02 respectively. They were however of the idea that trainees did not show good skills of quality control and they did not prefer trainees being attached to large formal establishments. These were ranked last with a mean of 3.56 and 3.50 respectively.

Further results on industrial effectiveness from the graduates' perspective indicated as follows;

**Table 4.13: Industrial attachment effectiveness on final-year students and graduates**

| Industrial attachment effectiveness | Mean | Std. Deviation | Rank | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Possess basic practical skills to identify and use correctly different workshop tools and equipment | 4.54 | 1.945 | 1 | -1.71 | 7.831 |
| Possess good practical experience to diagnose and repair latest models of cars in the market | 4.49 | 1.845 | 2 | -1.46 | 5.51 |
| Acquired practical experience and skills to disassemble and inspect the condition of engine parts | 4.48 | 1.798 | 3 | .079 | -1.09 |
| Acquired practical experience and knowledge of spare parts specification and procurement | 4.32 | 1.786 | 4 | -.545 | .898 |
| Have good practical experience of job planning and evaluation | 4.28 | 1.652 | 5 | -.727 | 1.257 |
| Have good team work ability | 4.14 | 1.528 | 6 | -.349 | -1.17 |
| Have good skills of quality control | 4.02 | 1.458 | 7 | .138 | -1.52 |
| Follow guidance of supervisors, operation manuals and safety standards | 3.94 | 1.689 | 8 | -1.406 | 4.089 |
| Good practical supervisory and customer care skills | 3.87 | 1.235 | 9 | -1.155 | 1.362 |
| Good knowledge of various legal requirements of a business entity | 3.75 | 1.163 | 10 | .242 | -1.385 |

(Source: Author, 2015 )

Graduates and students in their final year of study asked to give their opinion on effectiveness of industrial effectiveness. The respondents agreed to possess basic practical

skills to identify and use correctly different workshop tools and equipment. This was represented by a mean of 4.54. Secondly ranking with a mean of 4.49, respondents agreed to possess good practical experience to diagnose and repair latest models of cars in the market. The lowest ranking was the possession of good practical supervisory and customer care skills and good knowledge of various legal requirements of a business entity. These were ranked by a mean of 3.87 and 3.75 respectively. Further results from those already in self-employment focused mainly on industry involvement in supporting competency based TVET program and on how cooperative training was taking place to support trainers and trainees in enhancing their knowledge and skills related to the real world of work and in practicing and handling new technology in industries. The study revealed a weak or poor TVET-institutions and industry collaboration in implementing competency based TVET curriculum.

4.8 Tutors opinion on availability of government support

The study further sought to examine tutors opinion on the availability of government support to TVET graduates. Respondents were asked to rate their opinion on a scale of five. The closer the mean is to 5, the more likely the respondents strongly agreed to the statement while the closer the mean is to 1, the more likely the respondents strongly disagreed to the statement.

The results are as shown in Table 4.14;

**Table 4.14: Tutors opinion on availability of government support**

| N=110 | Mean | Std. Deviation | Rank | Skew. | Kurt. |
|---|---|---|---|---|---|
| Presence of government policy to assist TVET graduates enter self-employment | 4.25 | 2.456 | 1 | -1.71 | 7.831 |
| Availability of provisions of pre-service orientation training to TVET graduates wishing to enter self-employment | 4.15 | 0.754 | 2 | -1.46 | 5.51 |
| Presence of adequate knowledge of Youth Enterprise Development Fund(YDEF) and Uwezo funds | 2.65 | 1.988 | 3 | .079 | -1.09 |
| Trainees are aware of the existence of the government policy to award 30% of all government tenders to women and the youth | 2.31 | 0.256 | 4 | -.545 | .898 |

(Source: Author, 2015 )

Government policy to assist TVET graduates enter self-employment was found to exist and was first ranked with a mean of 4.25. Provisions of pre-service orientation training to TVET graduates wishing to enter self-employment was also found to exist with a mean of 4.15. The study however found less knowledge of availability of Youth Enterprise

Development Fund (YDEF) and Uwezo funds. This was represented by a mean of 2.65. Trainees were also found to be less aware of the existence of the government policy to award 30% of all government tenders to women and the youth represented by a mean of 2.31. Further results from the graduates and students in their final year on availability of government support were as shown below;

**Table 4.15: Trainees and graduates' opinion on availability of government support**

| N=100 | Mean | Std. Deviation | Rank | Skewness | Kurtosis |
|---|---|---|---|---|---|
| Existence of provisions of pre-service orientation training to TVET graduates wishing to enter self-employment | 4.11 | .672 | 1 | -1.025 | 2.774 |
| Have adequate knowledge on Youth Enterprise Development Fund(YDEF) and Uwezo funds | 4.01 | .764 | 2 | -1.178 | 2.446 |
| Existence of government policy to assist TVET graduates enter self-employment | 3.65 | .727 | 3 | -1.406 | 4.089 |
| Anticipation of government support to get employment in the formal as well as the informal motor vehicle sector | 3.01 | .932 | 4 | -1.155 | 1.362 |
| Provision for TVET graduates to acquire small tool kits loans for business start-ups | 2.97 | 1.425 | 5 | -1.305 | 4.335 |

(Source: Author, 2015 )

Graduates agreed to the existence of provisions of pre-service orientation training to TVET graduates wishing to enter self-employment. This was ranked first with a mean of 4.11. Second ranking with a mean of 4.01 was the possession of adequate knowledge on

Youth Enterprise Development Fund (YDEF) and Uwezo funds. Graduates were however unsure of government support to get employment in the formal as well as the informal motor vehicle sector after completing training. The lowest ranking with a mean of 2.97 was the anticipation for provision for TVET graduates to acquire small tool kits loans for business start-ups. Key informants on the other hand indicated no support from the government before or even after they joined self-employment. The little help has only come recently as Uwezo funds and targets all youths and not specifically TVET graduates. This has increased the competition for such aid making it harder for more people to access it.

