

**UNIVERSITY OF NAIROBI**  
**DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK**

**THE ROLE OF VILLAGE POLYTECHNICS IN ENTREPRENEURSHIP  
DEVELOPMENT: A TRACER STUDY OF GRADUATES OF KARURUMO  
VILLAGE POLYTECHNIC, EMBUCOUNTY**

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**C50/67801/2011**

**A RESEARCH PROJECTSUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS  
IN SOCIOLOGY (ENTREPRENEURSHIP DEVELOPMENT) OF THE  
UNIVERSITY OF NAIROBI**

**NOVEMBER 2014**

## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signed .....

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This research project has been submitted for examination with my approval as a university supervisor.

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## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to individuals that assisted me in one way or another in the course of writing this project.

Special thanks go to my supervisors, Mr. Geoffrey Njeru and Professor Edward Mburugu, who tirelessly guided me and provided professional advice as well as encouragement during the study period.

I am greatly indebted to Madam Emily Nkoroi, the Embu county director of youth training who providing the relevant information, documents and generally facilitated the study.

Further gratitude goes to Mr. Graham Kangethe of curriculum, instruction and examinations division, of the department of youth training in the ministry of youth affairs and sports at the headquarters for providing me with relevant information on youth polytechnics nationally.

I cannot forget the Karurumo youth polytechnic manager and the instructors for their cooperation in giving me the preliminary information and the former trainees who will targets in the study.

Finally, I wish to thank everybody I may not have mentioned here but made this work possible.

Thank you all.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>KCSE</b>	-	Kenya Certificate of Secondary Education
<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>KIE</b>	-	Kenya Institute of Education
<b>MDGs</b>	-	Millennium Development Goals
<b>MOYAS</b>	-	Ministry of Youth Affairs and Sports
<b>NVCET</b>	-	National Vocational Certificate in Education and Training
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>SYPT</b>	-	Subsidised Youth Polytechnic Tuition
<b>TVET</b>	-	Technical and Vocational Education and Training
<b>TIQET</b>	-	Total Integrated Quality Education and Training
<b>UNDP</b>	-	United Nations Development Program
<b>UNESCO</b>	-	United Nations Education and Scientific and Cultural Organization
<b>YPs</b>	-	Youth Polytechnics

## **ABSTRACT**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and analyze their contribution to entrepreneurship development in Kenya. The study used descriptive survey design. The target population was 325 former graduates from Karurumo youth polytechnic who graduated between 2003 and 2012 with a sample size of 20% of the target population leading to 65 respondents. The data collected was analyzed using correlation matrix and multi regression analysis to establish the relationships between independent and dependent variable. The results revealed that vocational skills acquired, business enterprises started, innovations started and what graduates do after graduation separately contributed significantly to entrepreneurship development. The analysis further revealed that polytechnic graduates are making significant contributions in the labour market either as workers in business or in self-employment. The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. It also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The census report also document that over 62% of Kenyans are not in any form of employment and that only 25% of the secondary and university leavers are absorbed in regular employment. It is therefore important to boost vocational, technical, and entrepreneurial skills in youth polytechnic to cover the shortfall. Kenya needs a vibrant youth polytechnic training programs that can support the enhancement of the productivity of small and medium enterprises sector that currently account for 76% of the total employment but only contributes 18% of the natural gross domestic product.

Youth polytechnic education provides youth with technical and vocational skills for jobs in industry. The village polytechnics are an adoption of tailor made strategy to suit the village and rural labour markets (Kinyanjui,2007). The sectors of the rural labour market namely construction, furniture, garments and currently electrification is targeted. It is hoped that after graduating, the youth polytechnic graduates would be gainfully employed and contribute to the entrepreneur development in Kenya.

The UNDP,2012 in report entitled “ Skills gap analysis for graduates of youth polytechnic, vocational training centers and out- of- school youth” revealed that most of the graduates of the youth polytechnics lack competency in modern technology and have no practical skills required to exploit untapped opportunities in our country. They also have weakness in work attitude, communication, customer care and social skills and hence affecting their contribution to entrepreneurship development and their employability in the job market after graduating from the youth polytechnics. It is therefore against this background that the research proposes to investigate the role of youth polytechnic graduates to entrepreneurship development in Kenya through a tracer study of youth polytechnic graduates from Karurumo village polytechnic in Embu county in the last 10 years from 2003 to 2012 with a view of

coming up with interventions that will ensure the right kind and quality of skills training is given to them to enhance their contribution to entrepreneurship development.

## **1.2 Statement of the Problem**

Every year, graduates from Karurumo Village Polytechnic enter the labour market equipped with either grade II or grade III certificate. The whereabouts of these graduates was not visible in surveys of micro and small enterprises in Kenya. In a micro and small enterprise survey carried out in the Ziwani enterprise cluster in Nairobi, there was only one motor vehicle repair entrepreneur who had acquired skills in a village polytechnic (Kinyanjui, 2007). It was also reported that technical training, which is an important aspect of entrepreneurship development, was lacking in baseline surveys of micro and small enterprises (CBS, 1999), yet every year, trained youth graduate from village polytechnics enter the labor market. However, Wanyonyi (2009), Kelemba (2010) and UNDP (2012) reported that graduates from youth polytechnics had difficulties in using modern equipment and lacked the necessary and required skills that employment demands of them. They lacked work attitude, communication, customer care and social skills that are important for them to venture into business enterprises and use innovations that enable them to effectively contribute to entrepreneurship development in the country. Kinyanjui (2007) in a tracer and policy study of youth polytechnics graduates from Kwale, Kitui, Makueni and Taita Taveta also recommended a study on factors influencing technical training to be carried out in other areas to guide on youth polytechnics training policy . A study by Ministry of Youth Affairs and Sports (2012) on national evaluation of NVCET curriculum found out that Embu district had the highest percentage 52% of trainees who were incompetent and unable to fix a prescribed job process that was expected of them during the evaluation period. The purpose of this project was therefore to investigate the contribution of youth polytechnic graduates in entrepreneurship development through a tracer study of youth polytechnic graduates from Karurumo village youth polytechnic in Embu Country. The study specifically looked at whether what youth polytechnic graduates do after graduation, types of business enterprises started by graduates, innovations started by the graduates and vocational skills acquired by the graduates of village polytechnic contributed to entrepreneurship development in Embu county and Kenya as whole.



### **1.3. Overall Research Question**

What role do graduates from village polytechnics play in enhancing entrepreneurship development in the country?

#### **1.3.1 Specific Research Questions**

1. Does vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County?
2. Does what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu County?
3. Do types of businesses enterprises started by graduates of Karurumo village polytechnic started in the last ten years contribute to entrepreneurship development in Embu County?
4. Do innovations started by graduates of Karurumo village polytechnic in the last ten years contribute to entrepreneurship development?

#### **1.3.2 Overall Objective of the Study**

The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and investigate their contribution to entrepreneurship development in Kenya.

#### **1.3.3 Specific Objectives**

The following specific objectives were addressed:-

1. To determine how the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 to 2012 contributed to entrepreneurship development in Embu county.
2. To find out whether what graduates of Karurumo village polytechnic do after graduation contributed to entrepreneurship development in Embu county
3. To determine how types of business started by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County.
4. To establish how innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county

#### **1.4 Significance of the Study**

The study sought to identify and document the role of village polytechnic graduates in enhancing entrepreneurship development in Embu County. The data generated would assist in the provision of appropriate entrepreneurship development services that can address the concerns of village youth polytechnic graduates before entry into the labor market. The study would help to increase the knowledge of the relevant stakeholders and the community about the fate of village polytechnics trainees after graduating and their role in entrepreneurship development. It would also add to the existing knowledge of the impact of youth Polytechnic education on entrepreneurship development.

#### **1.5 Scope and Limitations of the Study**

This study focused on graduates of Karurumo Village Polytechnic, Embu County. The reason Karurumo Village Polytechnic was chosen was because the researcher was from that area and so it offered an ideal setting that could be replicated with lesser complexities in other Karurumo Village Polytechnic in Kenya. This is a case study focusing only on the role of village polytechnics in entrepreneurship development: a tracer study of graduate's of Karurumo Village Polytechnic, Embu County. The study only focused in one village polytechnic of which may not be the same aspect in other village polytechnics, which was not a good representation of all types of village polytechnic. The questionnaire's data was based on the graduate's response, which could be untrue. In order to ensure the response was real and met the expectation of the result, respondent were given more time to read and understand the information that the study required.

Finally, the graduates sampled were fewer hence affecting the sampling size. In order to ensure sampled size was met, research assistance visited the respondents frequently till they met at least 80% of the sample size which was adequate for analysis.

## **1.6 Assumption of the Study**

The study assumed that all the sampled respondents from Karurumo village polytechnic were traceable and able to express themselves freely without hiding information. The other assumption is that this project will assist the policy makers in planning of technical and vocational educational and training of the youth in the country.

## **1.7 Definition of Significant Terms**

**Entrepreneurship:** Is the process of starting a business or other organization. The entrepreneur develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure.

**Entrepreneurship Development** This is success in producing desired or successful enterprises by graduates

**Innovations:** This referred to the introduction of new products or services, use of new methods of production, opening up new markets or use of new products.

**Self Employed:** 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.

**Tracer Study:** Is an approach which widely being used in most organization especially in the educational institutions to track and to keep record of their students once they have graduated from the institution. It is the follow up of graduates of higher education or institutes.

**Temporary Employment:**

Is a situation where the employee is expected to leave the employer within a certain period of time.

**Unemployed:**

Is a situation where someone of working age is not able to get a job but would like to be in full time employment.

**Vocational Skills:**

Are those skills which allow a person to master a particular subject or procedure that is applicable to a career.

**Youth Polytechnic:**

This refers to low cost based post-primary training institutions that prepare trainees on vocation and technical training.

## **1.8 Organization of the Study**

This study is organized in five chapters. Chapter one deals with background on the role of village polytechnics in entrepreneurial development in Kenya. It explores four key components that are involved in entrepreneurship development in youth polytechnics (Vocational skills acquired by the graduates, work done by the graduates after graduation, Business enterprises started by the graduates and innovations started by the graduates) can be used to improve the role the polytechnic play in entrepreneurship development in Country. Chapter two discusses the overview and development of youth polytechnics in Kenya. It looks at how the youth polytechnics can be used to equip young with relevant skills and attitudes that would lead the young people so trained into gainful self-employment in order for them to contribute in the entrepreneurship development of their communities by building up the economic strength of those communities. Chapter three deals with research methodology and expounds on the descriptive survey research design used and research instruments used questionnaires to collect both qualitative and quantitative data from the former Karurumo Youth Polytechnics graduates.

Chapter four deals with data analysis while Chapter five deals with recommendations, It looks at how graduates of Karurumo village polytechnic are making significant contribution in the labour market as workers in business or self-employment. It also looks at how vocational skills acquired have helped the graduates become entrepreneurs hence promoting entrepreneurship development in the country. It further examines how innovations make one risk money and fortunes and combine resources to start new products and services and also establish small and micro enterprises and create employment opportunities for other people.

## **CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

The purpose of the project was to investigate the role of village polytechnics in entrepreneurship development in Kenya. The present chapter reviews related literature and the theoretical and empirical literature on the subject investigated. It details overview of the Kenya education system after independence in 1963 with regard to vocational and technical education and training systems, the establishment of youth polytechnics in Kenya, theoretical literature on vocational training and entrepreneurship development in Kenya, conceptual framework of the study and empirical literature of previous studies and findings about youth polytechnics in Kenya.

### **2.2 Overview of Kenya Vocational and Technical Education Systems since Independence**

Kenya sought ways to make changes in the inherited educational system on achieving independence. The aim was to make educational system supportive and responsive to the newly developed national goals (Merrifield 1986). In the years following independence, two major commissions (Ominde Commission, 1964 and the Gacathi Commission in 1976) were appointed to review the education system (Republic of Kenya, 1964; Republic of Kenya, 1976) and to plan for its future. This resulted to increased schooling. The provision of increased primary education was achieved as a result of Ominde commission. The 1976 commission addressed unemployment among product of formal education at all levels of education. Manpower issues were also addressed and a programme of action was formulated to further develop Vocational and technical education and training.

Attempts to alleviate the problem of unemployment among the youth, particularly the primary school graduates were directed towards the establishment of non-formal vocational education and training institutions such as youth polytechnics (Sifuna 1984). These programs were to absorb youth polytechnics graduates for a few years and give them marketable skills (Hoppers, 1985). Vocational training was also a way of developing attitudes for self reliance as well as imparting workable skills (Bacchus, 1988, Simiyu, 1990).

UNESCO (1984) defined vocational and technical education as: “A comprehensive term refers to education processes where it involves, in addition to general education, the study of technologies and related sciences and acquisitions of practical skills and knowledge relating to occupations in various economic and social life”. The report of the presidential working party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988) also stipulated the need to expand and streamline vocational and technical training institutions and their training to cater for training demands of the 8-4-4 system of education, provide greater opportunities for training primary and secondary school graduates and provide more trained manpower for the economy. The courses offered in youth polytechnics included masonry, carpentry, metal work, tailoring, dressmaking, and motor mechanics among others.

### **2.3 The Establishment of Youth Polytechnics in Kenya**

A youth polytechnic is a low cost community based post primary training institutions (Yambo,1986). Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics were to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). Youth polytechnics were established in Kenya in 1966 after a conference held at Kericho on Education employment and rural development. The conference observed that only a small portion of primary school graduates received places in secondary schools (Sheffield 1967) and youth polytechnics were seen as part of alleviating the primary school graduate unemployment problem. The youth polytechnics were closely related to the local needs and absorption capacities of the rural villages (Thompson, 1981). Between 1966 and 1977, more than 53 youth polytechnics were established and the demand for them was expanding. Currently, there are over 700 youth polytechnics with enrolment of over 100,000 trainees (Republic of Kenya, 2012). The structure of youth polytechnic program at the national level includes a director of youth

training with four major divisions (Curriculum, Institutions and Examinations, Research Division, quality Assurance and Standards and Infrastructure Division). At the County level, there is county director of youth training and the district youth training officer at the district level. The principal (project manager) is the executive officer at the institutional level and serves as the link between staff, trainees, the board of governors and the district youth training Officer. A number of commission reports, sessional papers and studies have made various recommendations on vocation and technical education in Kenya. The education sector reforms in Kenya dates back to the independence period, with commissions, committees, working parties and task forces generating reports, with recommendations, some of which have been implemented in part while others have never been implemented completely. In 1964, there was the Ominde Commission; In 1976, there was the National Committee on Educational Objectives and Policies led by Gachathi; In 1981 there was the Presidential Working Party on the Second University in Kenya led by Mackay; In 1988 there was the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond led by Kamunge; In 1999, there was the Commission of Inquiry into the Education System of Kenya led by Koech. To date, no government documentation is available to the public with chronological details on what recommendations from these reports were adopted and implemented.

The Ominde Commission outlined what education was and had to be during and after independence. The blueprint laid the foundation of post-independence education. It was mandated to survey existing educational resources and to advise the government on the formation and implementation of the required national policies for education (Republic of Kenya, 1964; It is important to note that despite its noble objectives the Ominde Commission recommendations were not implemented in full, a blunder that has had significant effects on education .The Gacathi Report reiterated objectives of the Ominde Commission and sought to enhance the use of the Kenyan educational goals to shape its national character and development. It recommended development of vocational, technical, and practical education. In 1979, the government realized that education was not doing much to achieve its stated objectives. Education curriculum was viewed as being too academic, narrow and examination centered (Republic of Kenya, 1979).



Rate of unemployment grew as school leavers went to urban centers to seek for white-collar jobs. In the 1980s the government changed its policy on education. This was because of the difficulties, which were faced by graduates of its education system at both primary and secondary levels. Most graduates who were matriculating from these levels could not be absorbed into the shrinking labor market. This made the government to reconsider changing its education system and to set up a Presidential Working Party in 1981 (Republic of Kenya, 1981). The report sought to investigate ways in which education could make graduates from these levels self-sufficient, productive in agriculture, industries, and commerce. Education system was expected to ensure that students acquired technical, scientific, and practical knowledge vital for self and salaried employment, lifelong skills, and nation building. The commission was also mandated to investigate the feasibility of establishing a second university that was development centered. It advocated for a practical curriculum that would offer a wide range of employment opportunities and equitable distribution of educational resources. It gave rise to the current education system, the 8::4:4. System.

Kamunge Report of (1988) noted that the youth polytechnics (YPs) were provided with basic facilities and equipments to enable them give quality training at artisan level. It recommended that vocational education and training instructors be trained in pedagogy and their terms and condition of service be improved. The youth polytechnics management be strengthened and local authorities be given full support. It further stressed those facilities of youth polytechnics to be improved. The country's training institutions were not only inadequate but also lacked the essential facilities and technology to prepare students for the challenging labour market.

The Government of Kenya appointed the Commission of Inquiry into the Education system of Kenya (Koech Commission) in 1999. The commission made recommendations on ways that could be used to provide quality education (Republic of Kenya, 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQET) to reflect the vision of Kenyan education. TIQET, as a concept embraced the values and substance that was to characterize the education system. It was to be total because it was expected to be inclusive, accommodative, and life-long. It focused on

quality of delivery and outcome of the education and training process. The report reiterated that, the proposed education system was to become a ticket to a better life, and future for the individual, community and the nation. As a departure from the 8-4-4 system of education, TIQET had some basic innovations, namely: the expansion of access to basic education; elimination of disparities in education based on geographical, social and gender factors; introduction of manageable curriculum content; introduction of modular learning approach and credit accumulation. Specifically, the report called for legal educational reforms, for instance: reviewing of the education act, political will and commitment by making public policy pronouncements on the required changes, enhancing of efficiency and effectiveness in educational administration and management, ensuring there is prudent governance and management of resources, building and strengthening genuine partnership and collaboration among educational stakeholders. In addition, the report also called for cutting-edge reforms including totally integrated quality education training, abolition of the 8-4-4 and replacement with a system not very distinct from the pre-8-4-4 system of 7-4-2-3, and universities maintenance of 1:10 ratio of graduate/undergraduate student; (Republic of Kenya, 1999). The reported also pointed out that one of the hindrances to the development of a technological culture was found in some cultural beliefs and practices among a number of Kenyan communities towards technically related work. Many of them design vocational education for other people's children instead of designing a universal system that is suited for all children who decide to join that career including their own children. In his recommendations, Koech Commission strongly pointed out that vocational training centers be encouraged to offer courses according to the needs of their localities such as short tailoring courses for upgrading courses as well as Jua – kali operators and health workers for the surrounding community. Despite its candid professional research, assessments and honesty on the challenges that were facing Kenyan education system, Koech Report was never implemented by the government. It was perceived as being expensive and complex.

Kenya Vision 2030 is the new long-term development blueprint for the country. It is motivated by a collective aspiration for a better society by the year 2030. The aim of Kenya Vision 2030 is to create “a globally competitive and prosperous country with a high quality of life by 2030”. It aims to transform Kenya into “a newly-industrializing, middle-income

country providing a high quality of life to all its citizens in a clean and secure environment. Simultaneously, the Vision aspires to meet the Millennium Development Goals for Kenyans by 2015. It proposes intensified application of science, technology, and innovation to raise productivity and efficiency levels across the three pillars. It recognizes the critical role played by research and development in accelerating economic development in all the newly industrializing countries of the world. More resources will be devoted to scientific research, technical capabilities of the workforce, and in raising the quality of teaching mathematics, science and technology in schools, polytechnics and universities.

#### **2.4 Vocational Skills acquired by YP Graduates and Entrepreneurship Development**

Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics are to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). The vocational education and training in polytechnics include masonry, tailoring, carpentry, driving, dressmaking, metalwork and many others. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing. However, Ndua suggested that research was required on the dropout rate of the trainees. Every year a number of these graduates get out to the field and therefore the project investigated whether this graduate are able to use the skills acquired in contributing to entrepreneurship development in Embu county.

#### **2.5 Work Done by YP Graduates after graduation and Entrepreneurship Development**

On what graduates of youth polytechnics do after graduation ( Nzioka 1986, Kinyanjui 2007, Yambo (1986) found that graduates who had been trained in carpentry and masonry

where somewhat more rural oriented than those trained in welding and plumbing. Yambo contended that many courses had economic value and predicted that new courses be eventually introduced in Youth Polytechnics. For a long time in Kenya, graduation from any level of education was associated with employment either in the private or public sector. The quality of an institution was based on how many of its graduates were employed after graduation. The reality is now different. The labour market has become very competitive and open joblessness is being experienced among graduates in all education levels. According to Kinyanjui, 2007, the youth polytechnic employees enter the labour market as employees (30%), Self-employment (42.2%) and only 22.2% of the graduates were unemployed. The key jobs for YP graduates were casual, contracts, carpentry, mechanics, welding and dress making among others. Polytechnic graduates were also employed in polytechnics as instructors, machine operators and electrical repairs. Some few graduates were employed in jobs such as hotel attendants, vegetable vending, and hairdressing. The studies revealed that polytechnic education is a holding ground for youth in village as they wait for their dream careers. The current project investigated whether these graduates played a role in entrepreneurship development in the County.

## **2.6 Creation of New Business Enterprises by YP Graduates**

The business perspective views entrepreneurship as the process of creating new business organization with intention of making profit. The entrepreneurs are organizers and coordinators of the major factors of production such as capital, labour and land. They properly mix these factors of production to start business enterprises. Entrepreneurs have initiative and self-confidence in accumulating and mobilizing capital resources for new business. Many youth polytechnics graduates find self-employment or starting new business as a means of making profitable career. This creates growth and wealth. Kinyanjui (2007) in a Trace and policy study of youth polytechnic graduates from Kwale, Kitui, Makueni and Taita Taveta found out that youth polytechnic staffing is one of the policy issues that need urgent attention. There was a clear need for policy to address staffing especially for instructors in the youth polytechnics. It also found out that there are no technicians to assist the instructions in handling the practicals. The study recommended polytechnic staffing will require restoring confidence and enhanced motivation and the beginning point being the

development of scheme of service for the youth polytechnic instructors. The study also recommended that equipments in youth polytechnic are inadequate and old.

UNDP (2012) in a study titled, Skills gap analysis for graduates of youth polytechnic, vocational training Centers and out-of-school youth found out that existing infrastructure and equipment in public youth polytechnics are dilapidated, inadequate and require renovation and modernizing if they are to produce high quality graduates. Most of the instructors are not competent enough to deliver quality skills training to the youth polytechnic trainees. Formalized partnership particularly between youth polytechnics and the industry was found to be lacking thereby making it difficult to align the youth polytechnic training with the demands of the industry and therefore reducing the contribution of Youth Polytechnic graduates in entrepreneurship development. The project investigated whether graduates from the youth polytechnics are involved in starting business enterprises and stimulating investment interests. Were the graduates able to generate income, provide training ground for other people, convene and utilizes local resources and start new business?

### **2.7 Innovations Started by YP Graduates and Entrepreneurship Development**

Schumpeter (1934) said entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before. Apart from being innovators, entrepreneurs are risk-takers and take advantage of business opportunities and transform these into products. This spirit has greatly contributed to the modernization of economics and new technologies. The project investigated whether the polytechnic graduates are able to start new products and create employment. Were the graduates able to use their innovations to satisfy human needs in a more convenient and pleasant way. Application of new technology is necessary for the future growth of business. A technical entrepreneur is as good as a craftsman. Because of the craftsmanship they develop quality goods. They also develop alternative marketing and distribution strategies in order to promote business. Entrepreneurs are creative. They can create customers and buyers. Due to their innovative nature they persist on discerning new sources of materials to improve their enterprises and transform these into profits.

Entrepreneurs like starting something new or different. Kelemba (2010) in a survey of initiatives in current use of integrating of education for sustainable development in centre's of excellence carried out in six TVET institutions in Kenya found out that there was an approach to inspire trainees to think about what they can achieve through their own lives and future careers, however, the major barriers to enacting sustainable development include overcrowding in some part of the curriculum, the perceived relevance by the staff, limited internal accreditation including institutional commitment and validation systems, financial obligation and confusion over what and how to teach sustainable development in youth polytechnics. Every year there are new technologies, new markets, and new products and therefore the project investigated whether the youth polytechnics graduates are able to utilize the opportunities and develop their entrepreneurship skills.

## **2.8. Theoretical Framework**

The theoretical framework on technical training and entrepreneurship development advanced in the project is-

### **2.8.1 The Goal Theory by Latham and Lockie**

According to Goal theory as developed by Latham and Lockie, (1979) there are four main mechanisms that connect goals to training outcomes. They direct attention to priorities , stimulate efforts, challenge people to bring their knowledge and skills to bear and increase their chances of success and the more challenging the goal, the more people will draw on their full repertoire of skills. The theory emphasizes on setting and agreeing on objectives against which performance is measured and managed. It also emphasizes on feedback and review aspects of performance management (Armstrong, 2010).It is against this framework that the project investigated whether graduates of youth polytechnics used the theory to succeed in what they do after graduating from the youth polytechnics. They combined their skills training and career progression by engaging in business, introducing new products, new methods of doing business, new marketing strategies and other income generating activities to enable them to succeed in life and develop their entrepreneurship skills.

### **2.8.2 Constructivism Theory of Training**

The theory advocates that we construct our own understanding of the world we live in. Each of us generates our own rules and mental models, which we use to make sense of our experiences. It advocates taking learning as a process of adjusting mental models to accommodate new experiences. Constructivists believe that learners construct their own reality or at least interpret it based upon their perception of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures, and beliefs that are used to interpret objects and events. What someone knows is grounded in perception of the physical and social experiences that are comprehended by the mind (Jonassen, 1991).

Constructivists call for elimination of standardized curriculum and instead promote use of curriculum that is customized to the student's prior knowledge and market based knowledge. It also emphasizes on hands on problem solving. They say education should focus on making connections between facts and fostering new understandings in students. Instructors should tailor their teaching strategies to student's response and encourage students to analyze, interpret, and predict information and use the knowledge to develop various skills that they can use in future after leaving school. It is against this framework that the project investigated whether graduates of youth polytechnics are using the theory to succeed in what they do after graduating from the youth polytechnics and whether their skills are market oriented and useful after graduation.

### **2.8.3 McClelland's Need for Achievement Theory**

McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence. Those people who have high need for achievement are more likely to succeed as entrepreneurs. Need for achievement refer to the desire to accomplish something with one's effort? It is the urge to excel or the will to do well. Need for power means the desire to dominate and influence others by controlling their actions and use of physical objects. Need for affiliation implies the desire to establish and maintain friendly and warm relation with others. The project investigated whether youth

polytechnics graduates are able to use this framework to ensure that they develop their entrepreneurship skills.