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.0 Introduction

This chapter contains a summary of the findings as per the research objectives together with a conclusion and the necessary recommendations on the study.

## 5.1 Summary of Findings

The study employed a survey research design. Data was collected from a sample of 250 respondents' who included instructors and graduates of technical education. Out of a total of 250 sampled respondents, 120 were instructors while 130 were graduates, where an overall 230 questionnaires were returned representing 92%. Questionnaires were used for instructors, graduates and students in their final year of study. The questionnaires contained both open and closed ended items. A sampling adequacy of 0.755 was found indicating that the sample was adequate for the research. The overall reliability analysis was found to be 0.806 (80.6%) ascertaining that the research tools were reliable. Of the 110 instructors, majority was male while of the 100 respondents in the study, majority was male. Majority of the instructors had a bachelor of education degree with only a few having other professional qualifications. Of the instructors interviewed, majority had below 3 years of teaching experience. Majority of the respondents were tutors with some of them being heads of department at the same time.

The study established that majority of the instructors was of the opinion that the content in automotive courses should be revised to match the developments in technology in the motor vehicle industry. Further, Training offered gave graduates sufficient practical

experience to work in the Jua kali sector as independent persons. Graduates and trainees in their final year of study agreed that they had good basic knowledge and skills of vehicle assembly. These skills were all combined as technical knowledge and skills.

The study further sought to establish the adequacy of entrepreneurial knowledge and skills imparted at the TTI. The instructors mostly agreed that trainees were confident enough to enter into self-employment in the areas of their specialization. The annual TVET fair was also found to have a positive impact in terms of motivating trainees to venture into self-employment. On the other hand, graduates agreed to having good interpersonal skills in the entrepreneurial field and they preferred being independent at work, hard workers and team players. Graduates also reported possessing good knowledge and skills with regard to cultivating new friends, taking interest in new products, seizing new opportunities that benefited them.

The study further sought to examine the effectiveness of industrial attachment schemes. Industrial attachment placement was found to be effective in imparting hands on practical experience to trainees. Trainees were also found to possess basic practical skills to identify and use correctly different workshop tools and equipment after attachment period. Instructors were also of the idea that trainees should be attached to the Jua Kali sector as well and that they possess practical experience and skills to disassemble, rebuild and test the engine and other systems. On the effectiveness of industrial attachment, graduates agreed to have acquired basic practical skills to identify and use correctly different workshop tools and equipment.

Finally the study sought to examine instructors' opinion on the availability of government support to TVET graduates. Government policy to assist TVET graduates enter self-employment was found to exist as well as provisions of pre-service orientation training to TVET graduates wishing to enter self-employment. The study however found less knowledge of availability of Youth Enterprise Development Fund (YDEF) and Uwezo funds. Graduates on the other hand agreed to the existence of provisions of pre-service orientation training to TVET graduates wishing to enter self-employment. Graduates were however unsure of government support to get employment in the formal as well as the informal motor vehicle sector after completing school with the lowest ranking being the anticipation for provision for TVET graduates to acquire small tool kits loans for business start-ups.

## 5.2 Discussion of findings

Introduction.

### 5.2.1 Technical knowledge and skills

The first objective of the study aimed to establish whether technical knowledge and skills acquired during training at TVET institutions adequately prepare automotive graduates for self-employment. Results were analyzed from the instructors, graduates and trainees in their final year of study as well. The results bring forward various concerns with respect to Technical knowledge and skills acquired during training at TVET institutions. The results agree with Nyakov (2006) who summarized the concerns as; poor quality in the delivery of TVET programs, high cost of training, training not suited to actual socio-economic conditions, disregard of the needs of the informal sector, disregard of the labour market and high unemployment rates among graduates.

### 5.2.2 Entrepreneurial Knowledge and Skills

The second objective aimed to establish whether entrepreneurial knowledge and skills learnt at TVET institution adequately prepare automotive graduates for self- employment. Trainees were found to be confident enough to enter into self-employment in their areas of specialization. Further, Entrepreneurship training offered in TVET institutions was found to have a positive impact on graduates upon completion of their training. The confidence to enter self-employment was characterized by preference to being independent at work, hard worker and team player. This was further supported with the need to cultivating new friends, taking interest in new products and seizure of a new opportunity. The results agree with Kithae (2011) who defined entrepreneurship to comprise of creative and innovative ideas. The results further agree with Lichtenstein &Lyons (2010) who asserted that the more developed an entrepreneur's skills, the better able he is to grow and sustain his business. They further cited that skills associated with entrepreneurs, such as money management, financial literacy and interpersonal communications are also relevant and beneficial for day-to-day life.

Another outcome of entrepreneurial skills in TVET is that it enhances human resource development and gives an opportunity for economic empowerment and social mobility (Afeti, 2013). Skilled youth have the choice of the kind of work or where they would like to work. Unlike unskilled youth, they are confined to available jobs and no power to negotiate for wages or rights (ILO, 2012). As such, VET can contribute to reduction of vulnerable youth being exposed to unfavorable working conditions. TVET also has the potential to promote self-development of youths. This is so because in response to

demands for skilled labour, more people are required to acquire or upgrade skills and knowledge.

### 5.2.3 Industrial attachment effectiveness

The third objective aimed to establish the effectiveness of the industrial attachment placement in imparting hands–on-experience necessary for self- employment. Industrial attachment placement was found to be effective in imparting hands on practical experience to trainees. In its effectiveness, the attachment experience imparted basic practical skills for the trainees to identify and use correctly different workshop tools and equipment. However, it was revealed that trainees should be attached to the Jua Kali sector as well. Trainees possessed basic practical skills to identify and use correctly different workshop tools and equipment after the attachment period. Further after the attachment period, trainees possessed good practical experience to diagnose and repair latest models of cars in the market. The results agree with Morrison (2005) who asserted that Student internship programme is widely used technique by many academics and professional bodies in order to blend students' theoretical knowledge with the real life working experiences.

Further Internship programmes provide not only significant benefits to students in terms of career preparation and income, but also to strengthen their self-confidence and self-satisfaction in the lifelong learning process. According to Trotskovy and Sabag (2010), students also have the opportunity to identify the differences in "traditional learning process in the academic environment and real-design process in the industrial

environment"(p.5). In addition to better academic understanding, participation in internships is also regarded as increasing the employability of the students when they graduate. The employment market now does not only demand graduates who have a high level of academic knowledge, but also graduates who can demonstrate core competencies essential to succeed in the work environment (Binks, 1996; Johnson, 2000; Okay and Sahin,2010).In fact, internships improve job opportunities for students since it allows them to hone their job skills and work values, focus on their career choices, directly access job sources, even to impress potential employers.

### 5.2.4 Availability of government support

The final objective aimed to establish availability of government support to those who become self-employed. Government policy to assist TVET graduates enter self-employment was found to exist accompanied with provisions of pre-service orientation training to TVET graduates wishing to enter self-employment. Nonetheless, there is less knowledge of availability of Youth Enterprise Development Fund (YDEF) and Uwezo funds. There was further doubt on government support for graduates to get employment in the formal as well as the informal motor vehicle sector after completing school. The results concur with Owiti (2013) who asserted that unemployment rates among TVET graduates were very high. Further, support offered is not adequate to facilitate job linkages or business startups for the graduates.

## 5.3 Conclusion

The role of TVET in furnishing skills required to improve productivity, raise income levels and improve access to employment has been widely recognized (Bennel,2009).

Training in automobile mechanics is one of the trades widely offered in TVET institutions. TVET according to most government national development plans and sessional papers (Sessional Paper no. 14 of 2012) is expected to play the following two major roles: firstly, to provide training opportunities and career advancement avenues for the increased number of school leavers; the second role is to provide skilled manpower that is needed at all levels of the economy which should be able to lead to self-employment in the absence of salaried employment and enhance Kenya's Industrialization process (Ngerechi, 2003). The study aimed at identifying the challenges facing these graduates. The results show that the course content in automotive courses is a challenge and should be reviewed to match the developments in technology in the motor vehicle industry. Another challenge identified by the study was the low rate for graduates in finding employment after completing their courses. Further, despite the industrial attachment providing practical skills to trainees, the attachment was found to be not enough and should also include the Jua Kali sector as well. Another challenge was the knowledge of the presence of adequate knowledge of Youth Enterprise Development Fund (YDEF) and Uwezo funds and the existence of the government policy to award 30% of all government tenders to women and the youth. Finally there was no provision for TVET graduates to acquire small tool kits loans for business start-ups.

### 5.4 Recommendations

Both industry and TVET institutions should work together to create opportunities for comprehensive internship programme for students.

The internship programme period to be twelve months' long instead of six month.

Since internship provides chances to apply theory based learning into practice, the organization should be more concerned about the students' skill development. Especially

creativity based learning, projects and presentation skills, team working activities and managerial skills are some important skills to be more developed.

TVET administrative part should link with industry to build good relationship among others in order to have effective internship program. Students should also build good rapport with both industry and organization as they are the middle source of the internship programme.

Government to set up start-up loans for graduates willing to enter self-employment.

## REFERENCES


Abban, C., and Quarshie, J. (1996). *Integrated Skills training for Self-employment*: The case of Ghana.

Acs, Z., and P. Mueller (2008). "*Employment Effects of Business Dynamics*: Mice, Gazelles and Elephants". *Small Business Economics* 30(2008): 85–100.

Aduda, D. (2006). Technical training reeling under neglect. *Daily Nation, 2 June 2006*, 11.

Afeti, G., (2013). *Technical and Vocational Education and Training for Industrialization*. Nairobi: Commonwealth Association of Polytechnics in Africa. Website: www.capa-sec.org

African Union (2007). *Strategy to Revitalize Technical and Vocational Education and Training* (TVET) in Africa. Addis Ababa: African Union.