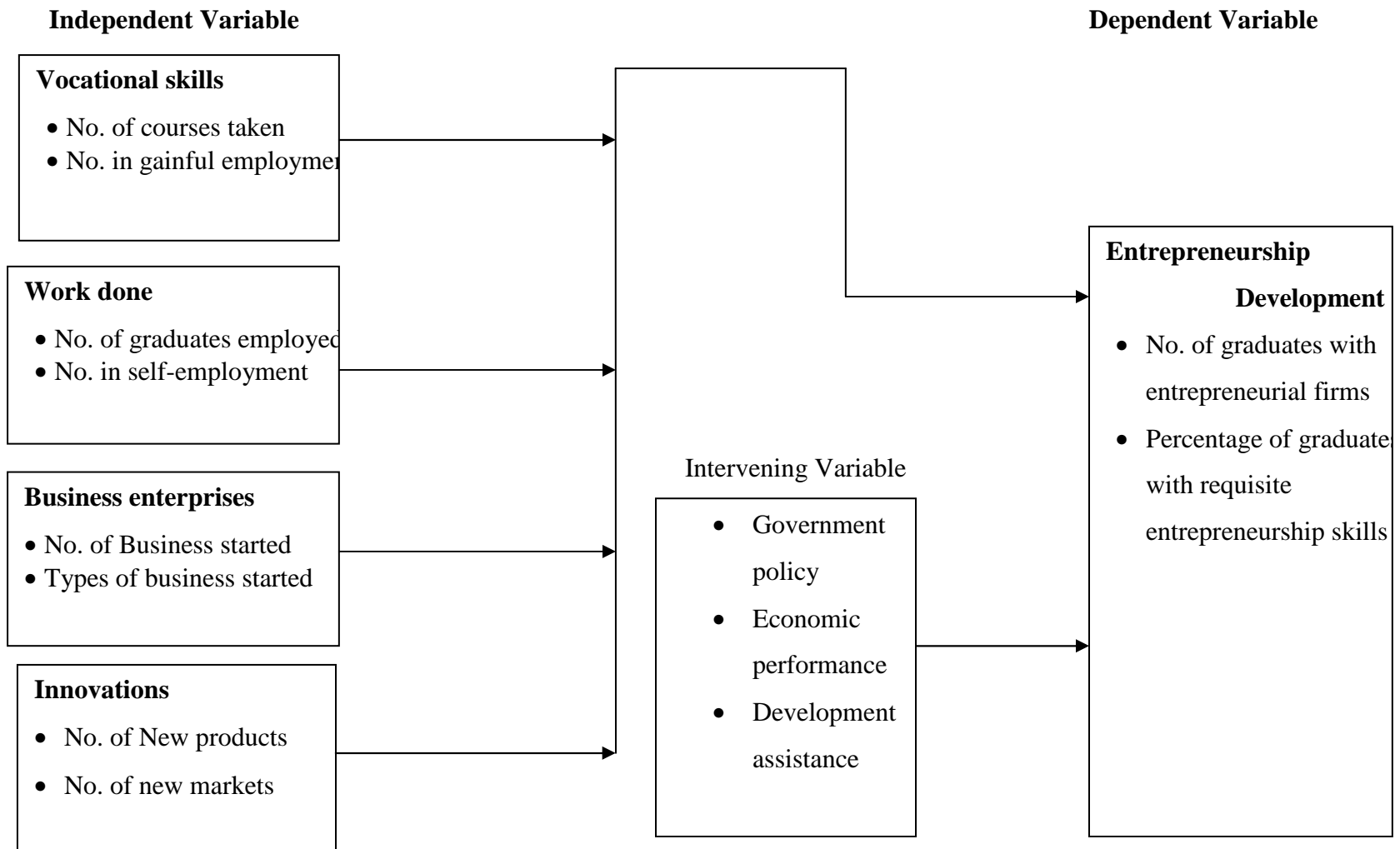
## **2.9 Conceptual Framework of the Study**

A conceptual framework helps simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda & Mugenda, 2003). The conceptual framework of the study was based on four independent variables namely; vocational skills acquired by the graduates, work done by the graduates, new business started by graduates and innovations stated by graduates.

An entrepreneur and his/her enterprise have been described as the engine of development. Scholars such as Schumpeter and Cantillon, see entrepreneur as the main catalyst through which any country achieves development. It is in this light that entrepreneurship is seen as the ability to perceive of a business opportunity and exploit it for the purposes of generating a profit, which in turn is used as capital for further investment or as a livelihood means. Entrepreneurship brings innovation through such activities as creation of new products, acquiring of new skills, investing in new technologies, acquiring new sources of raw materials, new production methods, creation of new markets and even new managerial innovations for developments. Entrepreneurship plays a major role in economic development of any economy by promoting capital formation by mobilizing the idle savings of the public, encourages effective resources mobilization of capital and skill that might otherwise remain unutilized and idle. Entrepreneurism an innovator who introduces new combinations of means of production. Innovation involves making use of new things or doing of things that are already being done in a new way. Entrepreneurs are risk takers and insecurity bearers. If the venture succeeds, the entrepreneur profits, if it does not, loses occur. The entrepreneurs must make use of his/her initiatives to reduce risks or uncertainties. They also make business decision, once the entrepreneur is convinced that a particular line of production offers large prospects, he/she has to formulate action plan regarding the product and the quality of products to be produced. He /she has to find the best possible method of production which ensures he/she succeeds. Entrepreneurs arrange finances, purchases raw materials, supervises, sells and markets and assures the role of manager in the enterprise.



In line with this definition and function of entrepreneurship taken above, the project used the below conceptual framework to explain the role of village polytechnics graduates in entrepreneurship development in Kenya. The project looked at whether what graduates of youth polytechnics do after graduation , business enterprises started by the YP graduates, innovations started by the youth polytechnic graduates and vocational skills acquired by the graduates contributes to entrepreneurship development in Embu county and Kenya as a whole.



**Figure 2.1 Conceptual framework**

## 2.10 Knowledge Gaps

The gaps identified in the reviewed literature are as shown on table 2.1

**Table 2.1 Knowledge Gaps**

<b>Variable</b>	<b>Author and Year</b>	<b>Findings</b>	<b>Knowledge gap</b>
Vocational skills and entrepreneurial development by the graduates	Kelemba, (2012) Ndua,(1988) Moyas, (2012) Sifuna (1975) Waithaka, (1989)	Found out that their existed a strong relationship between vocational skills and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	There is need to explore this findings in the context of Kenyan youth polytechnics so as to clearly examine the exact relationship
Work done and entrepreneurial development by the graduates	Moyas (2012) Nzioka (1986) Kinyanjui (2007)	These studies found out that their existed a strong relationship between work done and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	These studies do not indicate clear methodologies that were used to reach this conclusion. On this basis, my study shall designed a clear methodology to verify this influence
Businesses and entrepreneurship development by the graduates	UNDP(2012) Kinyanjui (2007)	There seems to exist a strong relationship between business and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail.
Innovations and entrepreneurial development by the graduates	Schumpeter (2004) Kelemba (2010)	There seems to exist a strong relationship between innovations and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail

## **2.11 Summary of Literature Review**

This chapter highlights the review of the previous studies on youth polytechnics in Kenya and the three theories namely, the Goal theory, the Constructivism theory and McClelland need for achievement theory that have been advanced about training and entrepreneurship development. It further reviews the conceptual framework with the four independent variables under study (What graduates of youth polytechnic do after graduation, types of business enterprises started, vocational skills acquired and innovations started by graduates of the polytechnic has the dependent variables).

This is due to the fact that various development plans and policies associate human development with economic development (Kamunge, 1998). It has been argued that there are many countries with trained and educated populations yet they lag behind in development (Prichet, 1996). Those of contrary opinion such as Ngware (2002), Alam (2007), see investments in education and training as being beneficial. They argue that education and training improves one's creativity, enhances individual's participation in economic development, and enhances one's competitiveness in the job market as well as future earnings. Therefore there is need for further research to ascertain the impact of investment in training on enhancing individual's competitiveness in labour market especially for the youth polytechnics graduates.

The review showed research studies that has been done on the role of vocational and technical skills on entrepreneurship development However, no such studies has been done in Embu County particularly targeting the Karurumo youth polytechnic graduates. This study hopes to fill in the gap.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter explained the research design, target population, sampling techniques, research instruments, data collection and analysis procedures and the operation definition of variables used.

### **3.2 Research Design**

The research design used in this study was descriptive survey design. The project aimed at investigating role of village polytechnic graduates to entrepreneurship development in respondent's opinion in relation to their role in entrepreneurship development in the country. This enabled the researcher to bring out the elements of the findings in a more clear and comprehensive manner. According to Creswell (2002) descriptive survey design is used when data is collected to describe person, organization, settings, and phenomena. A survey reports the way things which include behavior, attitude, values and characteristics are formed (Mugenda and Mugenda, 2003). The above design was therefore used to investigate the role of village polytechnic graduates to entrepreneurship development in Embu County. A self-administered questionnaire was used to collect the required quantitative and qualitative data from former trainees of Karurumo Youth Polytechnic. The Questionnaire comprised of two sections. The first part was designed to determine the demographic characteristics of the respondents, while the second part consisted of questions focusing on the four independent variables to be studied (Work done by graduates after graduation, business enterprises started by graduates, new innovations started by the YP graduates and Vocational skills acquired by YP graduates) had a role to play in entrepreneurship development in Embu county and Kenya as whole.

The questionnaire was designed in line with the objective of the study. To enhance quality of data obtained, Likert types of questions were included whereby respondents indicated the extent to which the variables were practiced in a five part Likert scale (Gamer, 2010). Structured and un-structured questions were also used to facilitate analysis and encourage the responses to give an in-depth response about the variables

without feeling held back in revealing any information. Secondary data was collected from the ministry of youth affairs and sports at the headquarters and from the county director of youth training in the county. This included annual reports and other related returns.

### 3.3 Target Population

The target population according to Cox (2010) is the entire set of units for which the survey data are used to make references. The target population constitutes the entire or totality of the items under study (Kothari, 2004). The target population for this study was 325 former graduates from Karurumo village polytechnic who graduated between 2003 and 2012 (10 years).

**Table 3.1 Target Population**

	<b>population</b>
YP Graduates from 2003 to 2012	325
<b>Total</b>	<b>325</b>

### 3.4 Sampling Procedure and Sample Size

Mugenda and Mugenda (2003) defined sampling as the selection of a portion of a population such that the selected portion represents the population adequately. Mugenda and Mugenda (2003) suggest that for descriptive studies 10% or above of the accessible population is enough for the study. This study targeted 20% of the target population of 325 making a total sample size of  $(0.20 \times 325) = 65$  as indicated in the below table:-

**Table 3.2 Sample Size**

	<b>Sample size</b>
YP Graduates (20% of 325)	65
<b>Total</b>	<b>65</b>

The former graduates of Karurumo youth polytechnic were traced in the whole county by the four research assistants under my guidance as the principal researcher. The research assistants were briefed on the research problem and what was expected from the questionnaire. The research assistants were encouraged to work as a team where necessary. In order to identify the respondents, the researchers were advised to visit the YP manager, instructors and chiefs to help them in tracing the graduates.

### **3.5 Data Collection Methods and Instruments**

The study used questionnaires in collecting data from graduates. The questionnaire combined both open-ended and close-ended questions which were administered to the graduates. Questionnaires were considered ideal for collecting quick data from the graduates.

The data collection procedure entailed the researcher obtaining an introduction letter from the University. The researcher then sampled graduates to inform them about the study and made arrangements for issuing questionnaires. The respondents were given instructions and assured of confidentiality and were given enough time to fill in the questionnaires, after which the researcher collected the filled-in questionnaires.

The researcher therefore sourced data from both primary and secondary sources. Primary data was gathered directly from respondents through questionnaires. Secondary data was used because there were some data from published materials and information e.g. journals and the internet.

#### **3.5.1 Pilot Testing of the Questionnaires**

Pilot testing of the questionnaires before embarking on real research was important in order for it to reveal deficiencies (Mugenda and Mugenda (2003). Eleven questionnaires were used for pilot testing to ensure reliability and validity in the adjacent Tharaka Nithi County. Former graduates of Muthambi YP were traced and interviewed. The pilot data was not included in the study. The recommendations of the supervisor enhanced the validity of the instruments. This established the reliability and the validity of the instruments.

### **3.5.2 Reliability of the Research Instruments**

In order to ensure reliability of instruments, questions in the questionnaires were constructed and first pre-tested to ensure consistency in measurement. The test-retest technique of assessing reliability of a research involved in administering the same instruments twice to the same group of subjects. This was after a lapse of two weeks. Spearman rank order correlation was employed to compute the correlation coefficient in order to establish the extent to which the content of the questionnaires was consistent in eliciting the right responses every time the instrument was administered. A correlation coefficient ( $r$ ) of 0.85 was considered high enough in judging the reliability of the instruments.

### **3.5.3 Validity of the Research Instruments**

Just as it was observed by Patten (2004) and Wallen & Fraenkel (2001) that a study instrument is only valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed, the current study put in place measures to ensure that the instruments used in the study provided accurate result. The content validity of the instruments was measured. The researcher's supervisors helped the researcher to assess the concept the instruments was measuring in order to determine whether the set of items were accurately representing items under study. The recommendations of the supervisor enhanced the validity of the instruments.

### **3.6 Data Analysis Techniques**

The data collected was coded, cleaned and entered into the computer and analyzed using the statistical package for social sciences (SPSS). Descriptive statistics was used to analyze the data. Descriptive statistics provided for meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution and was used to analyze and generalize the results of analysis to the population (Kothari, 2008). This is because the variables studied were measured at ratio or interval scales and were continuous (Patton, 2003). For analysis of quantitative data, the data was converted into numeric codes representing attributes or measurements of variables. Coding included as much information as possible because once the coded data was entered into the computer,



it was possible to recover any details, which were omitted ( Mugenda &Mugenda, 2003). Generalization was done from the themes about the phenomena in question and interpreted in the light of available literature (Kumar, 2005). Qualitative analysis was important since it supplemented the quantitative analysis that created a better framework for the interpretation of the findings (Kothari 2008). Data was then presented in pie charts and tables and explained

### **3.7 Operational Definition of Variables**

To operationalize the research variables, the matrix below defines how the variables was measured

### 3.8 Operational Definition of Variables

To operationalize the research variables, the matrix below defines how the variables was measured

**Table 3.3 Operational definition of variables**

Objectives	Variables	Indicators of Measurements	Measurements scale	Tools of Analysis	Type of Analysis
To determine how vocational skills acquired by graduates from Karurumo Village Polytechnic in the last 10 years contributed to entrepreneurship development in Embu county	Independent: vocational skills acquired by graduates	<ul style="list-style-type: none"> <li>No. of graduates in gainful employment</li> <li>No. of courses taken by graduates</li> </ul>	Nominal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To find out whether what graduates from Karurumo village polytechnic do after graduation contributed to entrepreneur development in Embu county	Independent: what graduates from Karurumo village polytechnic do after graduation	<ul style="list-style-type: none"> <li>No. of graduates employment</li> <li>No. of graduates self- employment</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneur development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Nominal		
To determine whether types of business started by graduates from Karurumo Village Polytechnic in the last 10 years contribute to entrepreneurship development in Embu County	Independent: types of business started by graduates	<ul style="list-style-type: none"> <li>No. of business started</li> <li>Types of business started</li> </ul>		Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To establish whether innovations started by graduates of Karurumo Village Polytechnic in the last ten years contribute to entrepreneurship development in Embu County	Independent: Innovations started by graduates	<ul style="list-style-type: none"> <li>No. of new products started</li> <li>No. of new technologies started</li> <li>New markets started</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		

**Table 3. 4 The number of Trainees enrolled at Karurumo Youth Polytechnic since 2003 to December 2012**

Dist.	YP	Name of Course	Youth Polytechnic Graduates since 2003 to December, 2012																													
			2003			2014			2005			2006			2007			2008			2010			2011			2012					
			M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
Emb		MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10
		Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11
		Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10
		Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15
		Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17
<b>Grand Total</b>												25						36					18			34			53			63

### **3.9 Ethical Considerations**

To avoid biases in this study, the researcher took into consideration the qualitative research that uses a case study approach which tends to skew data in certain ways (Mason, 2002). All ethical procedures were considered. Multiple methods were used and acknowledgement of researchers' role assisted in mitigating all the biases in the study.

## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

### 4.1 Introduction

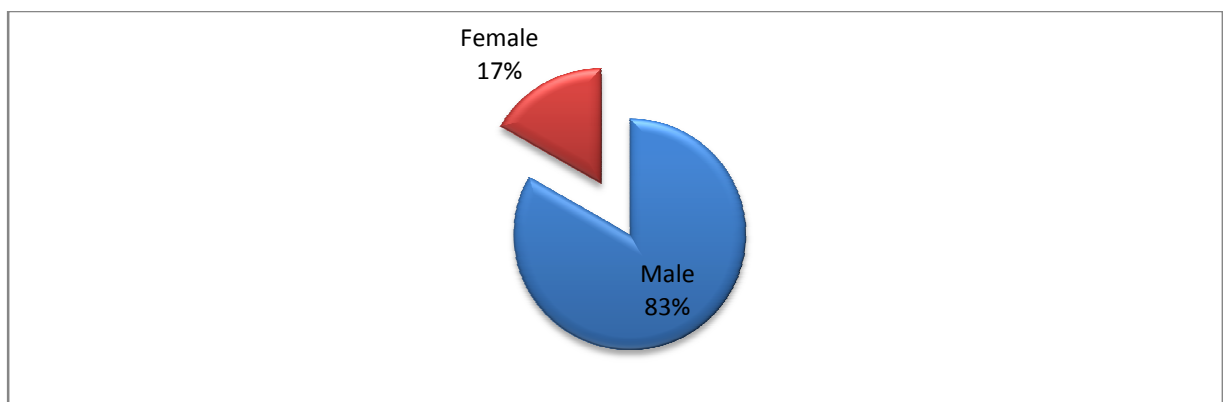
This chapter presents analysis and findings of the study as set out in the research methodology. The results were presented on the role of village polytechnics in entrepreneurship development. The study targeted 65 respondents out of which 60 responded and returned their questionnaires contributing to the response rate of 92.3%. This response rates were sufficient and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was due to extra efforts that were made via personal calls and visits to remind the respondent to fill-in and return the questionnaires. The chapter covers the demographic information, and the findings were based on the objectives.

### 4.2 Demographic Information

#### 4.2.1 Gender distribution of the respondents

The study sought to establish the respondent's gender distribution. The findings are as stipulated in figure 4.1.

**Figure 4.1 Gender of the respondents**



From the findings illustrated in figure 4.1 the majority of the respondents (83%) were males while 17% were females. This illustrates that there was gender disparity as majority of the respondents were males.

### 4.2.2 Highest level of Education

The research sought to establish respondents' highest level of Education. The findings are as stipulated in figure 4.2.

**Figure 4.2 Highest level of Education**

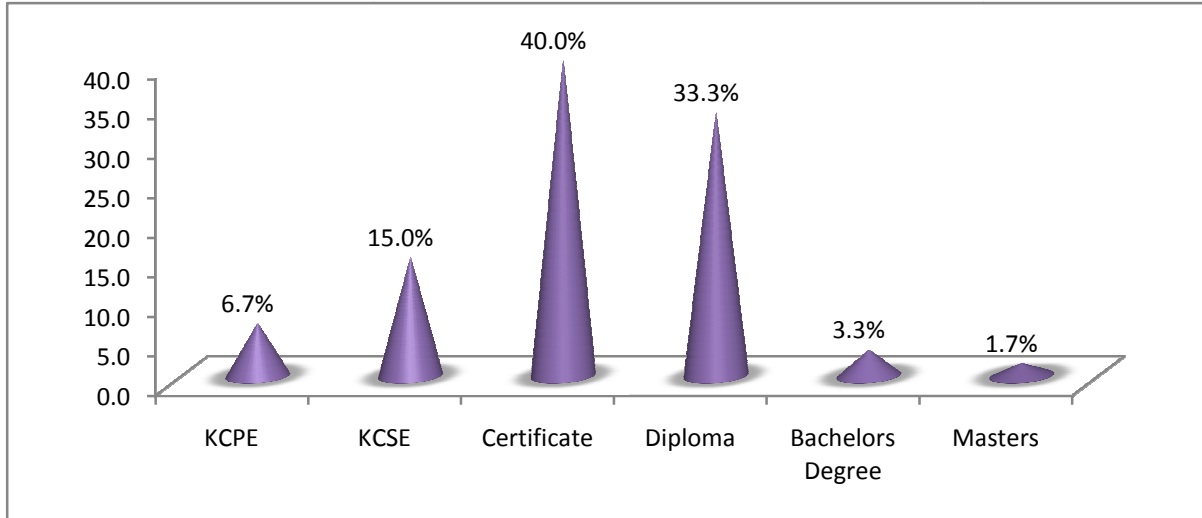
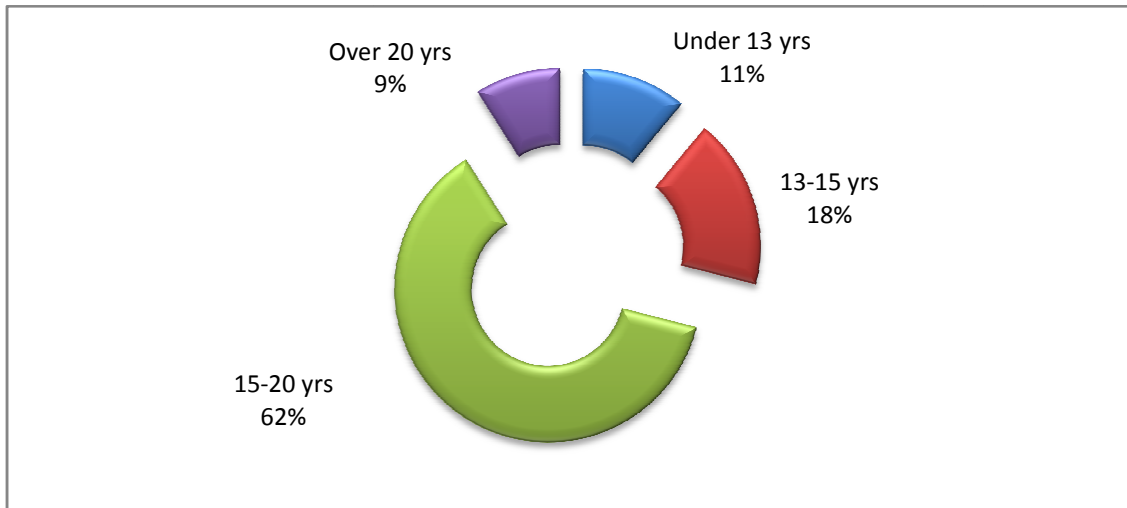


Figure 4.2 indicates that most of the former graduates from Karurumo youth polytechnic (40%) had college certificates level of education, 33.3% had college diplomas and 15% had Kenya certificate of secondary education while 6.7%, 3.3% and 1.7% had Kenya certificate of primary education, bachelor's degree and Masters degree respectively. This illustrates that majority of the graduates from Karurumo Youth Polytechnic had college certificates and diplomas respectively. This shows that most of the graduates were able to carry out entrepreneurship development without many problems owing to their level of education.

### 4.2.3 Age the trainees joined the Polytechnic

The study also sought to establish the age at which the respondents joined the Polytechnic. The findings are as stipulated in figure 4.3.

**Figure 4.3 Age trainees joined Polytechnic**



From the study findings, majority of the respondents (62%) joined the Polytechnic at the age of 15-20 years, 18% at the age of 13-15 years while 11% and 9% joined the polytechnic at the age of less than 13 years and over 20 years respectively. This implies that majority of the graduates from Karurumo youth polytechnic had joined the institution at the age of 15-20 years. This was the normal age at which students/trainees are enrolled in the polytechnics and therefore they were suitable to join the training.

**4.2.4 Number of Years trainees spent in the Polytechnic**

The study further sought to establish the number of years that the respondents spent in the polytechnic. The findings are as stipulated in table 4.1.

**Table 4.1 Number of Years trainees spent in the Polytechnic**

	Frequency	Percentage
< 1 yr	3	5.0
1 & < 2 yr	14	23.3
2 & <3 yrs	23	38.3
3 & < 4 yrs	11	18.3
> 4 years	9	15.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents (38.3%) had spent 2-3 years at Karurumo youth polytechnic, 23% had spent 1-2 years and 18.3% had spent 3-4 years while 15% had spent over four years at Karurumo Youth Polytechnic. This implies that majority of the graduates from Karurumo Youth Polytechnic had spent 2-3 years in the institution that was relatively enough to acquire the desired skills. This is the normal duration that the trainees take in the polytechnics.

#### 4.2.5 Reasons for enrolling in the Youth Polytechnic

The study sought to establish the reasons why the respondents enrolled in the youth polytechnic. The findings are as stipulated in table 4.2.

**Table 4.2 Reasons for enrolling in the Youth Polytechnic**

	Frequency	Percentage
Acquiring of skills	53	88.3
Interested or liked courses offered in the YPs	44	73.3
Forced by circumstances	49	81.7
Lack of school fees for secondary education	51	85.0
Failure to score good grades in KCPE	53	88.3
To be self employed	39	65.0
Polytechnic education is affordable	46	76.7

From the study findings, majority of the respondents (88.3%) indicated acquiring of skills and failure to score good grades in KCPE as the reasons why they enrolled in the youth polytechnic, 85% cited lack of school fees for secondary education and 81.7% indicated that they were forced by circumstances to enroll in the youth polytechnic. On the other hand, 76.7% indicated that polytechnic education was affordable and 73.3% cited that they were interested or liked courses offered in the YPs while 65% indicated that they enrolled in the youth polytechnic due to failure to score good grades in KCPE. Majority of the trainees had divergent reasons why they joined the polytechnics but acquiring of skills and failure to score good grades in KCPE stood out.

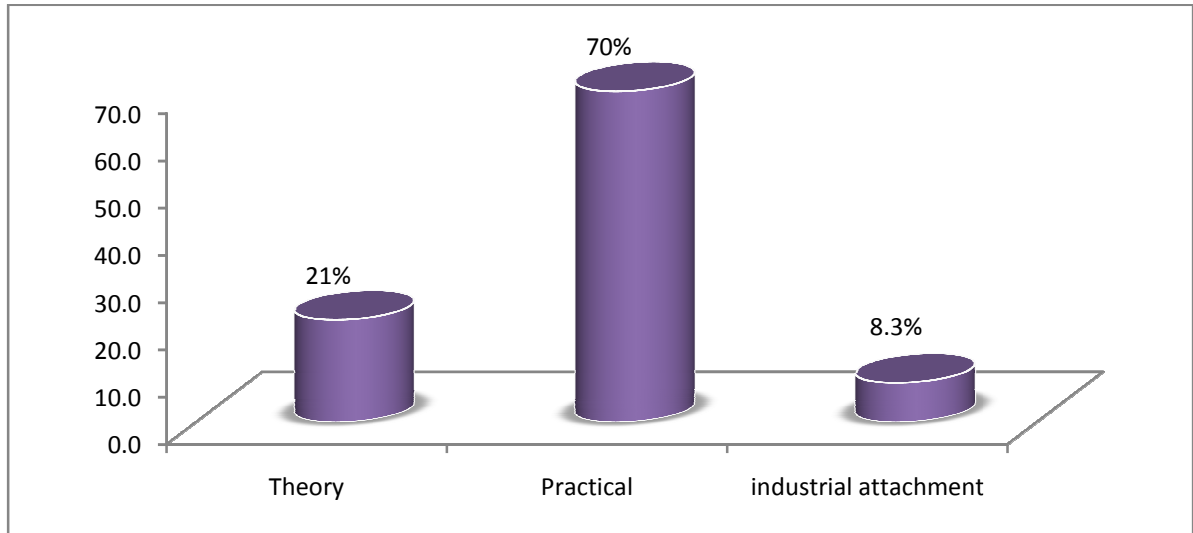


### 4.3 Vocational Skills and Entrepreneurship Development

#### 4.3.1 Aspects of the course undertaken in the polytechnic and day today life

The study asked the respondents to indicate the aspects of the course undertaken in the polytechnic and what they were doing on day today life. The findings are as stipulated in figure 4.4.