African Union. (2007). *Strategy to Revitalize Technical and Vocational Education and Training* in Africa. Addis Ababa: African Union: Final Draft. *Bureau of the Conference of Ministers of Education of the African Union*

Agbenyo, J.S. (2010). ICT, Technical and Vocational Training in Ghana, Tele-centres African Rural Community Services Delivery. The Role of Leadership Development. *International Journal of Humanities and Social Science* Vol. 2 No. 4.

Atchoarena, D. and Delluc A. (2008). Revisiting Technical and Vocational Education in Sub-Saharan Africa: An Update on Trends, Innovations and Challenges. Paris: *International Institute for Educational Planning*, World Bank.

Atchoarena, D., and Esquieu, P. (2009). Private technical vocational education in Sub-Saharan Africa: Provision patterns and policy issues. *Revised final report*. Paris, France: UNESCO.

Atchoerena, D. Delluc, A. (2001) *Revisiting Technical and Vocational Education in Sub - Saharan Africa*: An update on trends innovations and challenges.

Bhuwanee, T. (2006). *Reforming technical and vocational education in Sub-Saharan Africa: Case studies of Ghana - Mauritius - Tanzania and Zimbabwe*. Dakar, Senegal: UNESCO BREDA.

Binks, M. (1996), "*Enterprise in higher education and the graduate labour market*", Education and Training, Vol. 38 No. 2, pp. 26-9.

Christiana E.E (2003).Employment Creation for Youth in Africa: The Gender Dimension. The International Labor Office, Training for Work in the Informal Sector: *Trends and Tensions.*

Cochran, W. G. (1963). *Sampling Techniques*, 2nd Ed., New York: John Wiley and Sons, Inc.

Daniels, S. (2010). *Making Do: Innovation in Kenya's Informal Economy*. San Francisco: Creative Commons.

David Balwanz, (2012), Youth Skills Development, Informal Employment and Delivering quality education and training to all Kenyans. Nairobi: *Government Printer*. Evidence from Kenya, Tanzania and Uganda, (accessed November 12, 2003).Government of Kenya.

Ferej A. (2000). The transition of youth from school to work: Issues and policies. *Journal of Vocational Education and Training* 45(3): 201-216.

Frey, B. and Benz, M. (2003), Being independent is a great thing: subjective evaluations of self-employment and hierarchy, *CESifo Working Paper* No. 959, Munich.

Goetz, S.J., and D.L. Debertin(2001). ''Why Farmers Quit: A County-Level Analysis.'' *American Journal of Agricultural Economics* 83(2001):1010–23.

Government of Kenya, (2010*). Economic survey*. Nairobi: Government Printer.

Government of Kenya. (2005). *Kenya education sector support programme 2005-2010*: Delivery of quality education and training to all Kenyans. Nairobi: Government Printer.

Grierson, J.P. and McKenzie I. (Eds) (2007). Training for self- employment through vocational training institutions. Turin, Italy: *ILO International Training Centre*.

Hamilton, B.H.(2000). ‘‘Does Entrepreneurship Pay? An Empirical Analysis of the Returns to Self-Employment.’’ *The Journal of Political Economy* 108(2000):604–31.

Ighelogbo, M. F. (2016). "The impact of skills management on business performance" (PDF). Skills DB Pro.

ILO, (2012). The youth employment crisis: Highlights of the 2012 ILO report. Geneva: *International Labour Office.*

Johnson, D. (2000). “The use of learning theories in the design of a work-based learning course at Masters level”, *Innovations in Education and Training International*, Vol. 37 No. 2, pp. 129-33.

Junichi, M. (2010). *Quality of Technical and Vocational Education and Training*: Perceptions of Enterprises in Hanoi and Surrounding Provinces, Vietnam.

Kenya Ministry of Youth Affairs and Sports. (2012). Skills Gap Analysis for Graduates of Youth Polytechnics, *Vocational Training Centres and Out-Of-School Youth*. Nairobi.

Kerre, B.W. (2010). *Technical and Vocational Education and Training (TVET*): A strategy for National Sustainable Development. Eldoret; Moi University Press.

King, K. (2006). Technical and Vocational Education and Training in an International Context. *Journal of Vocational Education and Training* 45(3): 201-216.

King, K., & McGrath, S. (2004). *Knowledge for development*? Comparing British, Japanese, Swedish and World Bank aid. London, UK: Zed Book.

Kothari, C. R. (1985). *Research Methodology*: Methods and Techniques. New Delhi: Wiley Eastern Limited.

Krejcie, R.V., & Morgan, D. W., (1970). Determining Sample for Research Activities.

Makworo E. O, (2013). Linking TVET Institutions and Industry in Kenya: Where Are We? Educational Research paper No. 06. *Centre for International Education*, University of Sussex.

Meier, Gerald M.; Rauch, James E. (2005). *Leading Issues in Economic Development* (8 ed.). New York: Oxford University Press. pp. 371–375.

Morrison, E.C. (2005). "*Trial by fire*", Supporting New Educators, Vol. 62 No. 8, pp. 66-8.

Nyankov, A. (1996): Current issues and trends in technical and vocational education. Paris, France: UNEVOC. *International Project on Technical and Vocational Education*.

Okay, S. and Sahin, I. (2010), "A study on the opinions of the students attending the faculty of technical education regarding industrial internship", *International Journal of the Physical Sciences,* Vol. 5 No. 7, pp. 1132-46.

Palmer, R. (2005). *Skills for work*? From skills development to decent livelihoods in Ghana's rural informal economy. Edinburgh, Scotland: Centre of African Studies, University of Edinburgh.

Paris dams, A. (2011). The Role of Skills Development in Overcoming Social Disadvantage.

Government of Kenya (2005a). *Sessional paper no. 1*: a policy framework for education training and research.

Republic of Kenya (2005b). Kenya Education Sector Support Programme 2005-2010:

Republic of Kenya (2007). Vision 2030 Strategy for National Transformation

Republic of Kenya. (2002). *National Development Plan 2002-2008*: Effective management for sustainable Economic growth and poverty reduction. Nairobi: Government printer.

Roeske, J.(2003). Skills training strategies to combat worst forms of child labour in the urban informal economy: Ghana Country Study, Marseilles, France: *International Programme on the Elimination of Child Labour (IPEC).*

Rupasingha, A.; Goetz, S. J. (2011). "Self-employment and local economic performance: Evidence from US counties". Papers in Regional Science: no. doi:10.1111/j.1435-5957.2011.00396.

Sivi-Njonjo, K. (2010). Youth Fact Book. Infinite Possibility or Definite Disaster? Nairobi:

Song L. S., (2004). *Vocational Education Challenges and strategies*, Suzhou China, International Symposium (2004).

Trotsky, E. and Sabag, N. (2010), "Internship in engineering design at hi-tech industries: theory and practice", paper presented at the IEEE-IBM TEE 2010 – *Transforming Engineering Education Conference*, Dublin, p. 5.

UNESCO, (2004) Synthesis report: Improving access, equity and relevance in technical vocational education and training (TVET). Bangkok, Thailand: UNESCO

UNESCO. (2004). *International cooperation in skills development*. A UNESCO meeting of internal experts on 25th -28th October 2004 (p. 107). Bonn: UNESCO.

UNESCO. (2012). Education for All Global Monitoring Report 2012. Youth and Skills:

Van Praag, C.M., and P.H. Versloot (2007). ''What is the Value of Entrepreneurship? A Review of Recent Research.'' *Small Business Economics* 29(2007): 351–82.

Wallenberg, M. (2010). Vocational Education and Training and Human Capital Development: current practice and future options. *European Journal of Education*, 45(2), 181-198.

World Bank. (2005). Expanding Opportunities and Building Competencies for Young People:

World Bank. (2008). *Kenya Poverty and Inequality Assessment*. Volume I: Synthesis Report.

## APPENDICES

THE QUESTIONNAIRE

Questionnaire for TVET graduates in final year of study and those in self-employment.

The purpose of the study is to establish challenges that face technical graduates' entry into self- employment. Your assistance in completing this questionnaire is kindly requested. This questionnaire is made up of two main sections -sections I and II. Give your honest responses to the items of the questionnaire to the best of your knowledge. Your input will be held in total confidentiality and your name or identity will not be revealed anywhere.

Instructions

Please write your answers in the space provided.

Do not indicate your name anywhere in this questionnaire.

Section 1: Background Information

1. **Gender:** Male [ ] Female [ ]

2. Level/course of study

Indicate by placing a tick in the appropriate box unit your course level and year of study.

| LEVEL/ COURSE | | YEAR OF STUDY |
|---|---|---|
| DIP<br>AUTO | | 1 |
| | | 2 |
| | | 3 |
| CERT | | 1 |

| | | |
|---|---|---|
| AUTO | | 2 |

**Section II A: Technical knowledge and Skills**

This section seeks to collect information on the adequacy of technical knowledge and skills imparted at the TTI. Indicate by ticking in the relevant boxes the extent to which you agree or disagree with the statement.

SA-Strongly Agree, A- Agree, U-Undecided, D - Disagree, SD -Strongly Disagree

| NO | ITEM Technical knowledge and skills | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| 1 | Do you have good basic knowledge and skills of vehicle assembly? | | | | | |
| 2 | Do you have good knowledge and skills of vehicle spare parts specification and procurement? | | | | | |
| 3 | Do you have good knowledge and skills of electronic engine testing and diagnostic equipment? | | | | | |
| 4 | Do you have good knowledge and skills to work in the motor repair workshop in the local informal sector? | | | | | |
| 5 | Do you have good knowledge and skills of engine measurements? | | | | | |
| 5 | Do you have good knowledge and skills to use specialized engine measuring tools such as dial gauge, micrometer and Vernier caliper? | | | | | |
| 6 | Do you have knowledge and skills of engine tear down, inspection and rebuild? | | | | | |
| 7 | Do you have good knowledge and skills of good metal processing (milling, machining, pressing, plating and heat treatment)? | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 8 | Do you have good knowledge and skills of construction and operation of manual and automatic transmission systems? | | | | | |
| 9 | Do you have good knowledge and skill to disassemble and rebuild manual and automatic transmission? | | | | | |
| 10 | Do you have good practical skills and knowledge of vehicle service and body work repair to the satisfaction of the customer? | | | | | |

What other skills do you have? (Please specify)

_____

_

**SECTION 11 B: Entrepreneurial knowledge and skills**

This section seeks to collect information on the adequacy of entrepreneurial knowledge and skills imparted at the TTI. Indicate by ticking in the relevant boxes the extent to which you agree or disagree with the statement (or question).