**Figure 4.4 Aspects of the course undertaken in the polytechnic**



From the study findings, majority of the respondents (70%) indicated that the aspects of the course undertaken in the polytechnic was practical in their day to day life, 21% indicated that it was theoretical while 8.3% indicated that the aspects of the course undertaken in the polytechnic helped the respondents in their industrial attachment. This meant that the respondents were able to acquire practical skills that they used when they got out from the polytechnic and were able to use it to develop their entrepreneurship skills. This shows that the graduates were able to get the right practical skills that enabled them to be competent, effective and efficient in the operations of the day to day life.

#### 4.3.2 Outcome of vocational skills acquired in the polytechnic

The study also sought to establish the outcome of vocational skills acquired in the polytechnic among the respondents. The findings are as stipulated in table 4.3.

**Table 4.3 Outcome of vocational skills acquired in the polytechnic**

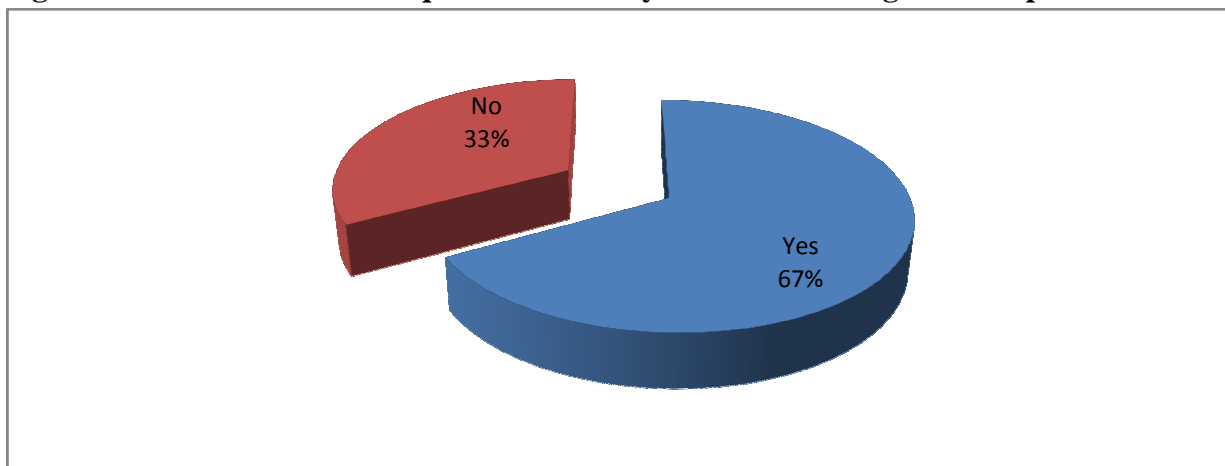
	Frequency	Percentage
Entrepreneur	23	38.3
Trainer	11	18.3
Self-employed	18	30.0
Employed	8	13.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents, 38.3% indicated that the vocational skills acquired in the polytechnic helped them to be entrepreneurs, 30% indicated self-employed while 18.3% and 13.3% indicated that the vocational skills acquired in the polytechnic helped them to be trainers and employed respectively. This implies that the vocational skills acquired in the polytechnic helped majority of the graduates from Karurumo Youth Polytechnic to be entrepreneurs. It also shows that Karurumo Youth Polytechnic graduates were doing well in life because of the vocational skills they acquired during their training. This was in line with expectation as they joined the polytechnic.

#### **4.3.3 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

The study asked the respondents to indicate whether the Vocational skills acquired in the Polytechnic helped them become an Entrepreneur. The findings are as stipulated in figure 4.5.

**Figure 4.5 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

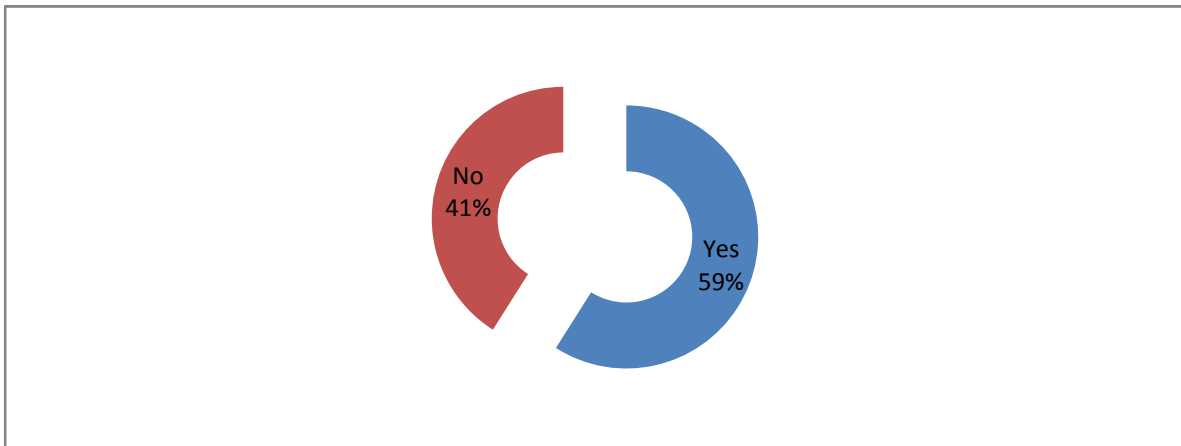


From the study findings, majority (67%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them become an entrepreneur while 33% were of a contrary opinion. This implies that vocational skills acquired in the Polytechnic help graduates become Entrepreneurs.

#### 4.3.4 Vocational skills acquired in the Polytechnic

The study further asked the respondents to indicate whether the vocational skills acquired in the polytechnic helped them improving entrepreneurship skills. The findings are as stipulated in figure 4.6.

**Figure 4.6 Vocational skills acquired in the Polytechnic**



From the study findings in the figure above, majority (59%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them improve their entrepreneurship skills while 41% were of a contrary opinion. This is in line with Waithaka, (1989) who observed that young school graduates with relevant skills and attitudes would lead the young people to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities.

#### 4.3.5 Vocational skills and Entrepreneurship development

The study sought to establish the role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. The findings are as stipulated in table 4.4.

**Table 4.4 Vocational skills and Entrepreneurship development**

	<b>Frequency</b>	<b>Percentage</b>
Promotion of new business	33	55.0
Promotion of innovations	44	73.3
Provision of new technologies	49	81.7
Creation of new products	51	85.0
Acquiring of new skills	56	93.3
Creation of new markets	39	65.0

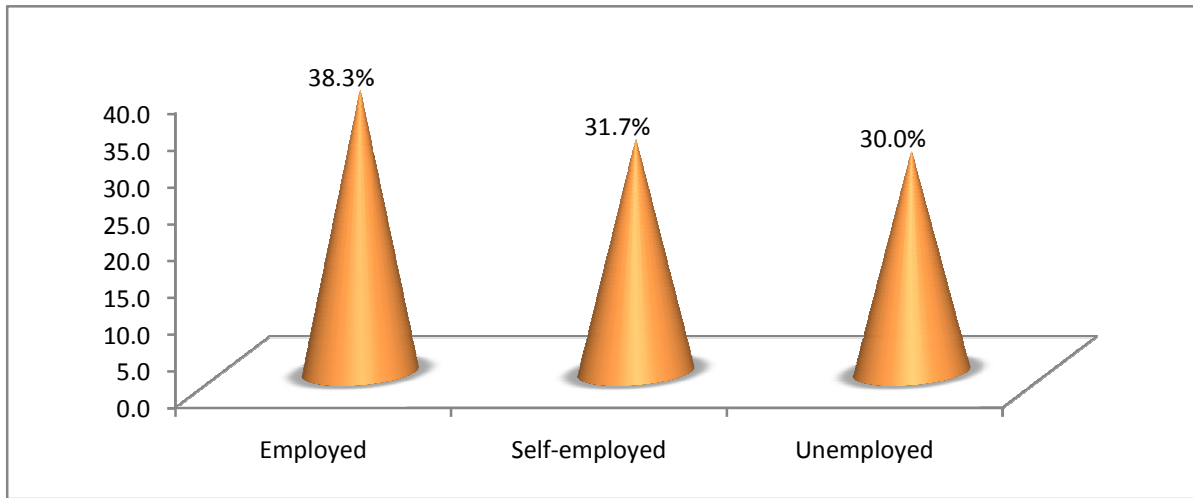
From the study findings, majority of the respondents (93.3%) indicated acquiring of new skills as the role of promotion of entrepreneurship development, 85% indicated creation of new products, 81.7% indicated provision of new technologies and 76.7% indicated new production methods while 73.3% indicated Promotion of innovations. On the other hand, 65% indicated creation of new markets and 55% indicated promotion of new business. This implies that acquiring of new skills was the main role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. This agrees with Schumpeter (1934) who indicated that entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before.

#### **4.4 What graduates do and Entrepreneurship Development**

##### **4.4.1 Employment status**

The study sought to establish the employment status of the graduates from Karurumo youth polytechnic. The findings are as stipulated in figure 4.7.

**Figure 4.7 Employment status**

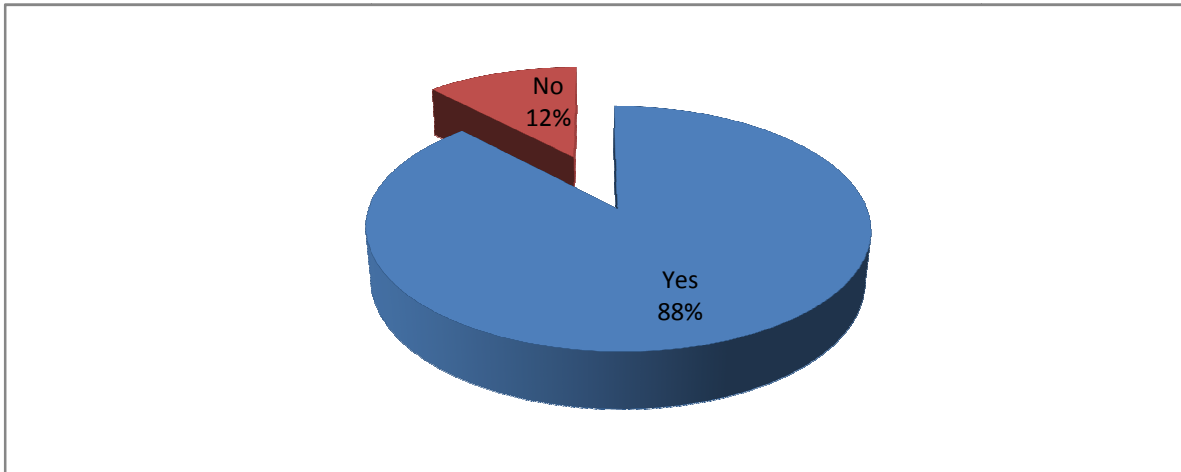


From the study findings, most (38.3%) of the graduates from Karurumo youth polytechnic indicated that they were employed, 31.7% were self-employed while 30% were unemployed. This implies majority of the graduates from Karurumo youth polytechnic were employed. This finding concur with the findings of Achieng (2012) on the study of factors affecting acquisition of vocational skills among learners in Maranda division of Siaya district that found that vocational education main aim is to offer skills to learners that can help them to be self-employed. Vocational skills create greater impact on human resource development and economic growth.

#### **4.4.2 Certificate from Youth Polytechnic and chances of employment**

The study asked the respondents to indicate whether skill training certificate from youth polytechnic enhanced their chances of employment. The findings are as stipulated in figure 4.8.

**Figure 4.8 Certificate from Youth Polytechnic and chances of employment**

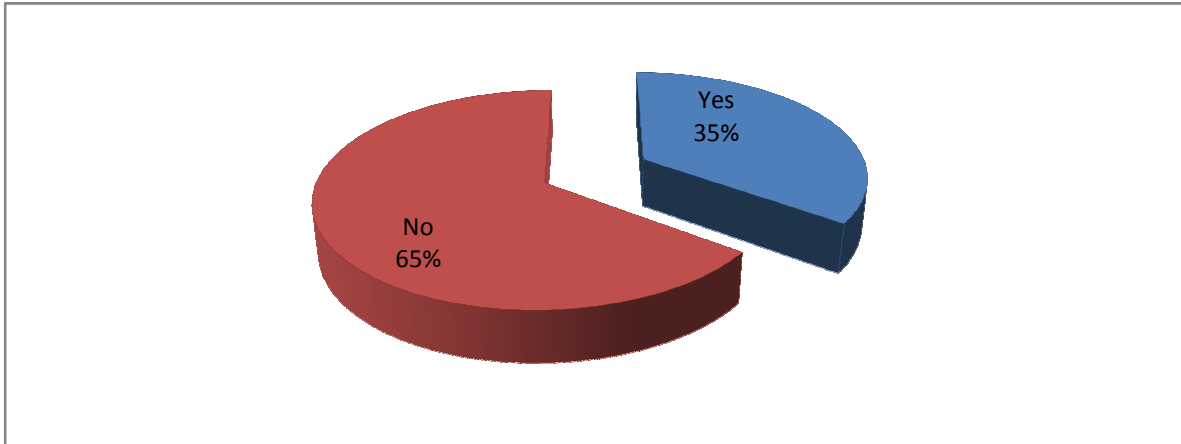


From the figure above, majority (88%) of the graduates from Karurumo youth polytechnic agreed that skill training certificate from youth polytechnic enhanced their chances of employment while 12% disagreed. This implies that skill training certificate from youth polytechnic enhanced graduates chances of employment. This concurred with the findings of Ibuathu (2013) on the study of the impact of vocational training for rural development in Nyambene district in Kenya that found out that 60% of the respondents said youth polytechnic graduates were marketable were learning their own business that included tailoring, carpentry and welding shops.

#### **4.4.3 Offering of Training by the former Polytechnic Graduates**

The study sought to establish whether the graduates from Karurumo youth polytechnic offered any training. The findings are as stipulated in figure 4.9.

**Figure 4.9 Offering of Training by the former Polytechnic Graduates**

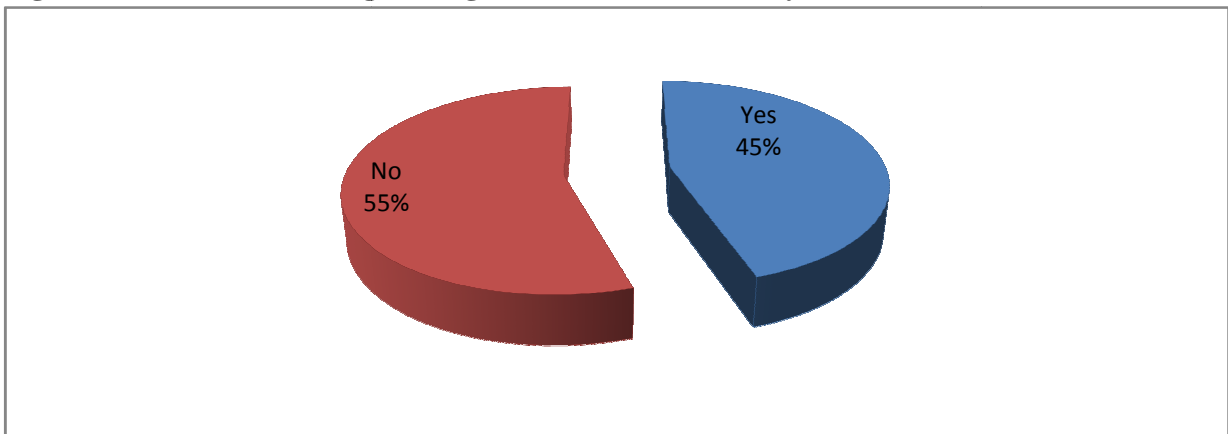


From the findings of the study, majority (65%) of the graduates from Karurumo youth polytechnic disagreed that they offered trainings with 35% agreeing that they offered trainings. This implies that graduates from Karurumo youth polytechnic did not offer trainings. This is in line with Kinyanjui (2007) the youth polytechnic employees enter the labour market as employees, Self-employment and only 22.2% of the graduates were unemployed.

**4.4.4 Use of Training skills gained in the Youth Polytechnic to train**

The study further sought to establish whether the graduates from Karurumo Youth Polytechnic used the training skills gained in the Youth Polytechnic to train. The findings are as stipulated in figure 4.10.

**Figure 4.10 Use of Training skills gained in the Youth Polytechnic to train**



From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic disagreed that they used the training skills gained in the Youth Polytechnic to train with 45% who used the training skills gained in the Youth Polytechnic to train. This implies that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train.

#### 4.4.5 Role of training in entrepreneurship development

The study asked the respondents to indicate the role of training in entrepreneurship development in the County. The findings are as stipulated in table 4.5.

**Table 4.5 Role of training in entrepreneurship development**

	Frequency	Percentage
started new business	33	55.0
Created new products in the market	35	58.3
Value addition to products	49	81.7
New technology	32	53.3
Opening new markets	53	88.3
Providing new services	41	68.3
Providing training services	58	96.7

From the table above, majority (96.7%) of the graduates from Karurumo youth polytechnic indicated provision of training services as the role of training in entrepreneurship development in Embu County, 88.3% indicated opening of new markets, 81.7% indicated value addition to products and 68.3% indicated provision of new services while 58.3%, 55% and 53.3% indicated creation of new products in the market, starting of new businesses and new technology as the role of training in entrepreneurship development in Embu County. McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence.

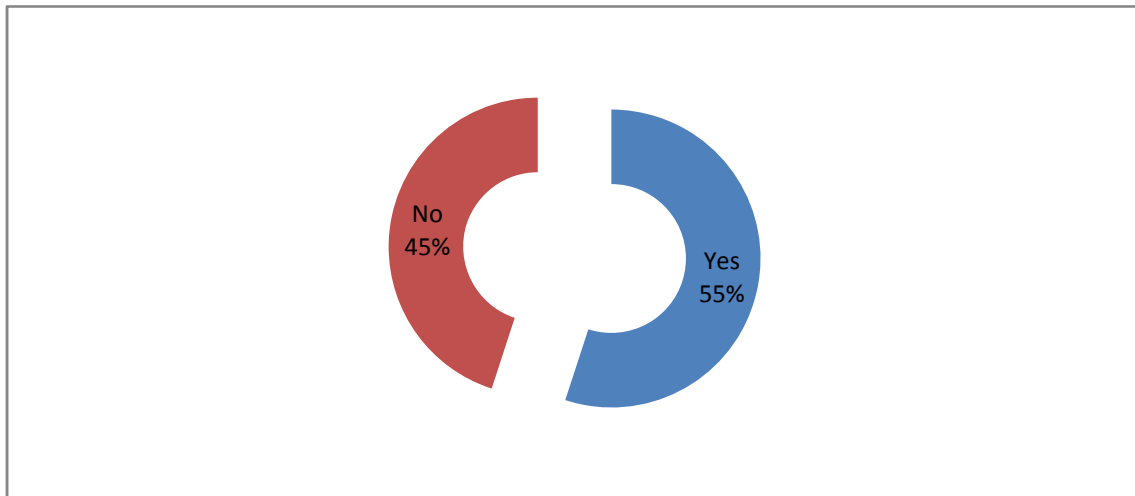


## 4.5 Business started and their role in entrepreneurship

### 4.5.1 Business enterprise after graduation

The study asked the respondents to indicate whether they had started any business enterprise after graduation. The findings are as stipulated in figure 4.11.

**Figure 4.11 Business enterprise after graduation**

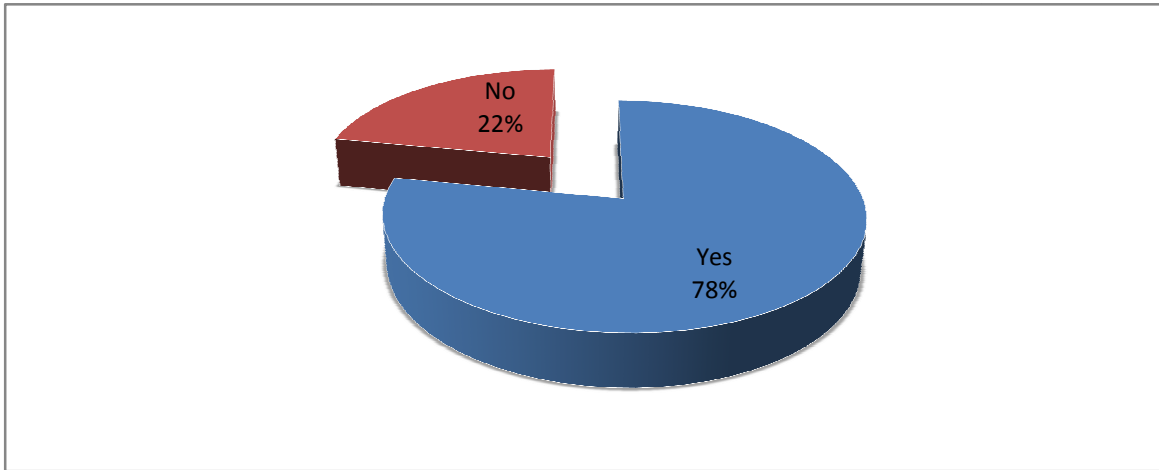


From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic agreed that they had started business enterprise after graduation while 45% had not. This implies that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation.

### 4.5.2 Business started and course taken at polytechnic

The study also sought to find out whether the businesses started were related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.12.

**Figure 4.12 Business started and course taken at polytechnic**

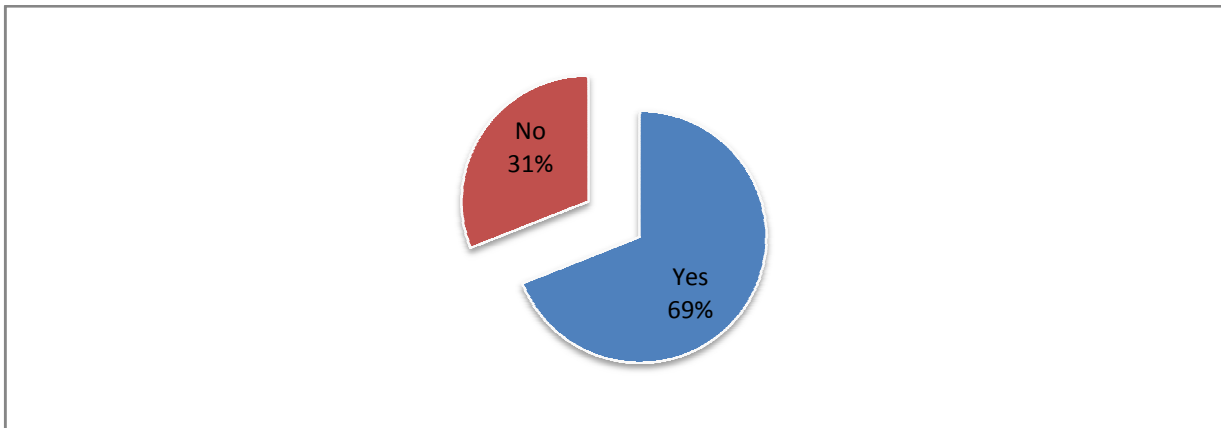


From the findings of the study, majority (78%) of the graduates from Karurumo youth polytechnic agreed that the businesses they had were related to the course undertaken at the polytechnic. This implies that majority of the graduates from Karurumo youth polytechnic had started businesses related to the course undertaken at the polytechnic.

#### **4.5.3 Business enterprise and improvement of entrepreneurship skills**

The study further sought to find out whether the business enterprise stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.13.

**Figure 4.13 Business enterprise and improvement of entrepreneurship skills**



From the figure above, majority (69%) of the graduates from Karurumo youth polytechnic agreed that the business enterprise stated assisted them to improve their entrepreneurship skills. This findings agrees with the findings of Kivu (2013) on the study of influence of leadership on the growth of enterprises in Machakos county that found innovation influenced growth of entrepreneurs in Machakos and that emotional intelligence plays a key role in product and process innovation.

#### **4.5.4 Role of business in improving economic development in the county**

The study asked the respondents to indicate the role of business in improving economic development in the County. The findings are as stipulated in table 4.6.

**Table 4.6 Role of business in improving economic development in the county**

	<b>Frequency</b>	<b>Percentage</b>
Training others	33	55
Doing things better, faster and at less cost	57	95
Opening new markets	51	85
Use of newly found material	32	53
Brought new technologies	53	88

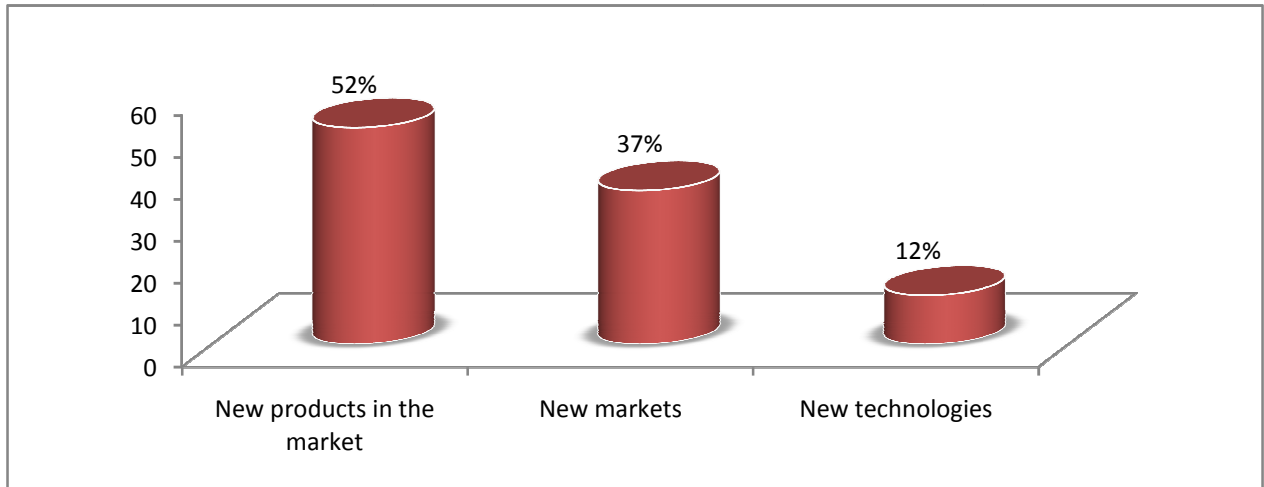
From the table above, majority (95%) of the graduates from Karurumo Youth Polytechnic indicated that the role of business in improving economic development in the County was through doing things better, faster and at less cost, 88% indicated that it brought new technologies, 85% cited that it opened new markets and 55% said that they trained others while 53% indicated that it was through use of newly found materials. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing.

## 4.6 Innovations started and entrepreneurship development

### 4.6.1 Innovations started since leaving polytechnic

The study sought to find out the innovations started by the graduates since they left polytechnic. The findings are as stipulated in figure 4.14.