| NO | ITEM Entrepreneurial knowledge and skills | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| 1 | Do you prefer being independent at work? | | | | | |
| 2 | Are you realistic practical and hard worker? | | | | | |
| 3 | Do you prefer working with others as a team? | | | | | |
| 4 | Are you out of college and prefer to create a job for yourself? | | | | | |
| 5 | Have you worked before in a service delivery business? | | | | | |
| 7 | Do you often seek the advice of more than two people before making a major decision? | | | | | |
| 8 | Do you envisage starting your own business in future? | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| | Are you knowledgeable in writing a business plan? | | | | | |
| 9 | Do you update yourself with business-related issues in automotive industry? | | | | | |
| 10 | Do you persistently seek new knowledge and ideas by wider reading and visits to trade fares, shows and exhibitions for self -improvement? | | | | | |
| 11 | Do you have good knowledge and skills with regard to cultivating new friends, taking interest in new products, seizing a new opportunity that would benefit you? | | | | | |
| 12 | Do you have basic knowledge of finance and marketing? | | | | | |

If you agree with item no. 8 above, please explain?

_____

_____

What are you good at or like doing after training?

_____

What kind of collaboration would you suggest to help improve entrepreneurial knowledge and skill acquisition in this training program?

**SECTION 11 C: Industrial Attachment Effectiveness**

This section seeks to collect information on the effectiveness of industrial attachment schemes. The subsection seeks to evaluate students who have participated in the program. Indicate by ticking in the relevant boxes the extent to which you agree or disagree with the statement.

SA-Strongly Agree, A- Agree, U-Undecided, D-Disagree, SD-Strongly Disagree

| NO | ITEM Industrial attachment effectiveness | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| 1 | I was attached in a formal establishment | | | | | |
| 2 | I was attached in the local informal establishment | | | | | |
| 2 | I possess basic practical skills to identify and use correctly different workshop tools and equipment | | | | | |
| 3 | I acquired practical experience and skills to disassemble and inspect the condition of engine parts | | | | | |
| 4 | I acquired practical experience and skills to rebuild and test the engine and other systems | | | | | |
| 5 | I acquired practical experience and knowledge of use of electronic engine diagnostic equipment and interpretation of data. | | | | | |
| 6 | I follow guidance of supervisors, operation manuals and safety standards | | | | | |
| 7 | I acquired practical experience and knowledge of spare parts specification and procurement | | | | | |
| 8 | I have good team work ability | | | | | |
| 9 | I learnt good skills of quality control | | | | | |
| 10 | I have good practical supervisory and customer care skills | | | | | |
| 11 | I possess good knowledge of various legal requirement of a business entity | | | | | |
| 12 | I have good practical experience of job planning and evaluation | | | | | |

If you agree with item 2 , above please describe the sector

_____

Other skills? (Please specify)

_____

**SECTION 11 D: Availability of Government Support**

This subsection seeks to collect information on the availability of government support to TVET graduates. Indicate by ticking in the relevant boxes the extent to which you agree or disagree with the statement.

| NO | ITEM Availability of government support | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| 1 | I have adequate knowledge of Youth Enterprise Development Fund (YDEF) and Uwezo funds | | | | | |
| | Are there provisions of pre-service orientation training to TVET graduates wishing to enter self-employment? | | | | | |
| 3 | Is there a provision for TVET graduates to acquire small tool kit loans for business start-ups? | | | | | |
| 4 | Is there government policy to assist TVET graduates enter self-employment? | | | | | |
| 5 | Do you anticipate government support to get employment in the formal as well as the informal motor vehicle sector? | | | | | |

If you agree with item no **5** above, indicate the kind of support you anticipate from the government?

What kind of collaboration would you suggest to help in the self-employment of TVET graduates?

Suggest any other initiatives that can be undertaken by the County or National government to assist TVET graduates wishing to enter self-employment_____

**SECTION III: Questionnaire for instructors in TVET institutions**

This questionnaire is part of a research project on Challenges facing TVET Graduates wishing to enter into self -Employment in the North Rift Region. To make this research successful, you are kindly requested to respond to all questions as honestly as possible. Fill in the black spaces or tick the indicated brackets ( ) appropriately. For complete confidentiality, do not write your name anywhere in this questionnaire.

**SECTION IIIA: DEMOGRAPHIC INFORMATION OF RESPONDENTS**

Please tick (?) all that apply

Gender

Female ( )

Male ( )

Level of professional qualification

Diploma in technical education ( )

B. Ed Technology ( )

M.Ed Technology Ed. ( )

Other (Please specify)_____

3. Teaching experience

0-3 years ( )

4-6 years ( )

7-9 years ( )

10-12 years ( )

13 and above years ( )

4. Current responsibility

Tutor ( )

Course tutor ( )

Head of department ( )

Principal/D principal ( )