**Figure 4.14 Innovations started since leaving polytechnic**

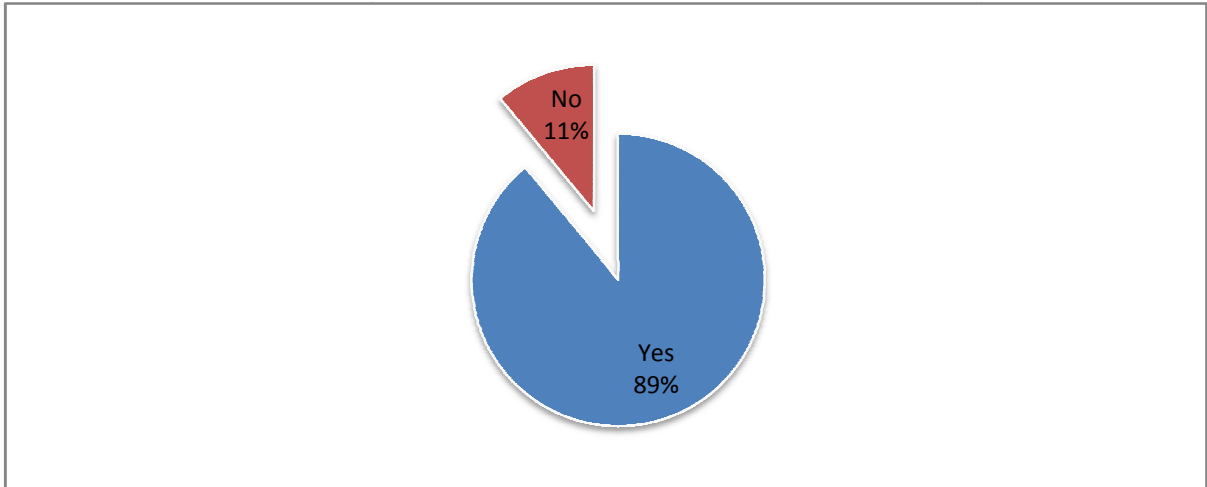


From the study findings, majority (52%) of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic, 37% had introduced new markets while 12% had introduced new technologies since they left polytechnic. This agrees with Yambo (1986) who observed that youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education.

### 4.6.2 Innovations started and course taken at polytechnic

The study also sought to find out whether the innovations stated was related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.15.

**Figure 4.15 Innovations started and course taken at polytechnic**

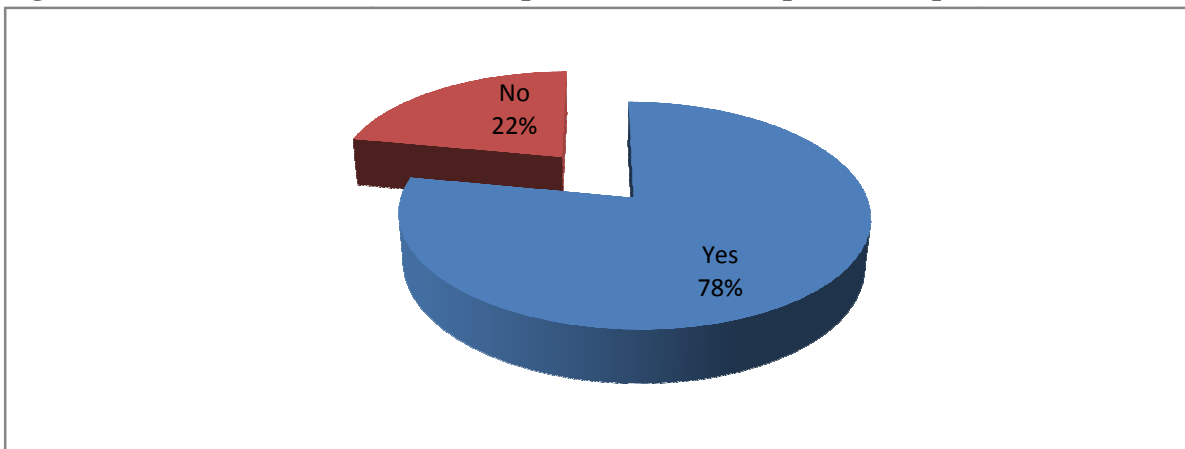


From the figure above, majority (89%) of the graduates from Karurumo youth polytechnic agreed that the innovations stated were related to the course undertaken at the polytechnic.

#### **4.6.3 Innovation started and improvement of entrepreneurship skills**

The study further sought to find out whether the innovation stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.16.

**Figure 4.16 Innovation started and improvement of entrepreneurship skills**

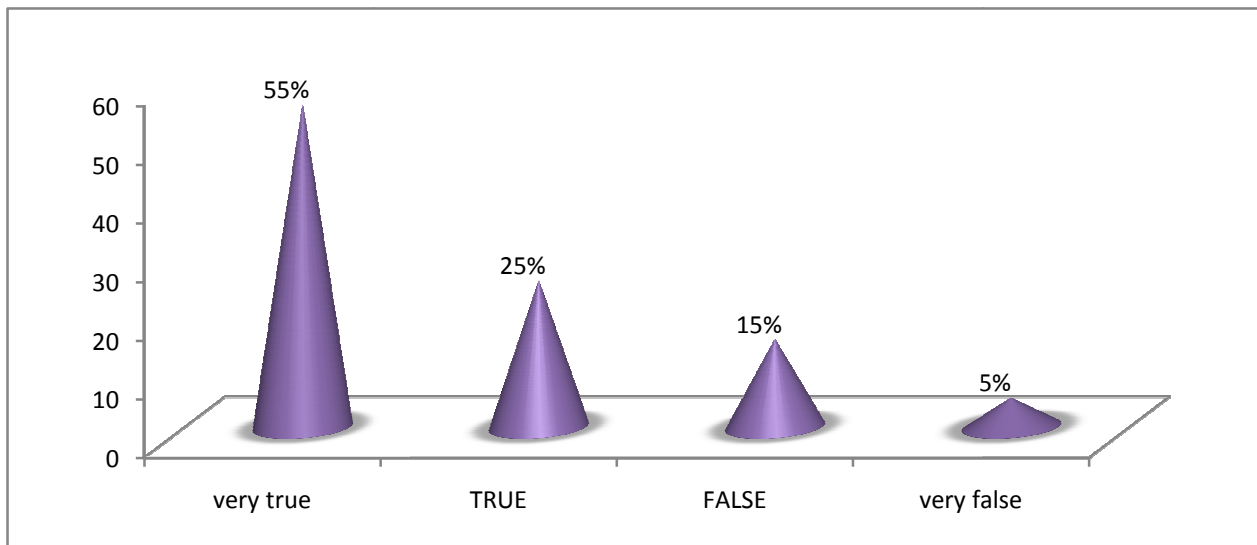


From the figure above, majority (78%) of the graduates from Karurumo youth polytechnic agreed that innovation stated assisted them to improve their entrepreneurship skills.

#### 4.6.4 Innovation started and graduate's role in economic services

The study further sought to find out whether the innovation stated assisted the respondents to enhance their role in providing economic services to the people. The findings are as stipulated in figure 4.17.

**Figure 4.17 Innovation started and graduate's role in economic services**



From the study findings, majority (55%) of the graduates from Karurumo youth polytechnic indicated that it was very true that the innovation stated assisted them to enhance their role in providing economic services to the people while 25% indicated that it was true and 15% indicated that it was false. This implies that the innovation stated assisted the graduates to enhance their role in providing economic services to the people. These findings concur with the findings of Wanyoko (2013) on his study on the influences of business incubation services on growth of small and medium enterprises in Kenya that found out that majority of the respondents in the study (83%) stated that innovation influenced the growth of business and entrepreneurship development and affects business to a greater extent.

#### 4.6.5 Extent to which innovations played role in entrepreneurship development

The study sought to establish the extent to which innovations started by graduates of the polytechnics play in entrepreneurship development. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly

disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

**Table 4.7 Extent to which innovations played role in entrepreneurship development**

Statement	SA	A	N	D	Mean	STDev
Innovations make one risk money and fortunes and combine resources to start new products and services.	46	7	4	3	4.65	0.482
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people	41	12	5	2	4.44	0.524
New technologies assist in provision of efficient and effective services to ones customers	48	6	2	4	4.53	0.621

From the study findings in Table 4.7, majority of the respondents strongly agreed that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people as shown by the mean scores of 4.65, 4.53 and 4.44 respectively and the standard deviation of 0.482, 0621 and 0.524 respectively. This shows that most of respondents either agreed or strongly agreed to the statement.

It also shows the graduates used innovations to satisfy human needs in a more convenient and pleasant way and were able to grow their businesses. They were also able to discern new sources of materials to improve their entrepreneurship. This is in line with Kelemba (2010) who found out that every year graduate of Youth Polytechnic were able to start new technologies, new materials, new products and used their skills to improve their enterprises.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of the study findings, conclusion and recommendations drawn from the study findings. The chapter is based on the study objectives, which were to determine whether the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 have contributed to entrepreneurship development in Embu county; to find out whether what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu county; to establish whether innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county and whether types of business started by the graduates of Karurumo villages polytechnic have contributed to entrepreneur development in Embu county.

### **5.2 Summary of findings**

The study established that the aspects of the course undertaken by the graduates from Karurumo Youth Polytechnic was practical in their day to day life since majority of the graduates ended up being entrepreneurs. Further, the study established that the vocational skills acquired in the polytechnic helped graduates from Karurumo Youth Polytechnic become Entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills by the graduates of Karurumo village polytechnic promoted entrepreneurship development in the County.

The study also established that skill training certificate from youth polytechnic enhanced graduates chances of employment thus majority of the graduates from Karurumo youth polytechnic were employed. Further, majority of the graduates did not offer trainings, however, the study established that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu county.

The study also found out that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation and the businesses were related to the



course undertaken at the polytechnic while business enterprise stated assisted them to improve their entrepreneurship skills. The study further established that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets.

The study found out that majority of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic; the innovations stated were related to the course undertaken at the polytechnic and the innovation stated assisted them to improve their entrepreneurship skills. Further, the study established that the innovation stated assisted the graduates to enhance their role in providing economic services to the people of Embu county. Lastly, the study found out that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assisted in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

### **5.3 Conclusion**

The study concludes that there was gender disparity as majority of the graduates from Karurumo Youth Polytechnic were male who joined the institution at the age of 15-20 years and had spent 2-3 years in the institution. The study also concluded that majority of the graduates had enrolled in the youth polytechnic to acquire of skills and failure to score good grades in KCPE. The study also concludes that many youth polytechnics graduates find self-employment or start new business as a means of making a living. This creates growth and wealth.

The analysis reveals that graduates are making significant contributions in the labour market either as workers in business or in self-employment. In order to cater for the unemployed polytechnic graduates, the economy in the counties needs to be diversified while polytechnics should be upgraded and reconstituted in such a way that they are able to meet demands for market based knowledge and skill acquisition. The other issue that emerged in the analysis is that polytechnics are institutions whose goal is to ensure that trainees acquire

skills that assists' them in personal development as well as for the economic development of the counties and the country at large. Polytechnic education should aim at imparting creativity, innovation, independent thought and precision in polytechnic graduates.

The study concludes that the vocational skills acquired in the polytechnic helped graduates from Karurumo youth polytechnic become entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills was the main role of vocational skills acquired in the polytechnic which promoted entrepreneurship development. The study also concluded that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu County.

The study further conclude that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets. Lastly, the study concluded that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

#### **5.4 Recommendations of the study**

The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. The graduates are making significant contribution in the labour market either in business or self –employment. Youth polytechnics are grassroots institutions that serve the needs of poor youth who are hopeless and helpless. Acquisition of skills and failure to perform well in the examinations are the key factors that drive the youth to enroll in polytechnics. The above perception must be done away with and a deliberate effort to position the youth polytechnics as centers of excellence for all.

The study also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. A deliberate effort to diversify the choice of courses for girls in the youth polytechnics be put in place. Some of the courses that might improve the choice of courses for girls are: secretarial, catering and housekeeping. More effort should also be put in order to encourage girls to enroll in male trades such as mechanic, electrical installations and welding. Communities need to be sensitized to ensure they also take girls to the polytechnics.

The study further recommends the vocational skills offered in the YPs be made more practical and entrepreneurial oriented to prepare the trainees for the world of work both in formal or self-employment. This will reduce the challenges of poverty in the counties and rural areas. There is also need to encourage the formation of right frameworks, networks and facilities that could encourage polytechnic graduates to enter into self-employment. The relationship between policy consumers, facilitators and implementers need to be defined.

Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya.

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**APPENDICES**

**APPENDIX I : DATA COLLECTION QUESTIONNAIRE FOR YP GRADUATES**

This is a self- administered questionnaire to collect data for purely academic purposes. The study seeks to analyze the **“Role of Youth Polytechnics in Entrepreneurship Development in Embu County”** All information will be treated with strict confidence. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

**SECTION A: GENERAL INFORMATION**

1. Gender.....Male  Female

2 Highest Academic Qualifications

*KCPE*

*KCSE*

*Certificate*

*Diploma*

*Bachelors Degree*

*Masters*

3. Age at which you joined the Polytechnic

1. Under 13 years

2. between 13-15 years

3. 15-20 years

4. Over 20 years

5. Year you enrolled in the Polytechnic-----

6. Number of Years you spent in the Polytechnic.....

**SECTION B: ON WETHER, VOCATIONAL SKILLS ACQUIRED BY GRADUATES  
PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMEMT.**

1. What aspects of the course undertaken in the polytechnic are relevant to what you are doing in your day today life?.....  
.....

2. In what way has the vocational skills acquired in the polytechnic prepared you in what you are doing now?.....

3. Has the vocational skills acquired in YP assisted you in being an entrepreneur?

Yes

No

If Yes, Specify.....

If No, specify.....

4. Is the Vocational skills started above assisting to improve your entrepreneurship skills?

1. Yes

2. No

3. If Yes, Specify.....

4. If No, specify.....

5. Do you have suggestion on courses taken in the polytechnic that could help improving entrepreneurship skills in the county.....  
.....

6. What role does vocational skills acquired in YPs play in promotion of entrepreneurship development?

1. ....

2. ....

3. ....

**SECTION C: ON WHETHER WHAT GRADUATES FROM KARURUMO VILLAGE POLYTECHNIC DO AFTER GRADUATION CONTRIBUTE TO ENTERPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Are you employed or in self-employment or unemployed?

Yes  No

(ii) If employed, specify type of job.....

(iii) If Self –employed, specify type of business.....

(iv) If unemployed, specify for how long.....

2. In what way did the Youth Polytechnic skills training prepare you for employment or self-employment?

1. Self-employment aspect.....

2. Employment aspect.....

3. What factors did you consider when choosing where to seek employment or locate business?

1. Self-employment .....

2. Locate business.....

4. How long did you take to find employment or to start business?

1. Find employment .....

2. Self-employment .....

5. Did skills training certificate from youth polytechnic enhance your chances of employment?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

6. Do you offer any training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

7. Do you use training skills learnt at the polytechnic in your training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

8. What role as your training played in entrepreneurship development in Embu County?

1. Started new business

2. Created new product in the market

3. Value additions to products

4. New technology

5. Opening new markets

6. Providing new services

7. Providing Training services

Other(specify).....

**SECTION D:ON WHETHER TYPES OF BUSINESS ENTERPRISESSTARTED BY GRADUATES FROM KARURUMO POLYTECHNIC PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Have you started any business enterprise after graduation?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

2. Is the business related to what you did at the polytechnic?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

3. Has your business enterprise assisted in improving your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, specify.....
- 4. If No, specify.....

4. What role does your business play in improving economic development in the County?

- 1. Training others
- 2. Doing things better, faster and at less cost
- 3. Opening up new markets
- 4. Use of newly found material
- 5. Brought new technologies
- 6. Other (Specify).....

**SECTION E: ON WETHER INNOVATIONS STARTED BY GRADUATES PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT?**

1. What innovations have you started since leaving the polytechnic?

- 1. Started new product in the market
- 2. Started New markets
- 3. Started New technologies
- 4. Other (specify).....

(ii) If, Yes above, specify-----

2. Is the innovation started above related to the course you did in the polytechnic?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

3. Is the innovation started above assisting to improve your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

4. Does the innovation started above enhance your role in providing economic services to people?

- 1. Very True
- 2. True
- 1. False
- 2. Very false

5. What role do the graduates play in promotion of innovation?

- 1. ....
- 2. ....
- 3. ....
- 4. ....

6. State your level of agreement to the following statement as regards whether innovations started by graduates of the polytechnics play a role in entrepreneurship development on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree.

Statement	SA	A	N	D	SD
Innovations make one risk money and fortunes and combine resources to start new products and services.					
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people					
New technologies assist in provision of efficient and effective services to ones customers					

7. What would be your advice to Youth Polytechnic trainees in enhancing entrepreneurship development in the County?

- 1.....
- 2.....
- 3.....

## APPENDIX II : NUMBER OF TRAINEES AT KARURUMO YOUTH POLYTECHNIC FROM 2003 TO 2012

Cou	District	YP	Name of Course	Youth Polytechnic Graduates since 2003																														
				2003			2014			2005			2006			2007			2008			2009			2010			2011			2012			GT
Em				M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
Cou	Embu	Karurumo	MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10	
			Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11	
			Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10	
			Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15	
			Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17	
<b>Grand Total</b>						<b>20</b>			<b>26</b>			<b>19</b>			<b>25</b>			<b>31</b>			<b>36</b>			<b>18</b>			<b>34</b>			<b>53</b>			<b>63</b>	<b>325</b>





**UNIVERSITY OF NAIROBI**  
**DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK**

**THE ROLE OF VILLAGE POLYTECHNICS IN ENTREPRENEURSHIP  
DEVELOPMENT: A TRACER STUDY OF GRADUATES OF KARURUMO  
VILLAGE POLYTECHNIC, EMBUCOUNTY**

**BY**  
**NJERU ZAVERIO NDUGUTUSON**  
**C50/67801/2011**

**A RESEARCH PROJECTSUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS  
IN SOCIOLOGY (ENTREPRENEURSHIP DEVELOPMENT) OF THE  
UNIVERSITY OF NAIROBI**

**NOVEMBER 2014**

## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signed .....

Date.....

**NJERU ZAVERIO NDUGUTUSON**  
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This research project has been submitted for examination with my approval as a university supervisor.

Signed .....

Date.....

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## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to individuals that assisted me in one way or another in the course of writing this project.

Special thanks go to my supervisors, Mr. Geoffrey Njeru and Professor Edward Mburugu, who tirelessly guided me and provided professional advice as well as encouragement during the study period.

I am greatly indebted to Madam Emily Nkoroi, the Embu county director of youth training who providing the relevant information, documents and generally facilitated the study.

Further gratitude goes to Mr. Graham Kangethe of curriculum, instruction and examinations division, of the department of youth training in the ministry of youth affairs and sports at the headquarters for providing me with relevant information on youth polytechnics nationally.

I cannot forget the Karurumo youth polytechnic manager and the instructors for their cooperation in giving me the preliminary information and the former trainees who will targets in the study.

Finally, I wish to thank everybody I may not have mentioned here but made this work possible.

Thank you all.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>KCSE</b>	-	Kenya Certificate of Secondary Education
<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>KIE</b>	-	Kenya Institute of Education
<b>MDGs</b>	-	Millennium Development Goals
<b>MOYAS</b>	-	Ministry of Youth Affairs and Sports
<b>NVCET</b>	-	National Vocational Certificate in Education and Training
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>SYPT</b>	-	Subsidised Youth Polytechnic Tuition
<b>TVET</b>	-	Technical and Vocational Education and Training
<b>TIQET</b>	-	Total Integrated Quality Education and Training
<b>UNDP</b>	-	United Nations Development Program
<b>UNESCO</b>	-	United Nations Education and Scientific and Cultural Organization
<b>YPs</b>	-	Youth Polytechnics

## **ABSTRACT**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and analyze their contribution to entrepreneurship development in Kenya. The study used descriptive survey design. The target population was 325 former graduates from Karurumo youth polytechnic who graduated between 2003 and 2012 with a sample size of 20% of the target population leading to 65 respondents. The data collected was analyzed using correlation matrix and multi regression analysis to establish the relationships between independent and dependent variable. The results revealed that vocational skills acquired, business enterprises started, innovations started and what graduates do after graduation separately contributed significantly to entrepreneurship development. The analysis further revealed that polytechnic graduates are making significant contributions in the labour market either as workers in business or in self-employment. The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. It also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The census report also document that over 62% of Kenyans are not in any form of employment and that only 25% of the secondary and university leavers are absorbed in regular employment. It is therefore important to boost vocational, technical, and entrepreneurial skills in youth polytechnic to cover the shortfall. Kenya needs a vibrant youth polytechnic training programs that can support the enhancement of the productivity of small and medium enterprises sector that currently account for 76% of the total employment but only contributes 18% of the natural gross domestic product.

Youth polytechnic education provides youth with technical and vocational skills for jobs in industry. The village polytechnics are an adoption of tailor made strategy to suit the village and rural labour markets (Kinyanjui,2007). The sectors of the rural labour market namely construction, furniture, garments and currently electrification is targeted. It is hoped that after graduating, the youth polytechnic graduates would be gainfully employed and contribute to the entrepreneur development in Kenya.

The UNDP,2012 in report entitled “ Skills gap analysis for graduates of youth polytechnic, vocational training centers and out- of- school youth” revealed that most of the graduates of the youth polytechnics lack competency in modern technology and have no practical skills required to exploit untapped opportunities in our country. They also have weakness in work attitude, communication, customer care and social skills and hence affecting their contribution to entrepreneurship development and their employability in the job market after graduating from the youth polytechnics. It is therefore against this background that the research proposes to investigate the role of youth polytechnic graduates to entrepreneurship development in Kenya through a tracer study of youth polytechnic graduates from Karurumo village polytechnic in Embu county in the last 10 years from 2003 to 2012 with a view of

coming up with interventions that will ensure the right kind and quality of skills training is given to them to enhance their contribution to entrepreneurship development.

## **1.2 Statement of the Problem**

Every year, graduates from Karurumo Village Polytechnic enter the labour market equipped with either grade II or grade III certificate. The whereabouts of these graduates was not visible in surveys of micro and small enterprises in Kenya. In a micro and small enterprise survey carried out in the Ziwani enterprise cluster in Nairobi, there was only one motor vehicle repair entrepreneur who had acquired skills in a village polytechnic (Kinyanjui, 2007). It was also reported that technical training, which is an important aspect of entrepreneurship development, was lacking in baseline surveys of micro and small enterprises (CBS, 1999), yet every year, trained youth graduate from village polytechnics enter the labor market. However, Wanyonyi (2009), Kelemba (2010) and UNDP (2012) reported that graduates from youth polytechnics had difficulties in using modern equipment and lacked the necessary and required skills that employment demands of them. They lacked work attitude, communication, customer care and social skills that are important for them to venture into business enterprises and use innovations that enable them to effectively contribute to entrepreneurship development in the country. Kinyanjui (2007) in a tracer and policy study of youth polytechnics graduates from Kwale, Kitui, Makueni and Taita Taveta also recommended a study on factors influencing technical training to be carried out in other areas to guide on youth polytechnics training policy . A study by Ministry of Youth Affairs and Sports (2012) on national evaluation of NVCET curriculum found out that Embu district had the highest percentage 52% of trainees who were incompetent and unable to fix a prescribed job process that was expected of them during the evaluation period. The purpose of this project was therefore to investigate the contribution of youth polytechnic graduates in entrepreneurship development through a tracer study of youth polytechnic graduates from Karurumo village youth polytechnic in Embu Country. The study specifically looked at whether what youth polytechnic graduates do after graduation, types of business enterprises started by graduates, innovations started by the graduates and vocational skills acquired by the graduates of village polytechnic contributed to entrepreneurship development in Embu county and Kenya as whole.

### **1.3. Overall Research Question**

What role do graduates from village polytechnics play in enhancing entrepreneurship development in the country?

#### **1.3.1 Specific Research Questions**

1. Does vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County?
2. Does what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu County?
3. Do types of businesses enterprises started by graduates of Karurumo village polytechnic started in the last ten years contribute to entrepreneurship development in Embu County?
4. Do innovations started by graduates of Karurumo village polytechnic in the last ten years contribute to entrepreneurship development?

#### **1.3.2 Overall Objective of the Study**

The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and investigate their contribution to entrepreneurship development in Kenya.

#### **1.3.3 Specific Objectives**

The following specific objectives were addressed:-

1. To determine how the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 to 2012 contributed to entrepreneurship development in Embu county.
2. To find out whether what graduates of Karurumo village polytechnic do after graduation contributed to entrepreneurship development in Embu county
3. To determine how types of business started by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County.
4. To establish how innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county

#### **1.4 Significance of the Study**

The study sought to identify and document the role of village polytechnic graduates in enhancing entrepreneurship development in Embu County. The data generated would assist in the provision of appropriate entrepreneurship development services that can address the concerns of village youth polytechnic graduates before entry into the labor market. The study would help to increase the knowledge of the relevant stakeholders and the community about the fate of village polytechnics trainees after graduating and their role in entrepreneurship development. It would also add to the existing knowledge of the impact of youth Polytechnic education on entrepreneurship development.

#### **1.5 Scope and Limitations of the Study**

This study focused on graduates of Karurumo Village Polytechnic, Embu County. The reason Karurumo Village Polytechnic was chosen was because the researcher was from that area and so it offered an ideal setting that could be replicated with lesser complexities in other Karurumo Village Polytechnic in Kenya. This is a case study focusing only on the role of village polytechnics in entrepreneurship development: a tracer study of graduate's of Karurumo Village Polytechnic, Embu County. The study only focused in one village polytechnic of which may not be the same aspect in other village polytechnics, which was not a good representation of all types of village polytechnic. The questionnaire's data was based on the graduate's response, which could be untrue. In order to ensure the response was real and met the expectation of the result, respondent were given more time to read and understand the information that the study required.

Finally, the graduates sampled were fewer hence affecting the sampling size. In order to ensure sampled size was met, research assistance visited the respondents frequently till they met at least 80% of the sample size which was adequate for analysis.

## **1.6 Assumption of the Study**

The study assumed that all the sampled respondents from Karurumo village polytechnic were traceable and able to express themselves freely without hiding information. The other assumption is that this project will assist the policy makers in planning of technical and vocational educational and training of the youth in the country.

## **1.7 Definition of Significant Terms**

**Entrepreneurship:** Is the process of starting a business or other organization. The entrepreneur develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure.

**Entrepreneurship Development** This is success in producing desired or successful enterprises by graduates

**Innovations:** This referred to the introduction of new products or services, use of new methods of production, opening up new markets or use of new products.

**Self Employed:** 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.

**Tracer Study:** Is an approach which widely being used in most organization especially in the educational institutions to track and to keep record of their students once they have graduated from the institution. It is the follow up of graduates of higher education or institutes.

**Temporary Employment:**

Is a situation where the employee is expected to leave the employer within a certain period of time.

**Unemployed:**

Is a situation where someone of working age is not able to get a job but would like to be in full time employment.

**Vocational Skills:**

Are those skills which allow a person to master a particular subject or procedure that is applicable to a career.

**Youth Polytechnic:**

This refers to low cost based post-primary training institutions that prepare trainees on vocation and technical training.



## **1.8 Organization of the Study**

This study is organized in five chapters. Chapter one deals with background on the role of village polytechnics in entrepreneurial development in Kenya. It explores four key components that are involved in entrepreneurship development in youth polytechnics (Vocational skills acquired by the graduates, work done by the graduates after graduation, Business enterprises started by the graduates and innovations started by the graduates) can be used to improve the role the polytechnic play in entrepreneurship development in Country. Chapter two discusses the overview and development of youth polytechnics in Kenya. It looks at how the youth polytechnics can be used to equip young with relevant skills and attitudes that would lead the young people so trained into gainful self-employment in order for them to contribute in the entrepreneurship development of their communities by building up the economic strength of those communities. Chapter three deals with research methodology and expounds on the descriptive survey research design used and research instruments used questionnaires to collect both qualitative and quantitative data from the former Karurumo Youth Polytechnics graduates.

Chapter four deals with data analysis while Chapter five deals with recommendations, It looks at how graduates of Karurumo village polytechnic are making significant contribution in the labour market as workers in business or self-employment. It also looks at how vocational skills acquired have helped the graduates become entrepreneurs hence promoting entrepreneurship development in the country. It further examines how innovations make one risk money and fortunes and combine resources to start new products and services and also establish small and micro enterprises and create employment opportunities for other people.