**SECTION III B: Instructors views on training offered at TVET institutions with regard to job market**

This section seeks to collect information on instructors of TVET institutions' view on training offered at these institutions with regard to job market. Indicate by ticking in the relevant boxes the extent to which you agree or disagree with the question. See below for an explanation

| SA stands for Strongly Agree, A stands for Agree, U stands for Undecided, D stands for Disagree, SD stands for Strongly Disagree | | | | | | |
|---|---|---|---|---|---|---|
| | **Statement** | SA | A | U | D | SD |
| 1 | Do you think knowledge and skills offered in automotive curriculum is relevant to the job market? | | | | | |
| 2 | Do you think graduates often find employment after completing their courses | | | | | |
| 3 | Knowledge and skills offered in the curriculum is relevant to the needs of the informal sector? | | | | | |
| 4 | There are refresher courses and industrial placement for instructors | | | | | |
| 5 | Do you think new courses should be introduced to match the developments in technology in the motor vehicle market? | | | | | |
| 6 | Do you think graduates may need re-training after being employed? | | | | | |
| 7 | Do you recommend TVET trainees to be attached to the local informal sector? | | | | | |
| 8 | Does the institute have modern facilities to match the developments in the industry? | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 9 | Do you think training offered gives graduates sufficient practical experience to work in the Jua-Kali sector as independent self-employed persons? | | | | | |
| 10 | Does the industry rate TVET trainees highly? | | | | | |
| 11 | Are there in-service training or industrial placement programs for instructors? | | | | | |
| 12 | Do you think the certification system requires review? | | | | | |

.If you agree or disagree with item 7 above, please Explain

_____

_____

Do you think the curriculum needs a review to offer skills needed in the current job market?

_____

If so, which areas needs Review

_____

_____

Cite any other reform that may improve training to enable TVET graduates be self-employed in the local informal sector

_____

**SECTION IV: Questionnaire for TVET graduates in self-employment/formal employment**.

The purpose of the study is to establish factors that influence technical graduates' entry into self-employment. Give your responses to the items of the questionnaire to the best of your knowledge. This questionnaire is made up of two main sections -sections I and II.

**Instructions**

Please write your answers in the space provided.

Do not indicate your name anywhere in this questionnaire.

Section 1: Background Information

1. Gender: Male[ ] Female [ ]

2. Level/course of study

Indicate by placing a tick in the appropriate box unit what your course level and year of study

| LEVEL | | COURSE | |
|---|---|---|---|
| DIP | | AUTO | |
| CERT | | AUTO | |

| NO | ITEM Technical knowledge and skills | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| 1 | Do you have good basic knowledge and skills of vehicle assembly? | | | | | |
| 2 | Do you have good knowledge and skills of vehicle spare parts specification? | | | | | |
| 3 | Do you have good knowledge and skills of electronic engine testing and diagnostic equipment? | | | | | |
| 4 | Do you have good knowledge and skills to work in the local informal sector? | | | | | |
| 5 | Do you have good knowledge and skills of good metal processing (milling, machining, pressing, plating and heat treatment)? | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 6 | Do you have good practical skills and knowledge of vehicle service and repair to the satisfaction of the customer? | | | | | |

**Section IV A: Technical knowledge and Skills**

This section seeks to collect information on the adequacy of technical knowledge and skills imparted at the TTI. Indicate by ticking in the relevant boxes the extent to which you Agree or disagree with the statement.

**SA**-Strongly Agree, **A**- Agree, **U**-Undecided, **D**- Disagree, **SD** -Strongly Disagree

What other skills do you have? (Pleases specify)

**SECTION 1V B: Entrepreneurial knowledge and skills**

This section seeks to collect information on the adequacy of entrepreneurial knowledge and skills imparted at the TTI. Indicate by ticking in the relevant boxes the extent you think in your own view is true.

| NO | ITEM Entrepreneurial knowledge and skills | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| 1 | Do you prefer being independent at work? | | | | | |
| 2 | Do you have good team work ability? | | | | | |
| 3 | Do you persistently seek self -improvement? | | | | | |
| 4 | Do you have good entrepreneurship with regard to cultivating new customers, new products and any new chance | | | | | |
| 5 | Do you find job satisfaction in your formal work? | | | | | |
| 6 | Do you find job satisfaction in your informal work? | | | | | |

If you agree with item no. 5 or 6 above, please explain?

What kind of collaboration would you suggest to help improve entrepreneurial knowledge and skill acquisition in this

trainingprogram?_____

**SECTION 1V C Industrial Attachment Effectiveness**

This section seeks to collect information on the effectiveness of industrial attachment schemes. The sub section seeks to evaluate students who have participated in the program. Indicate by ticking in the relevant boxes the extent to which you agree or disagree with the statement.

**SA**-Strongly Agree, **A**- Agree, **U**-Undecided, **D**-Disagree, **SD**-Strongly **D**isagree

| NO | ITEM Industrial attachment effectiveness | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| 1 | I was attached in a formal establishment | | | | | |
| 2 | I was attached in the local informal establishment | | | | | |
| 3 | I Posses basic practical skills to learn use of new tools and equipment | | | | | |
| 4 | I have good team work ability | | | | | |
| 5 | I have good skills of quality control | | | | | |
| 6 | I follow guidance of supervisors, operation manuals and safety standards | | | | | |
| 7 | I have good practical supervisory skills. | | | | | |
| 8 | I have good job planning and evaluation practical experience | | | | | |

Other skills (please specify) _____

SECTION 1V D: Availability of Government Support

This subsection seeks to collect information on the availability or non-availability of government support to TVET graduates. Indicate by ticking in the relevant boxes the extent you agree or disagree with the statement.

| NO | ITEM Entrepreneurial knowledge and skills | SA | A | U | D | SD |
|---|---|---|---|---|---|---|
| 1 | I have adequate knowledge of Youth Enterprise Development Fund (YDEF). | | | | | |
| | Are there provisions of pre-service orientation courses to TVET graduates wishing to enter self-employment? | | | | | |

| | | | | | | |
|---|---|---|---|---|---|---|
| 3 | Is there a provision for TVET graduates to acquire small tool kit loans for business start-ups? | | | | | |
| 4 | Is there government policy to assist TVET graduates enter self-employment? | | | | | |
| 5 | Did you receive government support to get employment in this sector? | | | | | |

If you agree with item no **5** above, indicate the kind of support you anticipate?

_____

_____

What kind of collaboration would you suggest to help in the self-employment of TVET graduates?

_____

_____

Do you experience any challenges as a self-employed person? If so, which are this challenges?

_____

## APPENDIX II: NACOSTI PERMIT

THIS IS TO CERTIFY THAT:
*MR. JAPHETH MANURA KIBOI*
of UNIVERSITY OF ELDORET, 0-30100
Eldoret,has been permitted to conduct
research in *Uasin-Gishu* County

on the topic: *GET VIEWS OF TVET GRADUATES IN SELF -EMPLOYMENT,TVET INSTRUCTORS AND UNEMPLOYED YOUTH WITH TVET TRAINING*

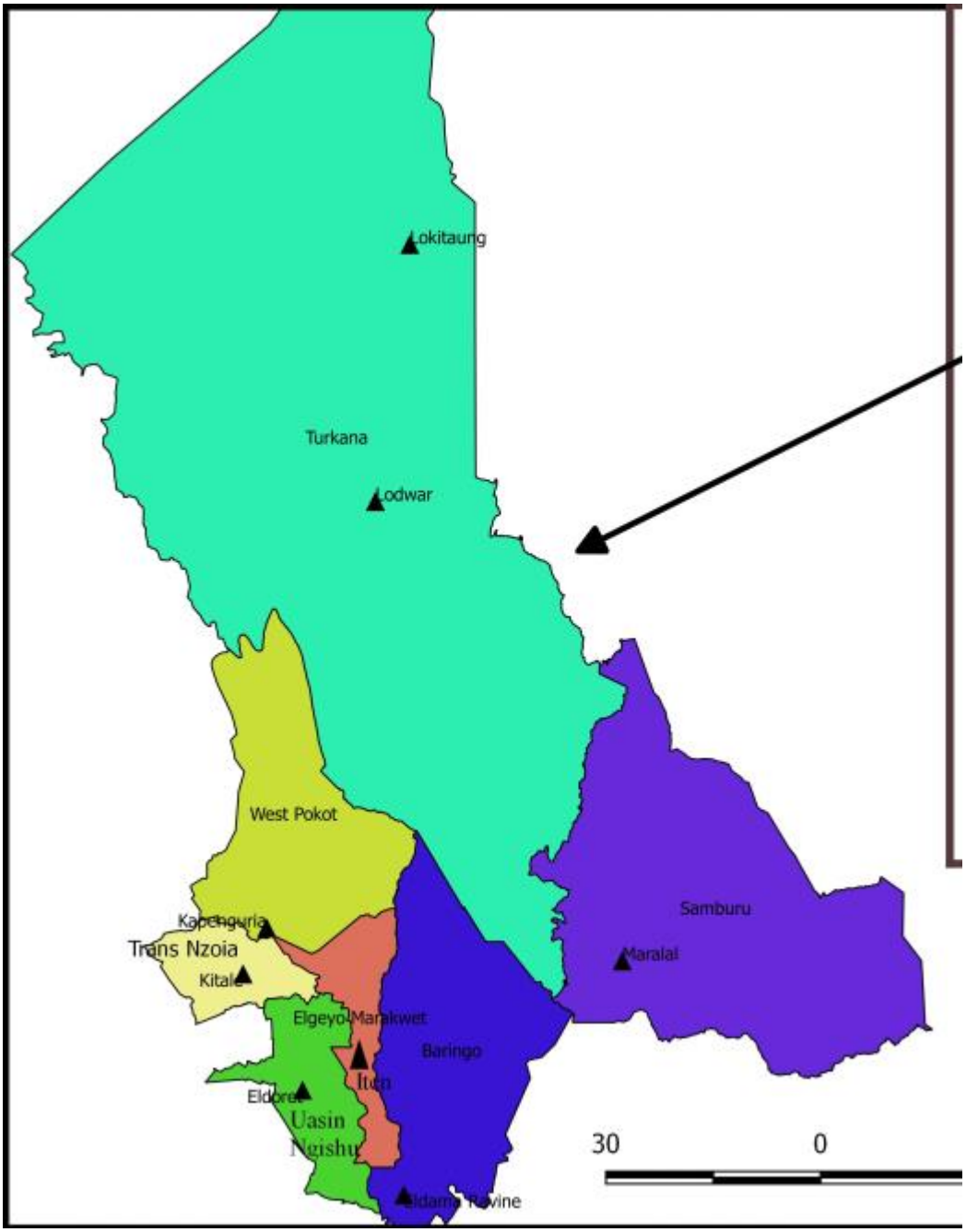
for the period ending:
*16th October,2015*

Applicant's
Signature

Permit No : NACOSTI/P/15/1237/5772
Date Of Issue : 6th May,2015
Fee Recieved :Ksh 1,000

Director General
National Commission for Science,
Technology & Innovation

## APPENDIX III: NORTH RIFT MAP




**(Source:Author 2016)**