## **CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

The purpose of the project was to investigate the role of village polytechnics in entrepreneurship development in Kenya. The present chapter reviews related literature and the theoretical and empirical literature on the subject investigated. It details overview of the Kenya education system after independence in 1963 with regard to vocational and technical education and training systems, the establishment of youth polytechnics in Kenya, theoretical literature on vocational training and entrepreneurship development in Kenya, conceptual framework of the study and empirical literature of previous studies and findings about youth polytechnics in Kenya.

### **2.2 Overview of Kenya Vocational and Technical Education Systems since Independence**

Kenya sought ways to make changes in the inherited educational system on achieving independence. The aim was to make educational system supportive and responsive to the newly developed national goals (Merrifield 1986). In the years following independence, two major commissions (Ominde Commission, 1964 and the Gacathi Commission in 1976) were appointed to review the education system (Republic of Kenya, 1964; Republic of Kenya, 1976) and to plan for its future. This resulted to increased schooling. The provision of increased primary education was achieved as a result of Ominde commission. The 1976 commission addressed unemployment among product of formal education at all levels of education. Manpower issues were also addressed and a programme of action was formulated to further develop Vocational and technical education and training.

Attempts to alleviate the problem of unemployment among the youth, particularly the primary school graduates were directed towards the establishment of non-formal vocational education and training institutions such as youth polytechnics (Sifuna 1984). These programs were to absorb youth polytechnics graduates for a few years and give them marketable skills (Hoppers, 1985). Vocational training was also a way of developing attitudes for self reliance as well as imparting workable skills (Bacchus, 1988, Simiyu, 1990).

UNESCO (1984) defined vocational and technical education as: “A comprehensive term refers to education processes where it involves, in addition to general education, the study of technologies and related sciences and acquisitions of practical skills and knowledge relating to occupations in various economic and social life”. The report of the presidential working party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988) also stipulated the need to expand and streamline vocational and technical training institutions and their training to cater for training demands of the 8-4-4 system of education, provide greater opportunities for training primary and secondary school graduates and provide more trained manpower for the economy. The courses offered in youth polytechnics included masonry, carpentry, metal work, tailoring, dressmaking, and motor mechanics among others.

### **2.3 The Establishment of Youth Polytechnics in Kenya**

A youth polytechnic is a low cost community based post primary training institutions (Yambo,1986). Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics were to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). Youth polytechnics were established in Kenya in 1966 after a conference held at Kericho on Education employment and rural development. The conference observed that only a small portion of primary school graduates received places in secondary schools (Sheffield 1967) and youth polytechnics were seen as part of alleviating the primary school graduate unemployment problem. The youth polytechnics were closely related to the local needs and absorption capacities of the rural villages (Thompson, 1981). Between 1966 and 1977, more than 53 youth polytechnics were established and the demand for them was expanding. Currently, there are over 700 youth polytechnics with enrolment of over 100,000 trainees (Republic of Kenya, 2012). The structure of youth polytechnic program at the national level includes a director of youth

training with four major divisions (Curriculum, Institutions and Examinations, Research Division, quality Assurance and Standards and Infrastructure Division). At the County level, there is county director of youth training and the district youth training officer at the district level. The principal (project manager) is the executive officer at the institutional level and serves as the link between staff, trainees, the board of governors and the district youth training Officer. A number of commission reports, sessional papers and studies have made various recommendations on vocation and technical education in Kenya. The education sector reforms in Kenya dates back to the independence period, with commissions, committees, working parties and task forces generating reports, with recommendations, some of which have been implemented in part while others have never been implemented completely. In 1964, there was the Ominde Commission; In 1976, there was the National Committee on Educational Objectives and Policies led by Gachathi; In 1981 there was the Presidential Working Party on the Second University in Kenya led by Mackay; In 1988 there was the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond led by Kamunge; In 1999, there was the Commission of Inquiry into the Education System of Kenya led by Koech. To date, no government documentation is available to the public with chronological details on what recommendations from these reports were adopted and implemented.

The Ominde Commission outlined what education was and had to be during and after independence. The blueprint laid the foundation of post-independence education. It was mandated to survey existing educational resources and to advise the government on the formation and implementation of the required national policies for education (Republic of Kenya, 1964; It is important to note that despite its noble objectives the Ominde Commission recommendations were not implemented in full, a blunder that has had significant effects on education .The Gacathi Report reiterated objectives of the Ominde Commission and sought to enhance the use of the Kenyan educational goals to shape its national character and development. It recommended development of vocational, technical, and practical education. In 1979, the government realized that education was not doing much to achieve its stated objectives. Education curriculum was viewed as being too academic, narrow and examination centered (Republic of Kenya, 1979).

Rate of unemployment grew as school leavers went to urban centers to seek for white-collar jobs. In the 1980s the government changed its policy on education. This was because of the difficulties, which were faced by graduates of its education system at both primary and secondary levels. Most graduates who were matriculating from these levels could not be absorbed into the shrinking labor market. This made the government to reconsider changing its education system and to set up a Presidential Working Party in 1981 (Republic of Kenya, 1981). The report sought to investigate ways in which education could make graduates from these levels self-sufficient, productive in agriculture, industries, and commerce. Education system was expected to ensure that students acquired technical, scientific, and practical knowledge vital for self and salaried employment, lifelong skills, and nation building. The commission was also mandated to investigate the feasibility of establishing a second university that was development centered. It advocated for a practical curriculum that would offer a wide range of employment opportunities and equitable distribution of educational resources. It gave rise to the current education system, the 8::4:4. System.

Kamunge Report of (1988) noted that the youth polytechnics (YPs) were provided with basic facilities and equipments to enable them give quality training at artisan level. It recommended that vocational education and training instructors be trained in pedagogy and their terms and condition of service be improved. The youth polytechnics management be strengthened and local authorities be given full support. It further stressed those facilities of youth polytechnics to be improved. The country's training institutions were not only inadequate but also lacked the essential facilities and technology to prepare students for the challenging labour market.

The Government of Kenya appointed the Commission of Inquiry into the Education system of Kenya (Koech Commission) in 1999. The commission made recommendations on ways that could be used to provide quality education (Republic of Kenya, 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQET) to reflect the vision of Kenyan education. TIQET, as a concept embraced the values and substance that was to characterize the education system. It was to be total because it was expected to be inclusive, accommodative, and life-long. It focused on

quality of delivery and outcome of the education and training process. The report reiterated that, the proposed education system was to become a ticket to a better life, and future for the individual, community and the nation. As a departure from the 8-4-4 system of education, TIQET had some basic innovations, namely: the expansion of access to basic education; elimination of disparities in education based on geographical, social and gender factors; introduction of manageable curriculum content; introduction of modular learning approach and credit accumulation. Specifically, the report called for legal educational reforms, for instance: reviewing of the education act, political will and commitment by making public policy pronouncements on the required changes, enhancing of efficiency and effectiveness in educational administration and management, ensuring there is prudent governance and management of resources, building and strengthening genuine partnership and collaboration among educational stakeholders. In addition, the report also called for cutting-edge reforms including totally integrated quality education training, abolition of the 8-4-4 and replacement with a system not very distinct from the pre-8-4-4 system of 7-4-2-3, and universities maintenance of 1:10 ratio of graduate/undergraduate student; (Republic of Kenya, 1999). The report also pointed out that one of the hindrances to the development of a technological culture was found in some cultural beliefs and practices among a number of Kenyan communities towards technically related work. Many of them design vocational education for other people's children instead of designing a universal system that is suited for all children who decide to join that career including their own children. In his recommendations, Koech Commission strongly pointed out that vocational training centers be encouraged to offer courses according to the needs of their localities such as short tailoring courses for upgrading courses as well as Jua – kali operators and health workers for the surrounding community. Despite its candid professional research, assessments and honesty on the challenges that were facing Kenyan education system, Koech Report was never implemented by the government. It was perceived as being expensive and complex.

Kenya Vision 2030 is the new long-term development blueprint for the country. It is motivated by a collective aspiration for a better society by the year 2030. The aim of Kenya Vision 2030 is to create “a globally competitive and prosperous country with a high quality of life by 2030”. It aims to transform Kenya into “a newly-industrializing, middle-income

country providing a high quality of life to all its citizens in a clean and secure environment. Simultaneously, the Vision aspires to meet the Millennium Development Goals for Kenyans by 2015. It proposes intensified application of science, technology, and innovation to raise productivity and efficiency levels across the three pillars. It recognizes the critical role played by research and development in accelerating economic development in all the newly industrializing countries of the world. More resources will be devoted to scientific research, technical capabilities of the workforce, and in raising the quality of teaching mathematics, science and technology in schools, polytechnics and universities.

#### **2.4 Vocational Skills acquired by YP Graduates and Entrepreneurship Development**

Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics are to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). The vocational education and training in polytechnics include masonry, tailoring, carpentry, driving, dressmaking, metalwork and many others. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing. However, Ndua suggested that research was required on the dropout rate of the trainees. Every year a number of these graduates get out to the field and therefore the project investigated whether this graduate are able to use the skills acquired in contributing to entrepreneurship development in Embu county.

#### **2.5 Work Done by YP Graduates after graduation and Entrepreneurship Development**

On what graduates of youth polytechnics do after graduation ( Nzioka 1986, Kinyanjui 2007, Yambo (1986) found that graduates who had been trained in carpentry and masonry

where somewhat more rural oriented than those trained in welding and plumbing. Yambo contended that many courses had economic value and predicted that new courses be eventually introduced in Youth Polytechnics. For a long time in Kenya, graduation from any level of education was associated with employment either in the private or public sector. The quality of an institution was based on how many of its graduates were employed after graduation. The reality is now different. The labour market has become very competitive and open joblessness is being experienced among graduates in all education levels. According to Kinyanjui, 2007, the youth polytechnic employees enter the labour market as employees (30%), Self-employment (42.2%) and only 22.2% of the graduates were unemployed. The key jobs for YP graduates were casual, contracts, carpentry, mechanics, welding and dress making among others. Polytechnic graduates were also employed in polytechnics as instructors, machine operators and electrical repairs. Some few graduates were employed in jobs such as hotel attendants, vegetable vending, and hairdressing. The studies revealed that polytechnic education is a holding ground for youth in village as they wait for their dream careers. The current project investigated whether these graduates played a role in entrepreneurship development in the County.

## **2.6 Creation of New Business Enterprises by YP Graduates**

The business perspective views entrepreneurship as the process of creating new business organization with intention of making profit. The entrepreneurs are organizers and coordinators of the major factors of production such as capital, labour and land. They properly mix these factors of production to start business enterprises. Entrepreneurs have initiative and self-confidence in accumulating and mobilizing capital resources for new business. Many youth polytechnics graduates find self-employment or starting new business as a means of making profitable career. This creates growth and wealth. Kinyanjui (2007) in a Trace and policy study of youth polytechnic graduates from Kwale, Kitui, Makueni and Taita Taveta found out that youth polytechnic staffing is one of the policy issues that need urgent attention. There was a clear need for policy to address staffing especially for instructors in the youth polytechnics. It also found out that there are no technicians to assist the instructions in handling the practicals. The study recommended polytechnic staffing will require restoring confidence and enhanced motivation and the beginning point being the



development of scheme of service for the youth polytechnic instructors. The study also recommended that equipments in youth polytechnic are inadequate and old.

UNDP (2012) in a study titled, Skills gap analysis for graduates of youth polytechnic, vocational training Centers and out-of-school youth found out that existing infrastructure and equipment in public youth polytechnics are dilapidated, inadequate and require renovation and modernizing if they are to produce high quality graduates. Most of the instructors are not competent enough to deliver quality skills training to the youth polytechnic trainees. Formalized partnership particularly between youth polytechnics and the industry was found to be lacking thereby making it difficult to align the youth polytechnic training with the demands of the industry and therefore reducing the contribution of Youth Polytechnic graduates in entrepreneurship development. The project investigated whether graduates from the youth polytechnics are involved in starting business enterprises and stimulating investment interests. Were the graduates able to generate income, provide training ground for other people, convene and utilizes local resources and start new business?

### **2.7 Innovations Started by YP Graduates and Entrepreneurship Development**

Schumpeter (1934) said entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before. Apart from being innovators, entrepreneurs are risk-takers and take advantage of business opportunities and transform these into products. This spirit has greatly contributed to the modernization of economics and new technologies. The project investigated whether the polytechnic graduates are able to start new products and create employment. Were the graduates able to use their innovations to satisfy human needs in a more convenient and pleasant way. Application of new technology is necessary for the future growth of business. A technical entrepreneur is as good as a craftsman. Because of the craftsmanship they develop quality goods. They also develop alternative marketing and distribution strategies in order to promote business. Entrepreneurs are creative. They can create customers and buyers. Due to their innovative nature they persist on discerning new sources of materials to improve their enterprises and transform these into profits.

Entrepreneurs like starting something new or different. Kelemba (2010) in a survey of initiatives in current use of integrating of education for sustainable development in centre's of excellence carried out in six TVET institutions in Kenya found out that there was an approach to inspire trainees to think about what they can achieve through their own lives and future careers, however, the major barriers to enacting sustainable development include overcrowding in some part of the curriculum, the perceived relevance by the staff, limited internal accreditation including institutional commitment and validation systems, financial obligation and confusion over what and how to teach sustainable development in youth polytechnics. Every year there are new technologies, new markets, and new products and therefore the project investigated whether the youth polytechnics graduates are able to utilize the opportunities and develop their entrepreneurship skills.

## **2.8. Theoretical Framework**

The theoretical framework on technical training and entrepreneurship development advanced in the project is-

### **2.8.1 The Goal Theory by Latham and Lockie**

According to Goal theory as developed by Latham and Lockie, (1979) there are four main mechanisms that connect goals to training outcomes. They direct attention to priorities , stimulate efforts, challenge people to bring their knowledge and skills to bear and increase their chances of success and the more challenging the goal, the more people will draw on their full repertoire of skills. The theory emphasizes on setting and agreeing on objectives against which performance is measured and managed. It also emphasizes on feedback and review aspects of performance management (Armstrong, 2010).It is against this framework that the project investigated whether graduates of youth polytechnics used the theory to succeed in what they do after graduating from the youth polytechnics. They combined their skills training and career progression by engaging in business, introducing new products, new methods of doing business, new marketing strategies and other income generating activities to enable them to succeed in life and develop their entrepreneurship skills.

### **2.8.2 Constructivism Theory of Training**

The theory advocates that we construct our own understanding of the world we live in. Each of us generates our own rules and mental models, which we use to make sense of our experiences. It advocates taking learning as a process of adjusting mental models to accommodate new experiences. Constructivists believe that learners construct their own reality or at least interpret it based upon their perception of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures, and beliefs that are used to interpret objects and events. What someone knows is grounded in perception of the physical and social experiences that are comprehended by the mind (Jonassen, 1991).

Constructivists call for elimination of standardized curriculum and instead promote use of curriculum that is customized to the student's prior knowledge and market based knowledge. It also emphasizes on hands on problem solving. They say education should focus on making connections between facts and fostering new understandings in students. Instructors should tailor their teaching strategies to student's response and encourage students to analyze, interpret, and predict information and use the knowledge to develop various skills that they can use in future after leaving school. It is against this framework that the project investigated whether graduates of youth polytechnics are using the theory to succeed in what they do after graduating from the youth polytechnics and whether their skills are market oriented and useful after graduation.

### **2.8.3 McClelland's Need for Achievement Theory**

McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence. Those people who have high need for achievement are more likely to succeed as entrepreneurs. Need for achievement refer to the desire to accomplish something with one's effort? It is the urge to excel or the will to do well. Need for power means the desire to dominate and influence others by controlling their actions and use of physical objects. Need for affiliation implies the desire to establish and maintain friendly and warm relation with others. The project investigated whether youth

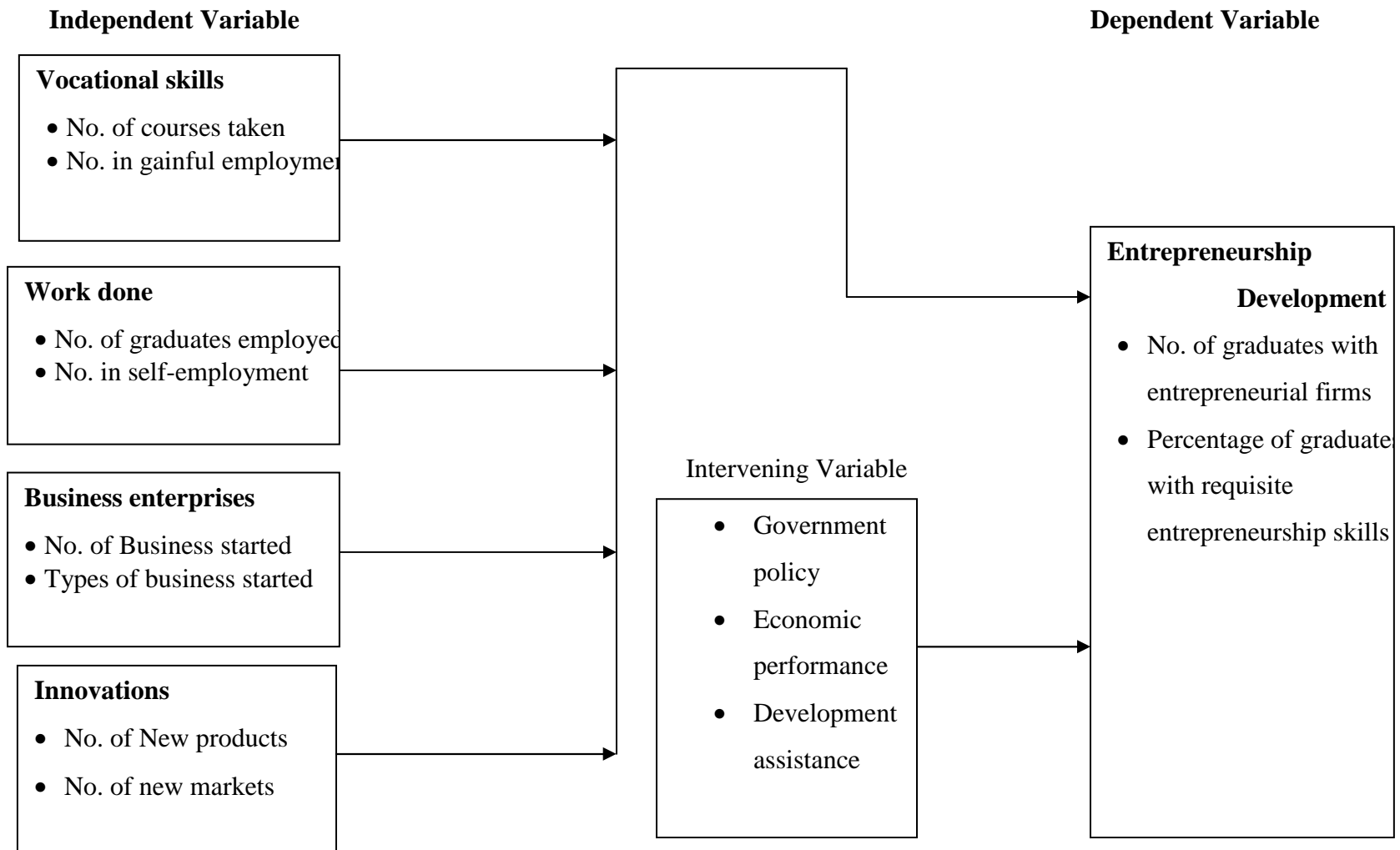
polytechnics graduates are able to use this framework to ensure that they develop their entrepreneurship skills.

## **2.9 Conceptual Framework of the Study**

A conceptual framework helps simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda & Mugenda, 2003). The conceptual framework of the study was based on four independent variables namely; vocational skills acquired by the graduates, work done by the graduates, new business started by graduates and innovations stated by graduates.

An entrepreneur and his/her enterprise have been described as the engine of development. Scholars such as Schumpeter and Cantillon, see entrepreneur as the main catalyst through which any country achieves development. It is in this light that entrepreneurship is seen as the ability to perceive of a business opportunity and exploit it for the purposes of generating a profit, which in turn is used as capital for further investment or as a livelihood means. Entrepreneurship brings innovation through such activities as creation of new products, acquiring of new skills, investing in new technologies, acquiring new sources of raw materials, new production methods, creation of new markets and even new managerial innovations for developments. Entrepreneurship plays a major role in economic development of any economy by promoting capital formation by mobilizing the idle savings of the public, encourages effective resources mobilization of capital and skill that might otherwise remain unutilized and idle. Entrepreneurism an innovator who introduces new combinations of means of production. Innovation involves making use of new things or doing of things that are already being done in a new way. Entrepreneurs are risk takers and insecurity bearers. If the venture succeeds, the entrepreneur profits, if it does not, loses occur. The entrepreneurs must make use of his/her initiatives to reduce risks or uncertainties. They also make business decision, once the entrepreneur is convinced that a particular line of production offers large prospects, he/she has to formulate action plan regarding the product and the quality of products to be produced. He /she has to find the best possible method of production which ensures he/she succeeds. Entrepreneurs arrange finances, purchases raw materials, supervises, sells and markets and assures the role of manager in the enterprise.

In line with this definition and function of entrepreneurship taken above, the project used the below conceptual framework to explain the role of village polytechnics graduates in entrepreneurship development in Kenya. The project looked at whether what graduates of youth polytechnics do after graduation , business enterprises started by the YP graduates, innovations started by the youth polytechnic graduates and vocational skills acquired by the graduates contributes to entrepreneurship development in Embu county and Kenya as a whole.



**Figure 2.1 Conceptual framework**

## 2.10 Knowledge Gaps

The gaps identified in the reviewed literature are as shown on table 2.1

**Table 2.1 Knowledge Gaps**

<b>Variable</b>	<b>Author and Year</b>	<b>Findings</b>	<b>Knowledge gap</b>
Vocational skills and entrepreneurial development by the graduates	Kelemba, (2012) Ndua,(1988) Moyas, (2012) Sifuna (1975) Waithaka, (1989)	Found out that their existed a strong relationship between vocational skills and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	There is need to explore this findings in the context of Kenyan youth polytechnics so as to clearly examine the exact relationship
Work done and entrepreneurial development by the graduates	Moyas (2012) Nzioka (1986) Kinyanjui (2007)	These studies found out that their existed a strong relationship between work done and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	These studies do not indicate clear methodologies that were used to reach this conclusion. On this basis, my study shall designed a clear methodology to verify this influence
Businesses and entrepreneurship development by the graduates	UNDP(2012) Kinyanjui (2007)	There seems to exist a strong relationship between business and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail.
Innovations and entrepreneurial development by the graduates	Schumpeter (2004) Kelemba (2010)	There seems to exist a strong relationship between innovations and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail

## **2.11 Summary of Literature Review**

This chapter highlights the review of the previous studies on youth polytechnics in Kenya and the three theories namely, the Goal theory, the Constructivism theory and McClelland need for achievement theory that have been advanced about training and entrepreneurship development. It further reviews the conceptual framework with the four independent variables under study (What graduates of youth polytechnic do after graduation, types of business enterprises started, vocational skills acquired and innovations started by graduates of the polytechnic has the dependent variables).

This is due to the fact that various development plans and policies associate human development with economic development (Kamunge, 1998). It has been argued that there are many countries with trained and educated populations yet they lag behind in development (Prichet, 1996). Those of contrary opinion such as Ngware (2002), Alam (2007), see investments in education and training as being beneficial. They argue that education and training improves one's creativity, enhances individual's participation in economic development, and enhances one's competitiveness in the job market as well as future earnings. Therefore there is need for further research to ascertain the impact of investment in training on enhancing individual's competitiveness in labour market especially for the youth polytechnics graduates.

The review showed research studies that has been done on the role of vocational and technical skills on entrepreneurship development However, no such studies has been done in Embu County particularly targeting the Karurumo youth polytechnic graduates. This study hopes to fill in the gap.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter explained the research design, target population, sampling techniques, research instruments, data collection and analysis procedures and the operation definition of variables used.

### **3.2 Research Design**

The research design used in this study was descriptive survey design. The project aimed at investigating role of village polytechnic graduates to entrepreneurship development in respondent's opinion in relation to their role in entrepreneurship development in the country. This enabled the researcher to bring out the elements of the findings in a more clear and comprehensive manner. According to Creswell (2002) descriptive survey design is used when data is collected to describe person, organization, settings, and phenomena. A survey reports the way things which include behavior, attitude, values and characteristics are formed (Mugenda and Mugenda, 2003). The above design was therefore used to investigate the role of village polytechnic graduates to entrepreneurship development in Embu County. A self-administered questionnaire was used to collect the required quantitative and qualitative data from former trainees of Karurumo Youth Polytechnic. The Questionnaire comprised of two sections. The first part was designed to determine the demographic characteristics of the respondents, while the second part consisted of questions focusing on the four independent variables to be studied (Work done by graduates after graduation, business enterprises started by graduates, new innovations started by the YP graduates and Vocational skills acquired by YP graduates) had a role to play in entrepreneurship development in Embu county and Kenya as whole.

The questionnaire was designed in line with the objective of the study. To enhance quality of data obtained, Likert types of questions were included whereby respondents indicated the extent to which the variables were practiced in a five part Likert scale (Gamer, 2010). Structured and un-structured questions were also used to facilitate analysis and encourage the responses to give an in-depth response about the variables

without feeling held back in revealing any information. Secondary data was collected from the ministry of youth affairs and sports at the headquarters and from the county director of youth training in the county. This included annual reports and other related returns.

### 3.3 Target Population

The target population according to Cox (2010) is the entire set of units for which the survey data are used to make references. The target population constitutes the entire or totality of the items under study (Kothari, 2004). The target population for this study was 325 former graduates from Karurumo village polytechnic who graduated between 2003 and 2012 (10 years).

**Table 3.1 Target Population**

	<b>population</b>
YP Graduates from 2003 to 2012	325
<b>Total</b>	<b>325</b>

### 3.4 Sampling Procedure and Sample Size

Mugenda and Mugenda (2003) defined sampling as the selection of a portion of a population such that the selected portion represents the population adequately. Mugenda and Mugenda (2003) suggest that for descriptive studies 10% or above of the accessible population is enough for the study. This study targeted 20% of the target population of 325 making a total sample size of  $(0.20 \times 325) = 65$  as indicated in the below table:-

**Table 3.2 Sample Size**

	<b>Sample size</b>
YP Graduates (20% of 325)	65
<b>Total</b>	<b>65</b>

The former graduates of Karurumo youth polytechnic were traced in the whole county by the four research assistants under my guidance as the principal researcher. The research assistants were briefed on the research problem and what was expected from the questionnaire. The research assistants were encouraged to work as a team where necessary. In order to identify the respondents, the researchers were advised to visit the YP manager, instructors and chiefs to help them in tracing the graduates.

### **3.5 Data Collection Methods and Instruments**

The study used questionnaires in collecting data from graduates. The questionnaire combined both open-ended and close-ended questions which were administered to the graduates. Questionnaires were considered ideal for collecting quick data from the graduates.

The data collection procedure entailed the researcher obtaining an introduction letter from the University. The researcher then sampled graduates to inform them about the study and made arrangements for issuing questionnaires. The respondents were given instructions and assured of confidentiality and were given enough time to fill in the questionnaires, after which the researcher collected the filled-in questionnaires.

The researcher therefore sourced data from both primary and secondary sources. Primary data was gathered directly from respondents through questionnaires. Secondary data was used because there were some data from published materials and information e.g. journals and the internet.

#### **3.5.1 Pilot Testing of the Questionnaires**

Pilot testing of the questionnaires before embarking on real research was important in order for it to reveal deficiencies (Mugenda and Mugenda (2003). Eleven questionnaires were used for pilot testing to ensure reliability and validity in the adjacent Tharaka Nithi County. Former graduates of Muthambi YP were traced and interviewed. The pilot data was not included in the study. The recommendations of the supervisor enhanced the validity of the instruments. This established the reliability and the validity of the instruments.

### **3.5.2 Reliability of the Research Instruments**

In order to ensure reliability of instruments, questions in the questionnaires were constructed and first pre-tested to ensure consistency in measurement. The test-retest technique of assessing reliability of a research involved in administering the same instruments twice to the same group of subjects. This was after a lapse of two weeks. Spearman rank order correlation was employed to compute the correlation coefficient in order to establish the extent to which the content of the questionnaires was consistent in eliciting the right responses every time the instrument was administered. A correlation coefficient ( $r$ ) of 0.85 was considered high enough in judging the reliability of the instruments.

### **3.5.3 Validity of the Research Instruments**

Just as it was observed by Patten (2004) and Wallen & Fraenkel (2001) that a study instrument is only valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed, the current study put in place measures to ensure that the instruments used in the study provided accurate result. The content validity of the instruments was measured. The researcher's supervisors helped the researcher to assess the concept the instruments was measuring in order to determine whether the set of items were accurately representing items under study. The recommendations of the supervisor enhanced the validity of the instruments.

### **3.6 Data Analysis Techniques**

The data collected was coded, cleaned and entered into the computer and analyzed using the statistical package for social sciences (SPSS). Descriptive statistics was used to analyze the data. Descriptive statistics provided for meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution and was used to analyze and generalize the results of analysis to the population (Kothari, 2008). This is because the variables studied were measured at ratio or interval scales and were continuous (Patton, 2003). For analysis of quantitative data, the data was converted into numeric codes representing attributes or measurements of variables. Coding included as much information as possible because once the coded data was entered into the computer,

it was possible to recover any details, which were omitted ( Mugenda &Mugenda, 2003). Generalization was done from the themes about the phenomena in question and interpreted in the light of available literature (Kumar, 2005). Qualitative analysis was important since it supplemented the quantitative analysis that created a better framework for the interpretation of the findings (Kothari 2008). Data was then presented in pie charts and tables and explained

### **3.7 Operational Definition of Variables**

To operationalize the research variables, the matrix below defines how the variables was measured

### 3.8 Operational Definition of Variables

To operationalize the research variables, the matrix below defines how the variables was measured

**Table 3.3 Operational definition of variables**

Objectives	Variables	Indicators of Measurements	Measurements scale	Tools of Analysis	Type of Analysis
To determine how vocational skills acquired by graduates from Karurumo Village Polytechnic in the last 10 years contributed to entrepreneurship development in Embu county	Independent: vocational skills acquired by graduates	<ul style="list-style-type: none"> <li>No. of graduates in gainful employment</li> <li>No. of courses taken by graduates</li> </ul>	Nominal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To find out whether what graduates from Karurumo village polytechnic do after graduation contributed to entrepreneur development in Embu county	Independent: what graduates from Karurumo village polytechnic do after graduation	<ul style="list-style-type: none"> <li>No. of graduates employment</li> <li>No. of graduates self- employment</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneur development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Nominal		
To determine whether types of business started by graduates from Karurumo Village Polytechnic in the last 10 years contribute to entrepreneurship development in Embu County	Independent: types of business started by graduates	<ul style="list-style-type: none"> <li>No. of business started</li> <li>Types of business started</li> </ul>		Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To establish whether innovations started by graduates of Karurumo Village Polytechnic in the last ten years contribute to entrepreneurship development in Embu County	Independent: Innovations started by graduates	<ul style="list-style-type: none"> <li>No. of new products started</li> <li>No. of new technologies started</li> <li>New markets started</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		

**Table 3. 4 The number of Trainees enrolled at Karurumo Youth Polytechnic since 2003 to December 2012**

Dist.	YP	Name of Course	Youth Polytechnic Graduates since 2003 to December, 2012																													
			2003			2014			2005			2006			2007			2008			2010			2011			2012					
			M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
Emb		MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10
		Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11
		Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10
		Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15
		Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17
<b>Grand Total</b>												25						36					18			34			53			63

### **3.9 Ethical Considerations**

To avoid biases in this study, the researcher took into consideration the qualitative research that uses a case study approach which tends to skew data in certain ways (Mason, 2002). All ethical procedures were considered. Multiple methods were used and acknowledgement of researchers' role assisted in mitigating all the biases in the study.



## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

### 4.1 Introduction

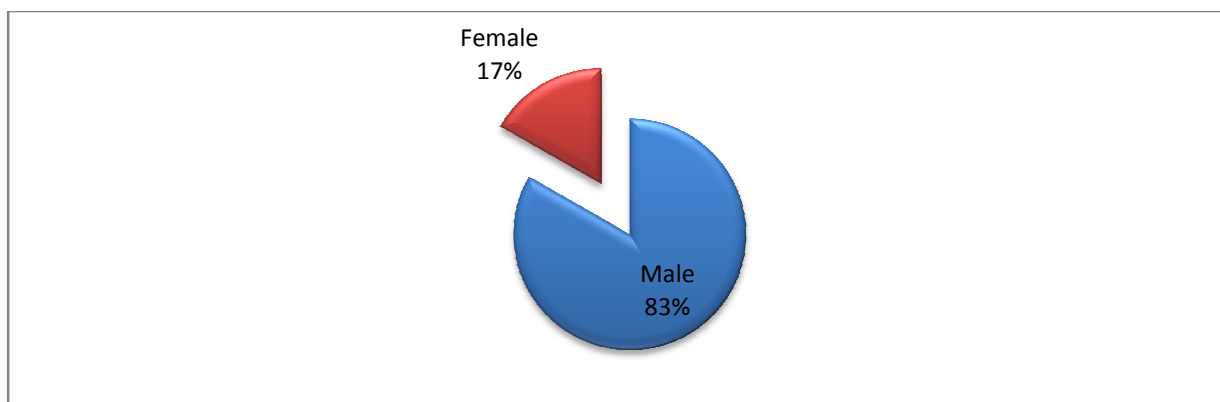
This chapter presents analysis and findings of the study as set out in the research methodology. The results were presented on the role of village polytechnics in entrepreneurship development. The study targeted 65 respondents out of which 60 responded and returned their questionnaires contributing to the response rate of 92.3%. This response rates were sufficient and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was due to extra efforts that were made via personal calls and visits to remind the respondent to fill-in and return the questionnaires. The chapter covers the demographic information, and the findings were based on the objectives.

### 4.2 Demographic Information

#### 4.2.1 Gender distribution of the respondents

The study sought to establish the respondent's gender distribution. The findings are as stipulated in figure 4.1.

**Figure 4.1 Gender of the respondents**



From the findings illustrated in figure 4.1 the majority of the respondents (83%) were males while 17% were females. This illustrates that there was gender disparity as majority of the respondents were males.

### 4.2.2 Highest level of Education

The research sought to establish respondents' highest level of Education. The findings are as stipulated in figure 4.2.

**Figure 4.2 Highest level of Education**

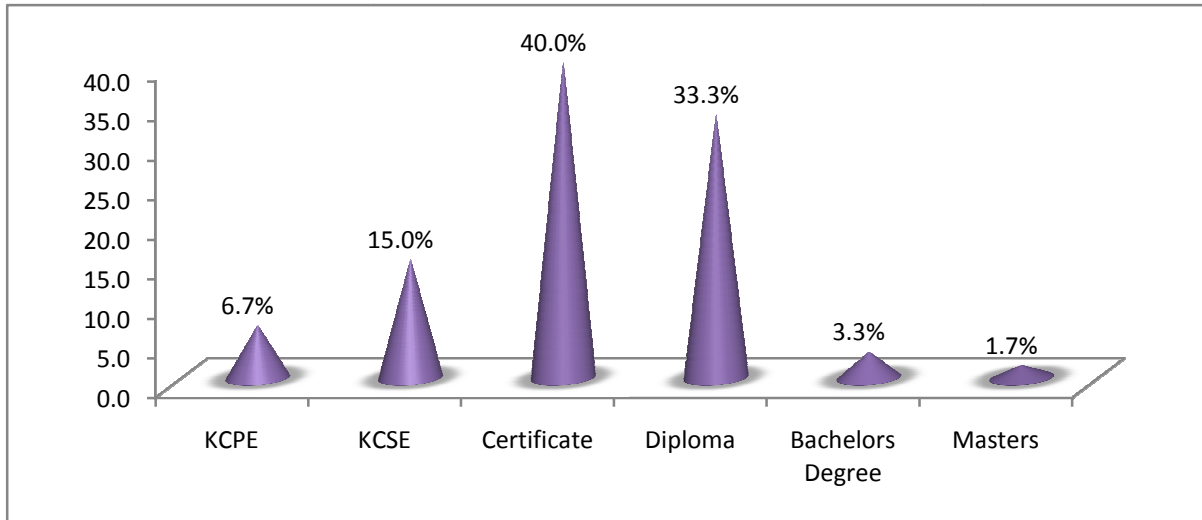
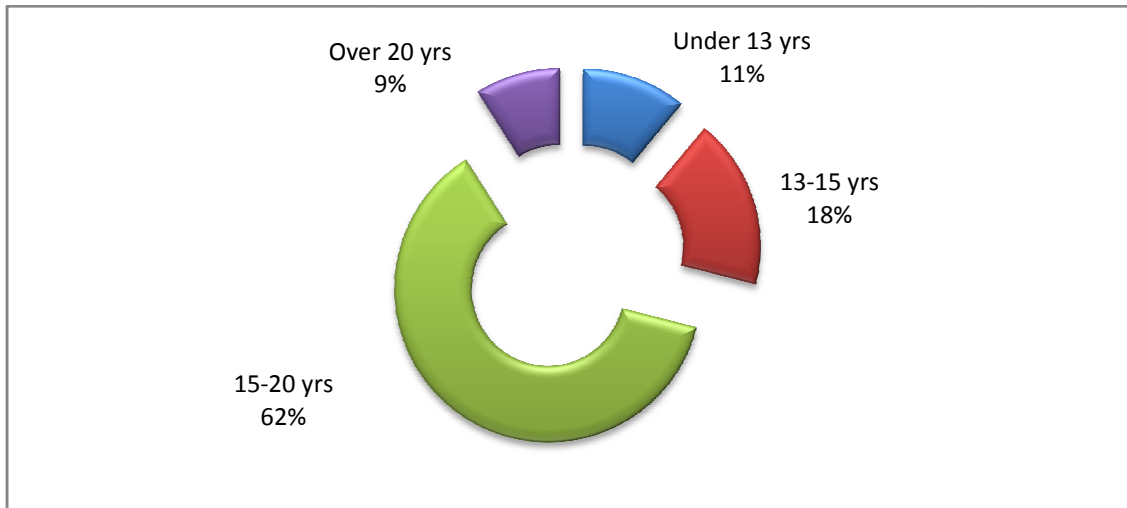


Figure 4.2 indicates that most of the former graduates from Karurumo youth polytechnic (40%) had college certificates level of education, 33.3% had college diplomas and 15% had Kenya certificate of secondary education while 6.7%, 3.3% and 1.7% had Kenya certificate of primary education, bachelor's degree and Masters degree respectively. This illustrates that majority of the graduates from Karurumo Youth Polytechnic had college certificates and diplomas respectively. This shows that most of the graduates were able to carry out entrepreneurship development without many problems owing to their level of education.

### 4.2.3 Age the trainees joined the Polytechnic

The study also sought to establish the age at which the respondents joined the Polytechnic. The findings are as stipulated in figure 4.3.

**Figure 4.3 Age trainees joined Polytechnic**



From the study findings, majority of the respondents (62%) joined the Polytechnic at the age of 15-20 years, 18% at the age of 13-15 years while 11% and 9% joined the polytechnic at the age of less than 13 years and over 20 years respectively. This implies that majority of the graduates from Karurumo youth polytechnic had joined the institution at the age of 15-20 years. This was the normal age at which students/trainees are enrolled in the polytechnics and therefore they were suitable to join the training.

**4.2.4 Number of Years trainees spent in the Polytechnic**

The study further sought to establish the number of years that the respondents spent in the polytechnic. The findings are as stipulated in table 4.1.

**Table 4.1 Number of Years trainees spent in the Polytechnic**

	Frequency	Percentage
< 1 yr	3	5.0
1 & < 2 yr	14	23.3
2 & <3 yrs	23	38.3
3 & < 4 yrs	11	18.3
> 4 years	9	15.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents (38.3%) had spent 2-3 years at Karurumo youth polytechnic, 23% had spent 1-2 years and 18.3% had spent 3-4 years while 15% had spent over four years at Karurumo Youth Polytechnic. This implies that majority of the graduates from Karurumo Youth Polytechnic had spent 2-3 years in the institution that was relatively enough to acquire the desired skills. This is the normal duration that the trainees take in the polytechnics.

#### 4.2.5 Reasons for enrolling in the Youth Polytechnic

The study sought to establish the reasons why the respondents enrolled in the youth polytechnic. The findings are as stipulated in table 4.2.

**Table 4.2 Reasons for enrolling in the Youth Polytechnic**

	Frequency	Percentage
Acquiring of skills	53	88.3
Interested or liked courses offered in the YPs	44	73.3
Forced by circumstances	49	81.7
Lack of school fees for secondary education	51	85.0
Failure to score good grades in KCPE	53	88.3
To be self employed	39	65.0
Polytechnic education is affordable	46	76.7

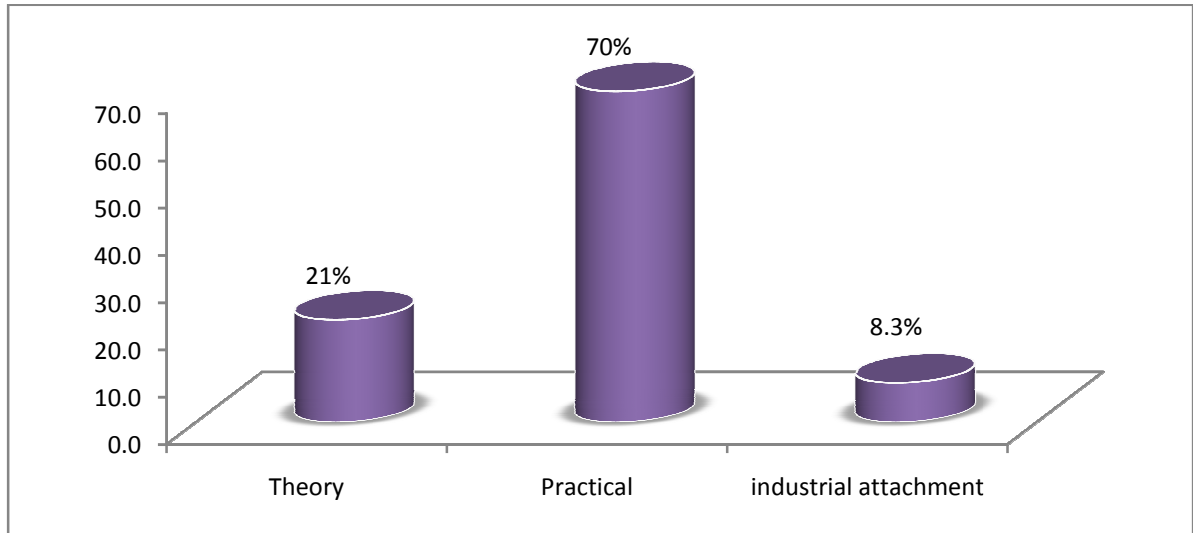
From the study findings, majority of the respondents (88.3%) indicated acquiring of skills and failure to score good grades in KCPE as the reasons why they enrolled in the youth polytechnic, 85% cited lack of school fees for secondary education and 81.7% indicated that they were forced by circumstances to enroll in the youth polytechnic. On the other hand, 76.7% indicated that polytechnic education was affordable and 73.3% cited that they were interested or liked courses offered in the YPs while 65% indicated that they enrolled in the youth polytechnic due to failure to score good grades in KCPE. Majority of the trainees had divergent reasons why they joined the polytechnics but acquiring of skills and failure to score good grades in KCPE stood out.

### 4.3 Vocational Skills and Entrepreneurship Development

#### 4.3.1 Aspects of the course undertaken in the polytechnic and day today life

The study asked the respondents to indicate the aspects of the course undertaken in the polytechnic and what they were doing on day today life. The findings are as stipulated in figure 4.4.

**Figure 4.4 Aspects of the course undertaken in the polytechnic**



From the study findings, majority of the respondents (70%) indicated that the aspects of the course undertaken in the polytechnic was practical in their day to day life, 21% indicated that it was theoretical while 8.3% indicated that the aspects of the course undertaken in the polytechnic helped the respondents in their industrial attachment. This meant that the respondents were able to acquire practical skills that they used when they got out from the polytechnic and were able to use it to develop their entrepreneurship skills. This shows that the graduates were able to get the right practical skills that enabled them to be competent, effective and efficient in the operations of the day to day life.

#### 4.3.2 Outcome of vocational skills acquired in the polytechnic

The study also sought to establish the outcome of vocational skills acquired in the polytechnic among the respondents. The findings are as stipulated in table 4.3.

**Table 4.3 Outcome of vocational skills acquired in the polytechnic**

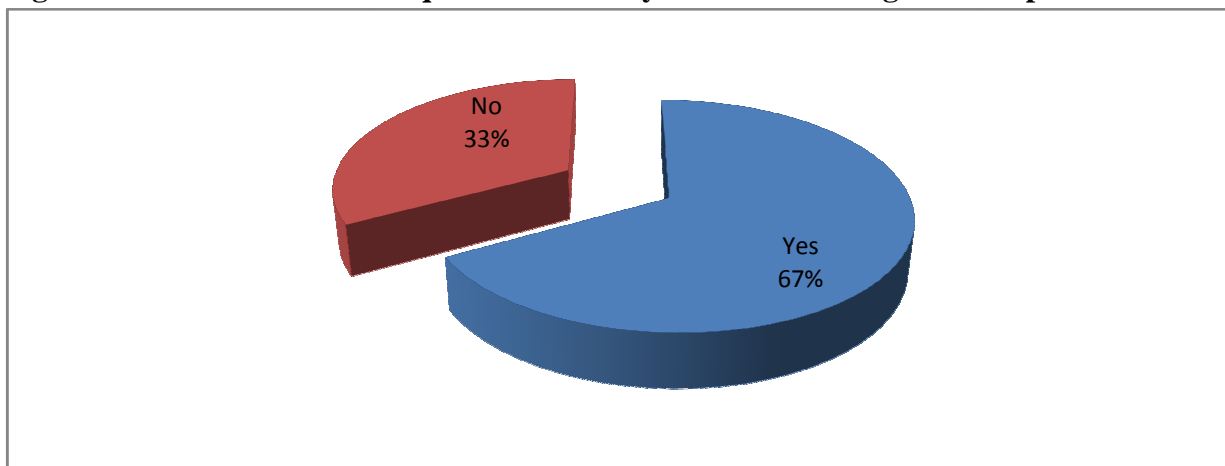
	Frequency	Percentage
Entrepreneur	23	38.3
Trainer	11	18.3
Self-employed	18	30.0
Employed	8	13.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents, 38.3% indicated that the vocational skills acquired in the polytechnic helped them to be entrepreneurs, 30% indicated self-employed while 18.3% and 13.3% indicated that the vocational skills acquired in the polytechnic helped them to be trainers and employed respectively. This implies that the vocational skills acquired in the polytechnic helped majority of the graduates from Karurumo Youth Polytechnic to be entrepreneurs. It also shows that Karurumo Youth Polytechnic graduates were doing well in life because of the vocational skills they acquired during their training. This was in line with expectation as they joined the polytechnic.

#### **4.3.3 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

The study asked the respondents to indicate whether the Vocational skills acquired in the Polytechnic helped them become an Entrepreneur. The findings are as stipulated in figure 4.5.

**Figure 4.5 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

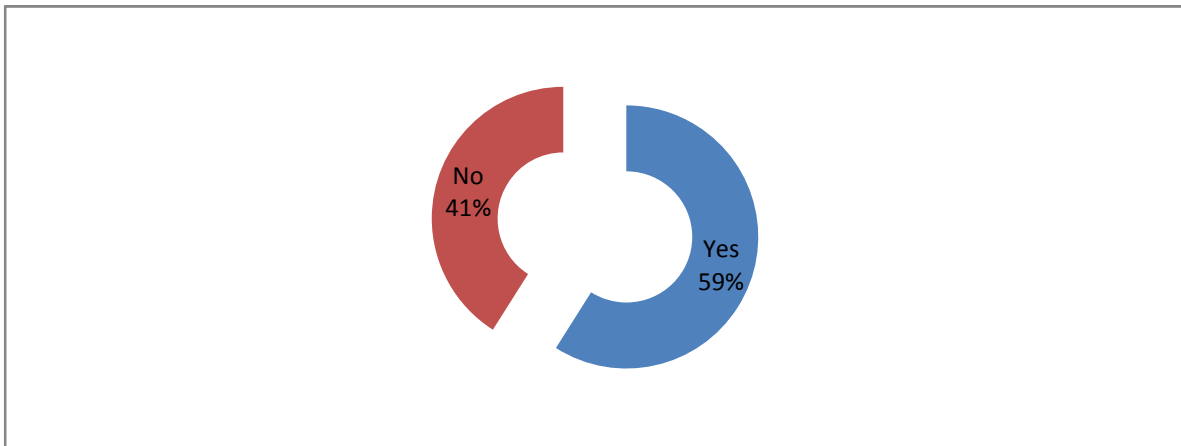


From the study findings, majority (67%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them become an entrepreneur while 33% were of a contrary opinion. This implies that vocational skills acquired in the Polytechnic help graduates become Entrepreneurs.

#### 4.3.4 Vocational skills acquired in the Polytechnic

The study further asked the respondents to indicate whether the vocational skills acquired in the polytechnic helped them improving entrepreneurship skills. The findings are as stipulated in figure 4.6.

**Figure 4.6 Vocational skills acquired in the Polytechnic**



From the study findings in the figure above, majority (59%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them improve their entrepreneurship skills while 41% were of a contrary opinion. This is in line with Waithaka, (1989) who observed that young school graduates with relevant skills and attitudes would lead the young people to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities.

#### 4.3.5 Vocational skills and Entrepreneurship development

The study sought to establish the role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. The findings are as stipulated in table 4.4.

**Table 4.4 Vocational skills and Entrepreneurship development**

	<b>Frequency</b>	<b>Percentage</b>
Promotion of new business	33	55.0
Promotion of innovations	44	73.3
Provision of new technologies	49	81.7
Creation of new products	51	85.0
Acquiring of new skills	56	93.3
Creation of new markets	39	65.0

From the study findings, majority of the respondents (93.3%) indicated acquiring of new skills as the role of promotion of entrepreneurship development, 85% indicated creation of new products, 81.7% indicated provision of new technologies and 76.7% indicated new production methods while 73.3% indicated Promotion of innovations. On the other hand, 65% indicated creation of new markets and 55% indicated promotion of new business. This implies that acquiring of new skills was the main role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. This agrees with Schumpeter (1934) who indicated that entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before.

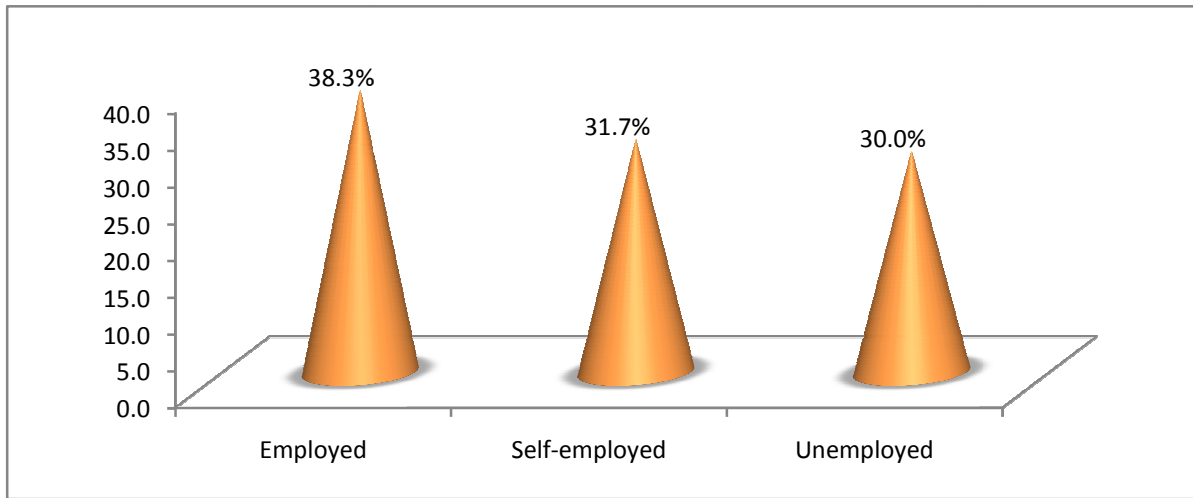
#### **4.4 What graduates do and Entrepreneurship Development**

##### **4.4.1 Employment status**

The study sought to establish the employment status of the graduates from Karurumo youth polytechnic. The findings are as stipulated in figure 4.7.



**Figure 4.7 Employment status**

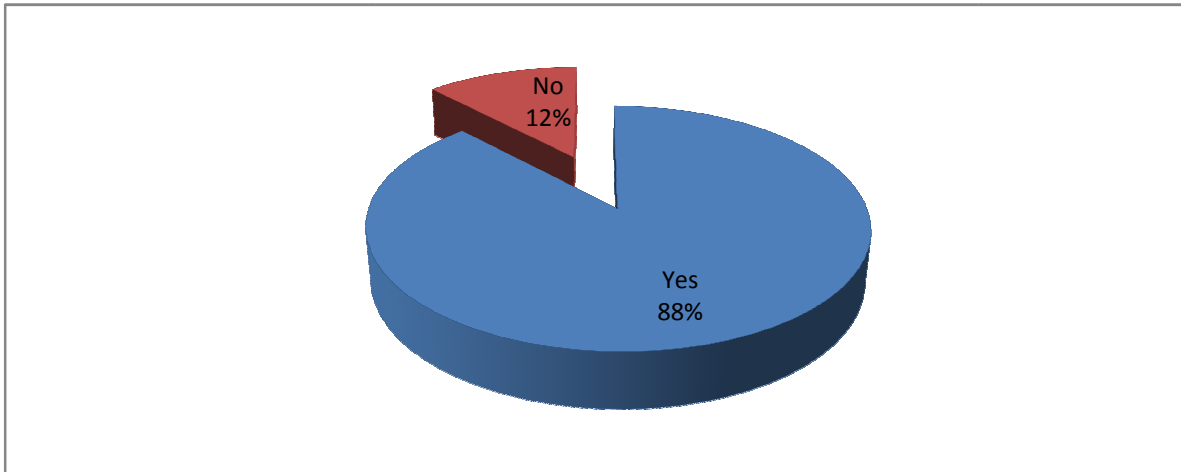


From the study findings, most (38.3%) of the graduates from Karurumo youth polytechnic indicated that they were employed, 31.7% were self-employed while 30% were unemployed. This implies majority of the graduates from Karurumo youth polytechnic were employed. This finding concur with the findings of Achieng (2012) on the study of factors affecting acquisition of vocational skills among learners in Maranda division of Siaya district that found that vocational education main aim is to offer skills to learners that can help them to be self-employed. Vocational skills create greater impact on human resource development and economic growth.

#### **4.4.2 Certificate from Youth Polytechnic and chances of employment**

The study asked the respondents to indicate whether skill training certificate from youth polytechnic enhanced their chances of employment. The findings are as stipulated in figure 4.8.

**Figure 4.8 Certificate from Youth Polytechnic and chances of employment**

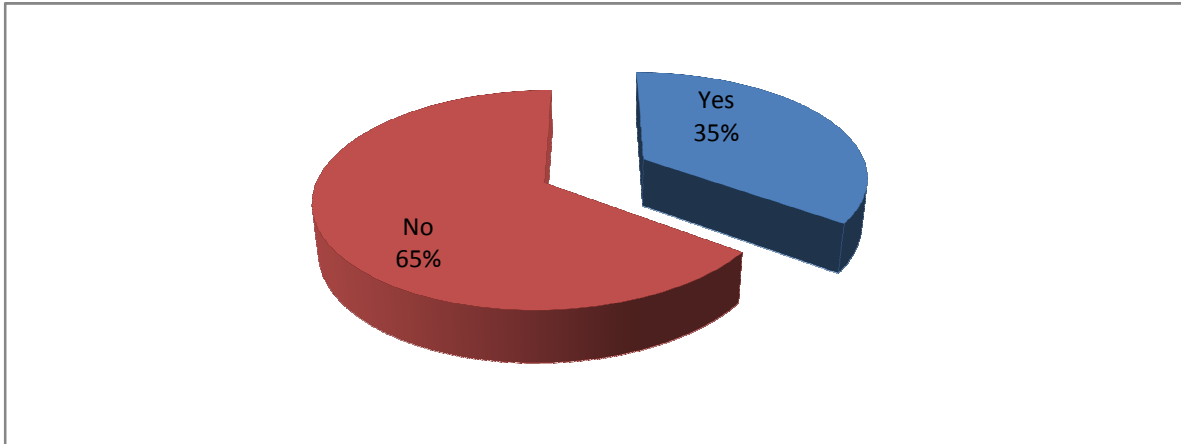


From the figure above, majority (88%) of the graduates from Karurumo youth polytechnic agreed that skill training certificate from youth polytechnic enhanced their chances of employment while 12% disagreed. This implies that skill training certificate from youth polytechnic enhanced graduates chances of employment. This concurred with the findings of Ibuathu (2013) on the study of the impact of vocational training for rural development in Nyambene district in Kenya that found out that 60% of the respondents said youth polytechnic graduates were marketable were learning their own business that included tailoring, carpentry and welding shops.

#### **4.4.3 Offering of Training by the former Polytechnic Graduates**

The study sought to establish whether the graduates from Karurumo youth polytechnic offered any training. The findings are as stipulated in figure 4.9.

**Figure 4.9 Offering of Training by the former Polytechnic Graduates**

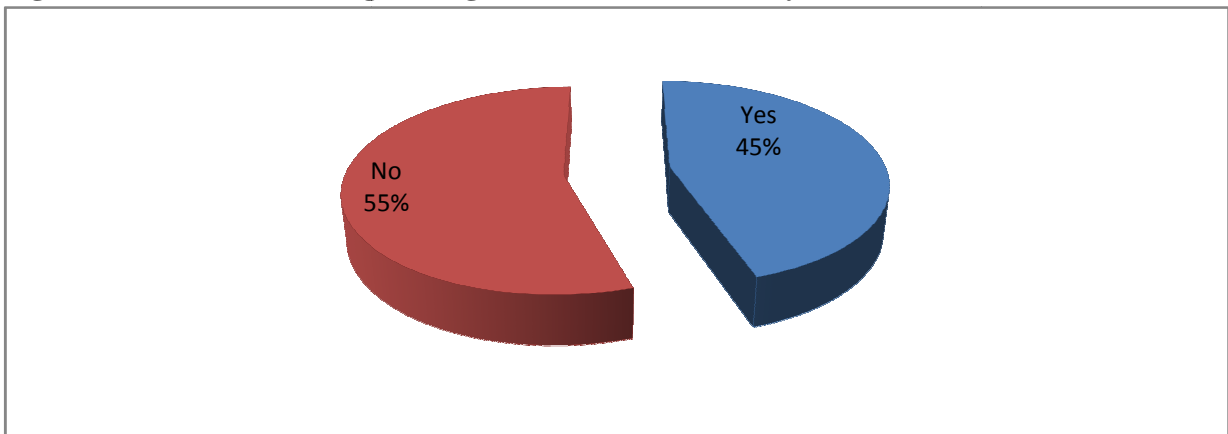


From the findings of the study, majority (65%) of the graduates from Karurumo youth polytechnic disagreed that they offered trainings with 35% agreeing that they offered trainings. This implies that graduates from Karurumo youth polytechnic did not offer trainings. This is in line with Kinyanjui (2007) the youth polytechnic employees enter the labour market as employees, Self-employment and only 22.2% of the graduates were unemployed.

**4.4.4 Use of Training skills gained in the Youth Polytechnic to train**

The study further sought to establish whether the graduates from Karurumo Youth Polytechnic used the training skills gained in the Youth Polytechnic to train. The findings are as stipulated in figure 4.10.

**Figure 4.10 Use of Training skills gained in the Youth Polytechnic to train**



From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic disagreed that they used the training skills gained in the Youth Polytechnic to train with 45% who used the training skills gained in the Youth Polytechnic to train. This implies that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train.

#### 4.4.5 Role of training in entrepreneurship development

The study asked the respondents to indicate the role of training in entrepreneurship development in the County. The findings are as stipulated in table 4.5.

**Table 4.5 Role of training in entrepreneurship development**

	Frequency	Percentage
started new business	33	55.0
Created new products in the market	35	58.3
Value addition to products	49	81.7
New technology	32	53.3
Opening new markets	53	88.3
Providing new services	41	68.3
Providing training services	58	96.7

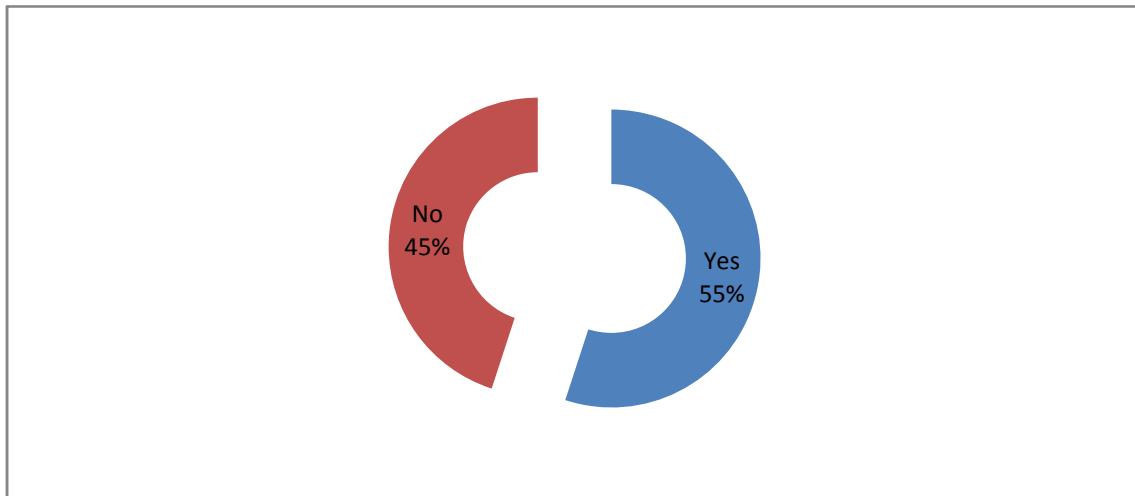
From the table above, majority (96.7%) of the graduates from Karurumo youth polytechnic indicated provision of training services as the role of training in entrepreneurship development in Embu County, 88.3% indicated opening of new markets, 81.7% indicated value addition to products and 68.3% indicated provision of new services while 58.3%, 55% and 53.3% indicated creation of new products in the market, starting of new businesses and new technology as the role of training in entrepreneurship development in Embu County. McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence.

## 4.5 Business started and their role in entrepreneurship

### 4.5.1 Business enterprise after graduation

The study asked the respondents to indicate whether they had started any business enterprise after graduation. The findings are as stipulated in figure 4.11.

**Figure 4.11 Business enterprise after graduation**

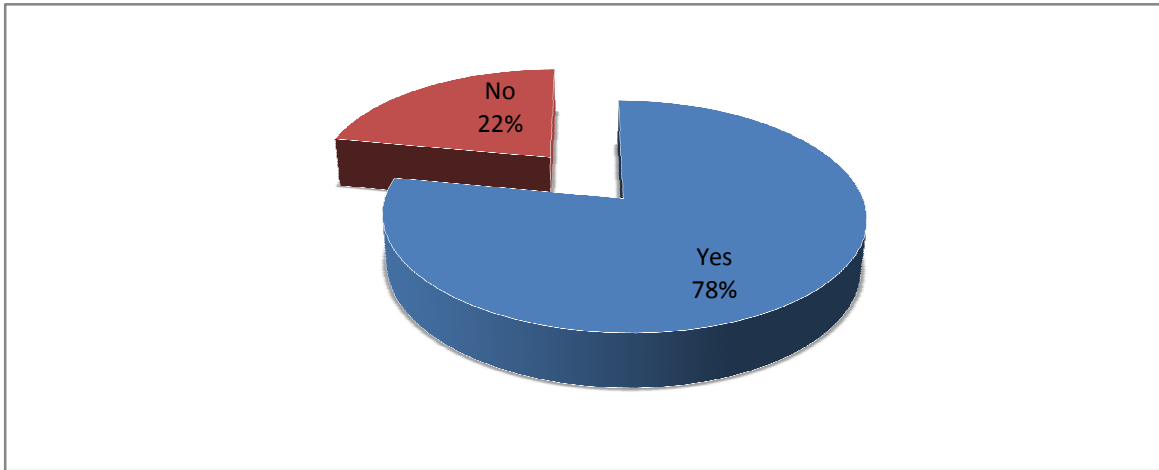


From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic agreed that they had started business enterprise after graduation while 45% had not. This implies that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation.

### 4.5.2 Business started and course taken at polytechnic

The study also sought to find out whether the businesses started were related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.12.

**Figure 4.12 Business started and course taken at polytechnic**

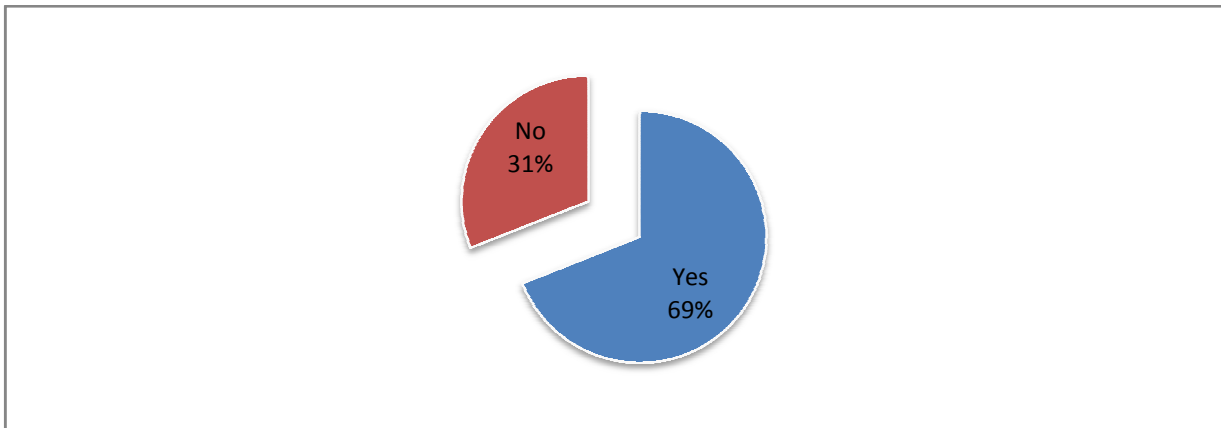


From the findings of the study, majority (78%) of the graduates from Karurumo youth polytechnic agreed that the businesses they had were related to the course undertaken at the polytechnic. This implies that majority of the graduates from Karurumo youth polytechnic had started businesses related to the course undertaken at the polytechnic.

#### **4.5.3 Business enterprise and improvement of entrepreneurship skills**

The study further sought to find out whether the business enterprise stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.13.

**Figure 4.13 Business enterprise and improvement of entrepreneurship skills**



From the figure above, majority (69%) of the graduates from Karurumo youth polytechnic agreed that the business enterprise stated assisted them to improve their entrepreneurship skills. This findings agrees with the findings of Kivu (2013) on the study of influence of leadership on the growth of enterprises in Machakos county that found innovation influenced growth of entrepreneurs in Machakos and that emotional intelligence plays a key role in product and process innovation.

#### **4.5.4 Role of business in improving economic development in the county**

The study asked the respondents to indicate the role of business in improving economic development in the County. The findings are as stipulated in table 4.6.

**Table 4.6 Role of business in improving economic development in the county**

	<b>Frequency</b>	<b>Percentage</b>
Training others	33	55
Doing things better, faster and at less cost	57	95
Opening new markets	51	85
Use of newly found material	32	53
Brought new technologies	53	88

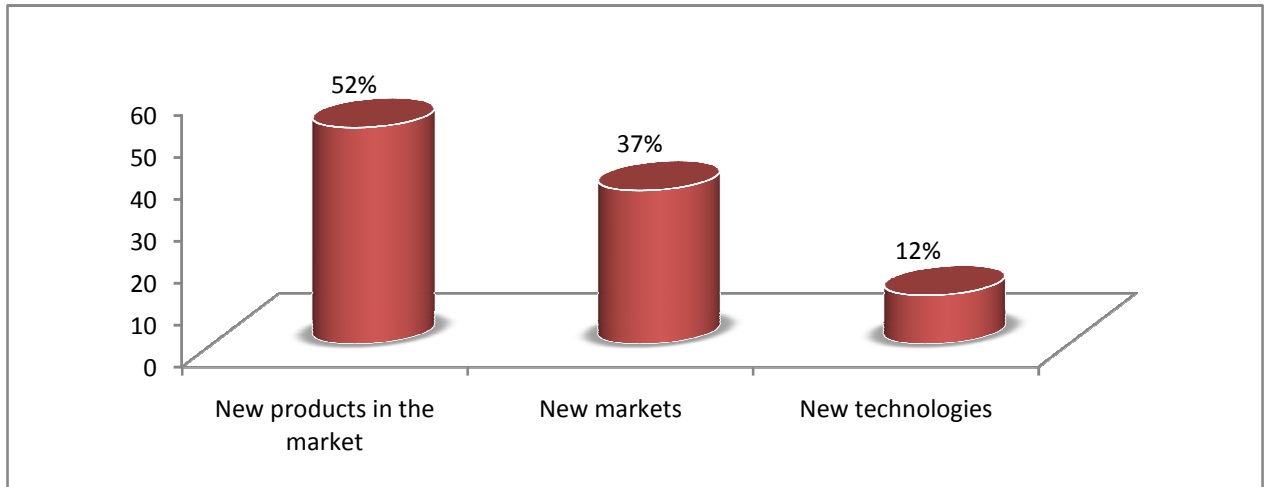
From the table above, majority (95%) of the graduates from Karurumo Youth Polytechnic indicated that the role of business in improving economic development in the County was through doing things better, faster and at less cost, 88% indicated that it brought new technologies, 85% cited that it opened new markets and 55% said that they trained others while 53% indicated that it was through use of newly found materials. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing.

## 4.6 Innovations started and entrepreneurship development

### 4.6.1 Innovations started since leaving polytechnic

The study sought to find out the innovations started by the graduates since they left polytechnic. The findings are as stipulated in figure 4.14.

**Figure 4.14 Innovations started since leaving polytechnic**



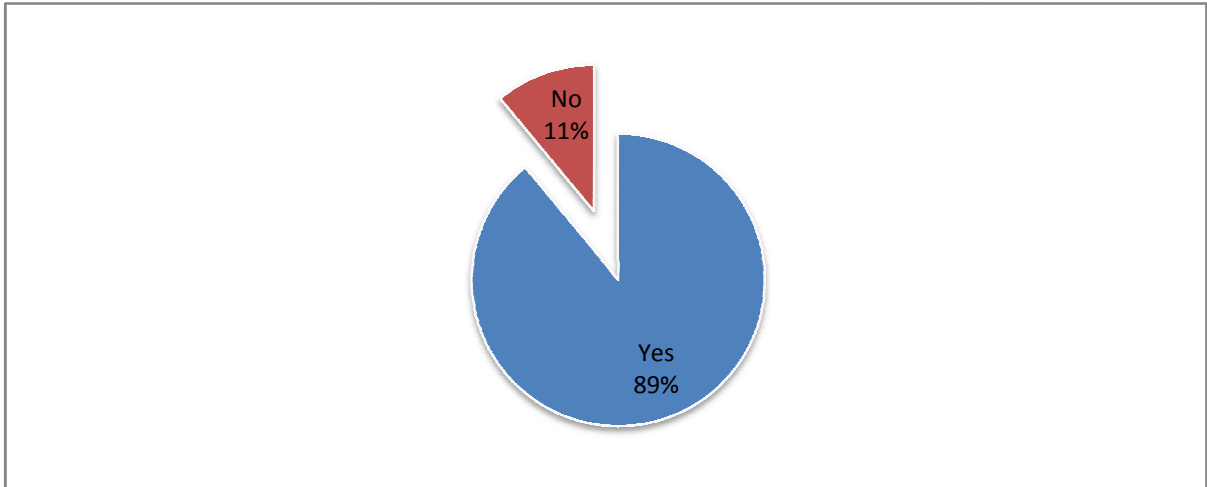
From the study findings, majority (52%) of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic, 37% had introduced new markets while 12% had introduced new technologies since they left polytechnic. This agrees with Yambo (1986) who observed that youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education.

### 4.6.2 Innovations started and course taken at polytechnic

The study also sought to find out whether the innovations stated was related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.15.



**Figure 4.15 Innovations started and course taken at polytechnic**

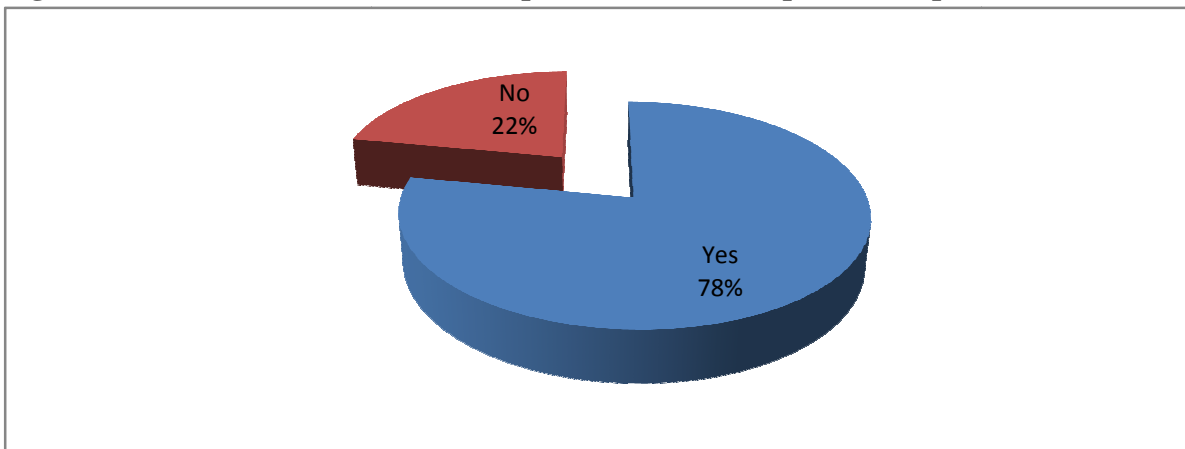


From the figure above, majority (89%) of the graduates from Karurumo youth polytechnic agreed that the innovations stated were related to the course undertaken at the polytechnic.

#### **4.6.3 Innovation started and improvement of entrepreneurship skills**

The study further sought to find out whether the innovation stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.16.

**Figure 4.16 Innovation started and improvement of entrepreneurship skills**

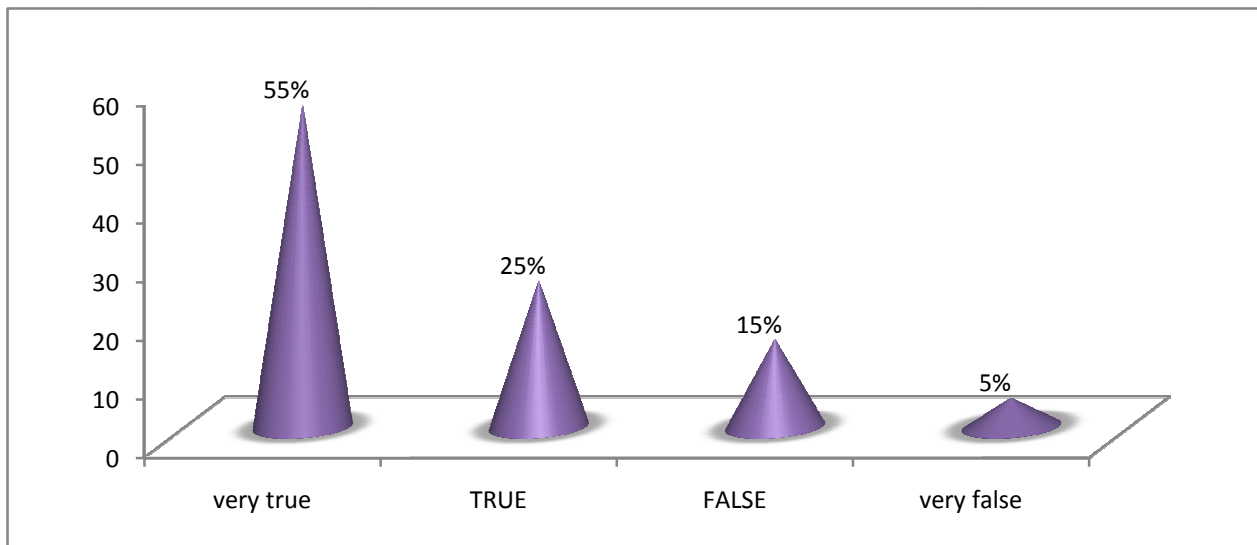


From the figure above, majority (78%) of the graduates from Karurumo youth polytechnic agreed that innovation stated assisted them to improve their entrepreneurship skills.

#### 4.6.4 Innovation started and graduate's role in economic services

The study further sought to find out whether the innovation stated assisted the respondents to enhance their role in providing economic services to the people. The findings are as stipulated in figure 4.17.

**Figure 4.17 Innovation started and graduate's role in economic services**



From the study findings, majority (55%) of the graduates from Karurumo youth polytechnic indicated that it was very true that the innovation stated assisted them to enhance their role in providing economic services to the people while 25% indicated that it was true and 15% indicated that it was false. This implies that the innovation stated assisted the graduates to enhance their role in providing economic services to the people. These findings concur with the findings of Wanyoko (2013) on his study on the influences of business incubation services on growth of small and medium enterprises in Kenya that found out that majority of the respondents in the study (83%) stated that innovation influenced the growth of business and entrepreneurship development and affects business to a greater extent.

#### 4.6.5 Extent to which innovations played role in entrepreneurship development

The study sought to establish the extent to which innovations started by graduates of the polytechnics play in entrepreneurship development. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly

disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

**Table 4.7 Extent to which innovations played role in entrepreneurship development**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>Mean</b>	<b>STDev</b>
Innovations make one risk money and fortunes and combine resources to start new products and services.	46	7	4	3	4.65	0.482
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people	41	12	5	2	4.44	0.524
New technologies assist in provision of efficient and effective services to ones customers	48	6	2	4	4.53	0.621

From the study findings in Table 4.7, majority of the respondents strongly agreed that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people as shown by the mean scores of 4.65, 4.53 and 4.44 respectively and the standard deviation of 0.482, 0621 and 0.524 respectively. This shows that most of respondents either agreed or strongly agreed to the statement.

It also shows the graduates used innovations to satisfy human needs in a more convenient and pleasant way and were able to grow their businesses. They were also able to discern new sources of materials to improve their entrepreneurship. This is in line with Kelemba (2010) who found out that every year graduate of Youth Polytechnic were able to start new technologies, new materials, new products and used their skills to improve their enterprises.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of the study findings, conclusion and recommendations drawn from the study findings. The chapter is based on the study objectives, which were to determine whether the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 have contributed to entrepreneurship development in Embu county; to find out whether what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu county; to establish whether innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county and whether types of business started by the graduates of Karurumo villages polytechnic have contributed to entrepreneur development in Embu county.

### **5.2 Summary of findings**

The study established that the aspects of the course undertaken by the graduates from Karurumo Youth Polytechnic was practical in their day to day life since majority of the graduates ended up being entrepreneurs. Further, the study established that the vocational skills acquired in the polytechnic helped graduates from Karurumo Youth Polytechnic become Entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills by the graduates of Karurumo village polytechnic promoted entrepreneurship development in the County.

The study also established that skill training certificate from youth polytechnic enhanced graduates chances of employment thus majority of the graduates from Karurumo youth polytechnic were employed. Further, majority of the graduates did not offer trainings, however, the study established that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu county.

The study also found out that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation and the businesses were related to the

course undertaken at the polytechnic while business enterprise stated assisted them to improve their entrepreneurship skills. The study further established that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets.

The study found out that majority of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic; the innovations stated were related to the course undertaken at the polytechnic and the innovation stated assisted them to improve their entrepreneurship skills. Further, the study established that the innovation stated assisted the graduates to enhance their role in providing economic services to the people of Embu county. Lastly, the study found out that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assisted in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

### **5.3 Conclusion**

The study concludes that there was gender disparity as majority of the graduates from Karurumo Youth Polytechnic were male who joined the institution at the age of 15-20 years and had spent 2-3 years in the institution. The study also concluded that majority of the graduates had enrolled in the youth polytechnic to acquire of skills and failure to score good grades in KCPE. The study also concludes that many youth polytechnics graduates find self-employment or start new business as a means of making a living. This creates growth and wealth.

The analysis reveals that graduates are making significant contributions in the labour market either as workers in business or in self-employment. In order to cater for the unemployed polytechnic graduates, the economy in the counties needs to be diversified while polytechnics should be upgraded and reconstituted in such a way that they are able to meet demands for market based knowledge and skill acquisition. The other issue that emerged in the analysis is that polytechnics are institutions whose goal is to ensure that trainees acquire

skills that assists' them in personal development as well as for the economic development of the counties and the country at large. Polytechnic education should aim at imparting creativity, innovation, independent thought and precision in polytechnic graduates.

The study concludes that the vocational skills acquired in the polytechnic helped graduates from Karurumo youth polytechnic become entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills was the main role of vocational skills acquired in the polytechnic which promoted entrepreneurship development. The study also concluded that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu County.

The study further conclude that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets. Lastly, the study concluded that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

#### **5.4 Recommendations of the study**

The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. The graduates are making significant contribution in the labour market either in business or self –employment. Youth polytechnics are grassroots institutions that serve the needs of poor youth who are hopeless and helpless. Acquisition of skills and failure to perform well in the examinations are the key factors that drive the youth to enroll in polytechnics. The above perception must be done away with and a deliberate effort to position the youth polytechnics as centers of excellence for all.

The study also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. A deliberate effort to diversify the choice of courses for girls in the youth polytechnics be put in place. Some of the courses that might improve the choice of courses for girls are: secretarial, catering and housekeeping. More effort should also be put in order to encourage girls to enroll in male trades such as mechanic, electrical installations and welding. Communities need to be sensitized to ensure they also take girls to the polytechnics.

The study further recommends the vocational skills offered in the YPs be made more practical and entrepreneurial oriented to prepare the trainees for the world of work both in formal or self-employment. This will reduce the challenges of poverty in the counties and rural areas. There is also need to encourage the formation of right frameworks, networks and facilities that could encourage polytechnic graduates to enter into self-employment. The relationship between policy consumers, facilitators and implementers need to be defined.

Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya.

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**APPENDICES**

**APPENDIX I : DATA COLLECTION QUESTIONNAIRE FOR YP GRADUATES**

This is a self- administered questionnaire to collect data for purely academic purposes. The study seeks to analyze the **“Role of Youth Polytechnics in Entrepreneurship Development in Embu County”** All information will be treated with strict confidence. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

**SECTION A: GENERAL INFORMATION**

1. Gender.....Male  Female

2 Highest Academic Qualifications

*KCPE*

*KCSE*

*Certificate*

*Diploma*

*Bachelors Degree*

*Masters*

3. Age at which you joined the Polytechnic

1. Under 13 years

2. between 13-15 years

3. 15-20 years

4. Over 20 years

5. Year you enrolled in the Polytechnic-----

6. Number of Years you spent in the Polytechnic.....

**SECTION B: ON WETHER, VOCATIONAL SKILLS ACQUIRED BY GRADUATES  
PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMEMT.**

1. What aspects of the course undertaken in the polytechnic are relevant to what you are doing in your day today life?.....  
.....

2. In what way has the vocational skills acquired in the polytechnic prepared you in what you are doing now?.....

3. Has the vocational skills acquired in YP assisted you in being an entrepreneur?

Yes

No

If Yes, Specify.....

If No, specify.....

4. Is the Vocational skills started above assisting to improve your entrepreneurship skills?

1. Yes

2. No

3. If Yes, Specify.....

4. If No, specify.....

5. Do you have suggestion on courses taken in the polytechnic that could help improving entrepreneurship skills in the county.....  
.....

6. What role does vocational skills acquired in YPs play in promotion of entrepreneurship development?

1. ....

2. ....

3. ....

**SECTION C: ON WHETHER WHAT GRADUATES FROM KARURUMO VILLAGE POLYTECHNIC DO AFTER GRADUATION CONTRIBUTE TO ENTERPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Are you employed or in self-employment or unemployed?

Yes  No

(ii) If employed, specify type of job.....

(iii) If Self –employed, specify type of business.....

(iv) If unemployed, specify for how long.....

2. In what way did the Youth Polytechnic skills training prepare you for employment or self-employment?

1. Self-employment aspect.....

2. Employment aspect.....

3. What factors did you consider when choosing where to seek employment or locate business?

1. Self-employment .....

2. Locate business.....

4. How long did you take to find employment or to start business?

1. Find employment .....

2. Self-employment .....

5. Did skills training certificate from youth polytechnic enhance your chances of employment?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

6. Do you offer any training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

7. Do you use training skills learnt at the polytechnic in your training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

8. What role as your training played in entrepreneurship development in Embu County?

1. Started new business

2. Created new product in the market

3. Value additions to products

4. New technology

5. Opening new markets

6. Providing new services

7. Providing Training services

Other(specify).....

**SECTION D:ON WHETHER TYPES OF BUSINESS ENTERPRISESSTARTED BY GRADUATES FROM KARURUMO POLYTECHNIC PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Have you started any business enterprise after graduation?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

2. Is the business related to what you did at the polytechnic?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....



3. Has your business enterprise assisted in improving your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, specify.....
- 4. If No, specify.....

4. What role does your business play in improving economic development in the County?

- 1. Training others
- 2. Doing things better, faster and at less cost
- 3. Opening up new markets
- 4. Use of newly found material
- 5. Brought new technologies
- 6. Other (Specify).....

**SECTION E: ON WETHERINNOVATIONS STARTEDBY GRADUATES PLAY A ROLE IN ENTREPRENEURSHIPDEVELOPMENT?**

1. What innovations have you started since leaving the polytechnic?

- 1. Started new product in the market
- 2. Started New markets
- 3. Started New technologies
- 4. Other (specify).....

(ii) If, Yes above, specify-----

2. Is the innovation started above related to the course you did in the polytechnic?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

3. Is the innovation started above assisting to improve your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

4. Does the innovation started above enhance your role in providing economic services to people?

- 1. Very True
- 2. True
- 1. False
- 2. Very false

5. What role do the graduates play in promotion of innovation?

- 1. ....
- 2. ....
- 3. ....
- 4. ....

6. State your level of agreement to the following statement as regards whether innovations started by graduates of the polytechnics play a role in entrepreneurship development on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree.

Statement	SA	A	N	D	SD
Innovations make one risk money and fortunes and combine resources to start new products and services.					
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people					
New technologies assist in provision of efficient and effective services to ones customers					

7. What would be your advice to Youth Polytechnic trainees in enhancing entrepreneurship development in the County?

- 1.....
- 2.....
- 3.....

**APPENDIX II : NUMBER OF TRAINEES AT KARURUMO YOUTH POLYTECHNIC FROM 2003 TO 2012**

Cou	District	YP	Name of Course	Youth Polytechnic Graduates since 2003																														
				2003			2014			2005			2006			2007			2008			2009			2010			2011			2012			GT
Em				M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
Cou	Embu	Karurumo	MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10	
			Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11	
			Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10	
			Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15	
			Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17	
<b>Grand Total</b>						<b>20</b>			<b>26</b>			<b>19</b>			<b>25</b>			<b>31</b>			<b>36</b>			<b>18</b>			<b>34</b>			<b>53</b>			<b>63</b>	<b>325</b>



**UNIVERSITY OF NAIROBI**  
**DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK**

**THE ROLE OF VILLAGE POLYTECHNICS IN ENTREPRENEURSHIP  
DEVELOPMENT: A TRACER STUDY OF GRADUATES OF KARURUMO  
VILLAGE POLYTECHNIC, EMBUCOUNTY**

**BY**  
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**C50/67801/2011**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS  
IN SOCIOLOGY (ENTREPRENEURSHIP DEVELOPMENT) OF THE  
UNIVERSITY OF NAIROBI**

**NOVEMBER 2014**

## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signed .....

Date.....

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**C50/67801/2011**

This research project has been submitted for examination with my approval as a university supervisor.

Signed .....

Date.....

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## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to individuals that assisted me in one way or another in the course of writing this project.

Special thanks go to my supervisors, Mr. Geoffrey Njeru and Professor Edward Mburugu, who tirelessly guided me and provided professional advice as well as encouragement during the study period.

I am greatly indebted to Madam Emily Nkoroi, the Embu county director of youth training who providing the relevant information, documents and generally facilitated the study.

Further gratitude goes to Mr. Graham Kangethe of curriculum, instruction and examinations division, of the department of youth training in the ministry of youth affairs and sports at the headquarters for providing me with relevant information on youth polytechnics nationally.

I cannot forget the Karurumo youth polytechnic manager and the instructors for their cooperation in giving me the preliminary information and the former trainees who will targets in the study.

Finally, I wish to thank everybody I may not have mentioned here but made this work possible.

Thank you all.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>KCSE</b>	-	Kenya Certificate of Secondary Education
<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>KIE</b>	-	Kenya Institute of Education
<b>MDGs</b>	-	Millennium Development Goals
<b>MOYAS</b>	-	Ministry of Youth Affairs and Sports
<b>NVCET</b>	-	National Vocational Certificate in Education and Training
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>SYPT</b>	-	Subsidised Youth Polytechnic Tuition
<b>TVET</b>	-	Technical and Vocational Education and Training
<b>TIQET</b>	-	Total Integrated Quality Education and Training
<b>UNDP</b>	-	United Nations Development Program
<b>UNESCO</b>	-	United Nations Education and Scientific and Cultural Organization
<b>YPs</b>	-	Youth Polytechnics

## **ABSTRACT**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and analyze their contribution to entrepreneurship development in Kenya. The study used descriptive survey design. The target population was 325 former graduates from Karurumo youth polytechnic who graduated between 2003 and 2012 with a sample size of 20% of the target population leading to 65 respondents. The data collected was analyzed using correlation matrix and multi regression analysis to establish the relationships between independent and dependent variable. The results revealed that vocational skills acquired, business enterprises started, innovations started and what graduates do after graduation separately contributed significantly to entrepreneurship development. The analysis further revealed that polytechnic graduates are making significant contributions in the labour market either as workers in business or in self-employment. The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. It also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The census report also document that over 62% of Kenyans are not in any form of employment and that only 25% of the secondary and university leavers are absorbed in regular employment. It is therefore important to boost vocational, technical, and entrepreneurial skills in youth polytechnic to cover the shortfall. Kenya needs a vibrant youth polytechnic training programs that can support the enhancement of the productivity of small and medium enterprises sector that currently account for 76% of the total employment but only contributes 18% of the natural gross domestic product.

Youth polytechnic education provides youth with technical and vocational skills for jobs in industry. The village polytechnics are an adoption of tailor made strategy to suit the village and rural labour markets (Kinyanjui,2007). The sectors of the rural labour market namely construction, furniture, garments and currently electrification is targeted. It is hoped that after graduating, the youth polytechnic graduates would be gainfully employed and contribute to the entrepreneur development in Kenya.

The UNDP,2012 in report entitled “ Skills gap analysis for graduates of youth polytechnic, vocational training centers and out- of- school youth” revealed that most of the graduates of the youth polytechnics lack competency in modern technology and have no practical skills required to exploit untapped opportunities in our country. They also have weakness in work attitude, communication, customer care and social skills and hence affecting their contribution to entrepreneurship development and their employability in the job market after graduating from the youth polytechnics. It is therefore against this background that the research proposes to investigate the role of youth polytechnic graduates to entrepreneurship development in Kenya through a tracer study of youth polytechnic graduates from Karurumo village polytechnic in Embu county in the last 10 years from 2003 to 2012 with a view of

coming up with interventions that will ensure the right kind and quality of skills training is given to them to enhance their contribution to entrepreneurship development.

## **1.2 Statement of the Problem**

Every year, graduates from Karurumo Village Polytechnic enter the labour market equipped with either grade II or grade III certificate. The whereabouts of these graduates was not visible in surveys of micro and small enterprises in Kenya. In a micro and small enterprise survey carried out in the Ziwani enterprise cluster in Nairobi, there was only one motor vehicle repair entrepreneur who had acquired skills in a village polytechnic (Kinyanjui, 2007). It was also reported that technical training, which is an important aspect of entrepreneurship development, was lacking in baseline surveys of micro and small enterprises (CBS, 1999), yet every year, trained youth graduate from village polytechnics enter the labor market. However, Wanyonyi (2009), Kelemba (2010) and UNDP (2012) reported that graduates from youth polytechnics had difficulties in using modern equipment and lacked the necessary and required skills that employment demands of them. They lacked work attitude, communication, customer care and social skills that are important for them to venture into business enterprises and use innovations that enable them to effectively contribute to entrepreneurship development in the country. Kinyanjui (2007) in a tracer and policy study of youth polytechnics graduates from Kwale, Kitui, Makueni and Taita Taveta also recommended a study on factors influencing technical training to be carried out in other areas to guide on youth polytechnics training policy . A study by Ministry of Youth Affairs and Sports (2012) on national evaluation of NVCET curriculum found out that Embu district had the highest percentage 52% of trainees who were incompetent and unable to fix a prescribed job process that was expected of them during the evaluation period. The purpose of this project was therefore to investigate the contribution of youth polytechnic graduates in entrepreneurship development through a tracer study of youth polytechnic graduates from Karurumo village youth polytechnic in Embu Country. The study specifically looked at whether what youth polytechnic graduates do after graduation, types of business enterprises started by graduates, innovations started by the graduates and vocational skills acquired by the graduates of village polytechnic contributed to entrepreneurship development in Embu county and Kenya as whole.



### **1.3. Overall Research Question**

What role do graduates from village polytechnics play in enhancing entrepreneurship development in the country?

#### **1.3.1 Specific Research Questions**

1. Does vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County?
2. Does what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu County?
3. Do types of businesses enterprises started by graduates of Karurumo village polytechnic started in the last ten years contribute to entrepreneurship development in Embu County?
4. Do innovations started by graduates of Karurumo village polytechnic in the last ten years contribute to entrepreneurship development?

#### **1.3.2 Overall Objective of the Study**

The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and investigate their contribution to entrepreneurship development in Kenya.

#### **1.3.3 Specific Objectives**

The following specific objectives were addressed:-

1. To determine how the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 to 2012 contributed to entrepreneurship development in Embu county.
2. To find out whether what graduates of Karurumo village polytechnic do after graduation contributed to entrepreneurship development in Embu county
3. To determine how types of business started by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County.
4. To establish how innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county

#### **1.4 Significance of the Study**

The study sought to identify and document the role of village polytechnic graduates in enhancing entrepreneurship development in Embu County. The data generated would assist in the provision of appropriate entrepreneurship development services that can address the concerns of village youth polytechnic graduates before entry into the labor market. The study would help to increase the knowledge of the relevant stakeholders and the community about the fate of village polytechnics trainees after graduating and their role in entrepreneurship development. It would also add to the existing knowledge of the impact of youth Polytechnic education on entrepreneurship development.

#### **1.5 Scope and Limitations of the Study**

This study focused on graduates of Karurumo Village Polytechnic, Embu County. The reason Karurumo Village Polytechnic was chosen was because the researcher was from that area and so it offered an ideal setting that could be replicated with lesser complexities in other Karurumo Village Polytechnic in Kenya. This is a case study focusing only on the role of village polytechnics in entrepreneurship development: a tracer study of graduate's of Karurumo Village Polytechnic, Embu County. The study only focused in one village polytechnic of which may not be the same aspect in other village polytechnics, which was not a good representation of all types of village polytechnic. The questionnaire's data was based on the graduate's response, which could be untrue. In order to ensure the response was real and met the expectation of the result, respondent were given more time to read and understand the information that the study required.

Finally, the graduates sampled were fewer hence affecting the sampling size. In order to ensure sampled size was met, research assistance visited the respondents frequently till they met at least 80% of the sample size which was adequate for analysis.

## **1.6 Assumption of the Study**

The study assumed that all the sampled respondents from Karurumo village polytechnic were traceable and able to express themselves freely without hiding information. The other assumption is that this project will assist the policy makers in planning of technical and vocational educational and training of the youth in the country.

## **1.7 Definition of Significant Terms**

<b>Entrepreneurship:</b>	Is the process of starting a business or other organization. The entrepreneur develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure.
<b>Entrepreneurship Development</b>	This is success in producing desired or successful enterprises by graduates
<b>Innovations:</b>	This referred to the introduction of new products or services, use of new methods of production, opening up new markets or use of new products.
<b>Self Employed:</b>	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.
<b>Tracer Study:</b>	Is an approach which widely being used in most organization especially in the educational institutions to track and to keep record of their students once they have graduated from the institution. It is the follow up of graduates of higher education or institutes.

**Temporary Employment:**

Is a situation where the employee is expected to leave the employer within a certain period of time.

**Unemployed:**

Is a situation where someone of working age is not able to get a job but would like to be in full time employment.

**Vocational Skills:**

Are those skills which allow a person to master a particular subject or procedure that is applicable to a career.

**Youth Polytechnic:**

This refers to low cost based post-primary training institutions that prepare trainees on vocation and technical training.

## **1.8 Organization of the Study**

This study is organized in five chapters. Chapter one deals with background on the role of village polytechnics in entrepreneurial development in Kenya. It explores four key components that are involved in entrepreneurship development in youth polytechnics (Vocational skills acquired by the graduates, work done by the graduates after graduation, Business enterprises started by the graduates and innovations started by the graduates) can be used to improve the role the polytechnic play in entrepreneurship development in Country. Chapter two discusses the overview and development of youth polytechnics in Kenya. It looks at how the youth polytechnics can be used to equip young with relevant skills and attitudes that would lead the young people so trained into gainful self-employment in order for them to contribute in the entrepreneurship development of their communities by building up the economic strength of those communities. Chapter three deals with research methodology and expounds on the descriptive survey research design used and research instruments used questionnaires to collect both qualitative and quantitative data from the former Karurumo Youth Polytechnics graduates.

Chapter four deals with data analysis while Chapter five deals with recommendations, It looks at how graduates of Karurumo village polytechnic are making significant contribution in the labour market as workers in business or self-employment. It also looks at how vocational skills acquired have helped the graduates become entrepreneurs hence promoting entrepreneurship development in the country. It further examines how innovations make one risk money and fortunes and combine resources to start new products and services and also establish small and micro enterprises and create employment opportunities for other people.

## **CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

The purpose of the project was to investigate the role of village polytechnics in entrepreneurship development in Kenya. The present chapter reviews related literature and the theoretical and empirical literature on the subject investigated. It details overview of the Kenya education system after independence in 1963 with regard to vocational and technical education and training systems, the establishment of youth polytechnics in Kenya, theoretical literature on vocational training and entrepreneurship development in Kenya, conceptual framework of the study and empirical literature of previous studies and findings about youth polytechnics in Kenya.

### **2.2 Overview of Kenya Vocational and Technical Education Systems since Independence**

Kenya sought ways to make changes in the inherited educational system on achieving independence. The aim was to make educational system supportive and responsive to the newly developed national goals (Merrifield 1986). In the years following independence, two major commissions (Ominde Commission, 1964 and the Gacathi Commission in 1976) were appointed to review the education system (Republic of Kenya, 1964; Republic of Kenya, 1976) and to plan for its future. This resulted to increased schooling. The provision of increased primary education was achieved as a result of Ominde commission. The 1976 commission addressed unemployment among product of formal education at all levels of education. Manpower issues were also addressed and a programme of action was formulated to further develop Vocational and technical education and training.

Attempts to alleviate the problem of unemployment among the youth, particularly the primary school graduates were directed towards the establishment of non-formal vocational education and training institutions such as youth polytechnics (Sifuna 1984). These programs were to absorb youth polytechnics graduates for a few years and give them marketable skills (Hoppers, 1985). Vocational training was also a way of developing attitudes for self reliance as well as imparting workable skills (Bacchus, 1988, Simiyu, 1990).

UNESCO (1984) defined vocational and technical education as: “A comprehensive term refers to education processes where it involves, in addition to general education, the study of technologies and related sciences and acquisitions of practical skills and knowledge relating to occupations in various economic and social life”. The report of the presidential working party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988) also stipulated the need to expand and streamline vocational and technical training institutions and their training to cater for training demands of the 8-4-4 system of education, provide greater opportunities for training primary and secondary school graduates and provide more trained manpower for the economy. The courses offered in youth polytechnics included masonry, carpentry, metal work, tailoring, dressmaking, and motor mechanics among others.

### **2.3 The Establishment of Youth Polytechnics in Kenya**

A youth polytechnic is a low cost community based post primary training institutions (Yambo,1986). Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics were to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). Youth polytechnics were established in Kenya in 1966 after a conference held at Kericho on Education employment and rural development. The conference observed that only a small portion of primary school graduates received places in secondary schools (Sheffield 1967) and youth polytechnics were seen as part of alleviating the primary school graduate unemployment problem. The youth polytechnics were closely related to the local needs and absorption capacities of the rural villages (Thompson, 1981). Between 1966 and 1977, more than 53 youth polytechnics were established and the demand for them was expanding. Currently, there are over 700 youth polytechnics with enrolment of over 100,000 trainees (Republic of Kenya, 2012). The structure of youth polytechnic program at the national level includes a director of youth

training with four major divisions (Curriculum, Institutions and Examinations, Research Division, quality Assurance and Standards and Infrastructure Division). At the County level, there is county director of youth training and the district youth training officer at the district level. The principal (project manager) is the executive officer at the institutional level and serves as the link between staff, trainees, the board of governors and the district youth training Officer. A number of commission reports, sessional papers and studies have made various recommendations on vocation and technical education in Kenya. The education sector reforms in Kenya dates back to the independence period, with commissions, committees, working parties and task forces generating reports, with recommendations, some of which have been implemented in part while others have never been implemented completely. In 1964, there was the Ominde Commission; In 1976, there was the National Committee on Educational Objectives and Policies led by Gachathi; In 1981 there was the Presidential Working Party on the Second University in Kenya led by Mackay; In 1988 there was the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond led by Kamunge; In 1999, there was the Commission of Inquiry into the Education System of Kenya led by Koech. To date, no government documentation is available to the public with chronological details on what recommendations from these reports were adopted and implemented.

The Ominde Commission outlined what education was and had to be during and after independence. The blueprint laid the foundation of post-independence education. It was mandated to survey existing educational resources and to advise the government on the formation and implementation of the required national policies for education (Republic of Kenya, 1964; It is important to note that despite its noble objectives the Ominde Commission recommendations were not implemented in full, a blunder that has had significant effects on education .The Gacathi Report reiterated objectives of the Ominde Commission and sought to enhance the use of the Kenyan educational goals to shape its national character and development. It recommended development of vocational, technical, and practical education. In 1979, the government realized that education was not doing much to achieve its stated objectives. Education curriculum was viewed as being too academic, narrow and examination centered (Republic of Kenya, 1979).



Rate of unemployment grew as school leavers went to urban centers to seek for white-collar jobs. In the 1980s the government changed its policy on education. This was because of the difficulties, which were faced by graduates of its education system at both primary and secondary levels. Most graduates who were matriculating from these levels could not be absorbed into the shrinking labor market. This made the government to reconsider changing its education system and to set up a Presidential Working Party in 1981 (Republic of Kenya, 1981). The report sought to investigate ways in which education could make graduates from these levels self-sufficient, productive in agriculture, industries, and commerce. Education system was expected to ensure that students acquired technical, scientific, and practical knowledge vital for self and salaried employment, lifelong skills, and nation building. The commission was also mandated to investigate the feasibility of establishing a second university that was development centered. It advocated for a practical curriculum that would offer a wide range of employment opportunities and equitable distribution of educational resources. It gave rise to the current education system, the 8::4:4. System.

Kamunge Report of (1988) noted that the youth polytechnics (YPs) were provided with basic facilities and equipments to enable them give quality training at artisan level. It recommended that vocational education and training instructors be trained in pedagogy and their terms and condition of service be improved. The youth polytechnics management be strengthened and local authorities be given full support. It further stressed those facilities of youth polytechnics to be improved. The country's training institutions were not only inadequate but also lacked the essential facilities and technology to prepare students for the challenging labour market.

The Government of Kenya appointed the Commission of Inquiry into the Education system of Kenya (Koech Commission) in 1999. The commission made recommendations on ways that could be used to provide quality education (Republic of Kenya, 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQET) to reflect the vision of Kenyan education. TIQET, as a concept embraced the values and substance that was to characterize the education system. It was to be total because it was expected to be inclusive, accommodative, and life-long. It focused on

quality of delivery and outcome of the education and training process. The report reiterated that, the proposed education system was to become a ticket to a better life, and future for the individual, community and the nation. As a departure from the 8-4-4 system of education, TIQET had some basic innovations, namely: the expansion of access to basic education; elimination of disparities in education based on geographical, social and gender factors; introduction of manageable curriculum content; introduction of modular learning approach and credit accumulation. Specifically, the report called for legal educational reforms, for instance: reviewing of the education act, political will and commitment by making public policy pronouncements on the required changes, enhancing of efficiency and effectiveness in educational administration and management, ensuring there is prudent governance and management of resources, building and strengthening genuine partnership and collaboration among educational stakeholders. In addition, the report also called for cutting-edge reforms including totally integrated quality education training, abolition of the 8-4-4 and replacement with a system not very distinct from the pre-8-4-4 system of 7-4-2-3, and universities maintenance of 1:10 ratio of graduate/undergraduate student; (Republic of Kenya, 1999). The reported also pointed out that one of the hindrances to the development of a technological culture was found in some cultural beliefs and practices among a number of Kenyan communities towards technically related work. Many of them design vocational education for other people's children instead of designing a universal system that is suited for all children who decide to join that career including their own children. In his recommendations, Koech Commission strongly pointed out that vocational training centers be encouraged to offer courses according to the needs of their localities such as short tailoring courses for upgrading courses as well as Jua – kali operators and health workers for the surrounding community. Despite its candid professional research, assessments and honesty on the challenges that were facing Kenyan education system, Koech Report was never implemented by the government. It was perceived as being expensive and complex.

Kenya Vision 2030 is the new long-term development blueprint for the country. It is motivated by a collective aspiration for a better society by the year 2030. The aim of Kenya Vision 2030 is to create “a globally competitive and prosperous country with a high quality of life by 2030”. It aims to transform Kenya into “a newly-industrializing, middle-income

country providing a high quality of life to all its citizens in a clean and secure environment. Simultaneously, the Vision aspires to meet the Millennium Development Goals for Kenyans by 2015. It proposes intensified application of science, technology, and innovation to raise productivity and efficiency levels across the three pillars. It recognizes the critical role played by research and development in accelerating economic development in all the newly industrializing countries of the world. More resources will be devoted to scientific research, technical capabilities of the workforce, and in raising the quality of teaching mathematics, science and technology in schools, polytechnics and universities.

#### **2.4 Vocational Skills acquired by YP Graduates and Entrepreneurship Development**

Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics are to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). The vocational education and training in polytechnics include masonry, tailoring, carpentry, driving, dressmaking, metalwork and many others. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing. However, Ndua suggested that research was required on the dropout rate of the trainees. Every year a number of these graduates get out to the field and therefore the project investigated whether this graduate are able to use the skills acquired in contributing to entrepreneurship development in Embu county.

#### **2.5 Work Done by YP Graduates after graduation and Entrepreneurship Development**

On what graduates of youth polytechnics do after graduation ( Nzioka 1986, Kinyanjui 2007, Yambo (1986) found that graduates who had been trained in carpentry and masonry

where somewhat more rural oriented than those trained in welding and plumbing. Yambo contended that many courses had economic value and predicted that new courses be eventually introduced in Youth Polytechnics. For a long time in Kenya, graduation from any level of education was associated with employment either in the private or public sector. The quality of an institution was based on how many of its graduates were employed after graduation. The reality is now different. The labour market has become very competitive and open joblessness is being experienced among graduates in all education levels. According to Kinyanjui, 2007, the youth polytechnic employees enter the labour market as employees (30%), Self-employment (42.2%) and only 22.2% of the graduates were unemployed. The key jobs for YP graduates were casual, contracts, carpentry, mechanics, welding and dress making among others. Polytechnic graduates were also employed in polytechnics as instructors, machine operators and electrical repairs. Some few graduates were employed in jobs such as hotel attendants, vegetable vending, and hairdressing. The studies revealed that polytechnic education is a holding ground for youth in village as they wait for their dream careers. The current project investigated whether these graduates played a role in entrepreneurship development in the County.

## **2.6 Creation of New Business Enterprises by YP Graduates**

The business perspective views entrepreneurship as the process of creating new business organization with intention of making profit. The entrepreneurs are organizers and coordinators of the major factors of production such as capital, labour and land. They properly mix these factors of production to start business enterprises. Entrepreneurs have initiative and self-confidence in accumulating and mobilizing capital resources for new business. Many youth polytechnics graduates find self-employment or starting new business as a means of making profitable career. This creates growth and wealth. Kinyanjui (2007) in a Trace and policy study of youth polytechnic graduates from Kwale, Kitui, Makueni and Taita Taveta found out that youth polytechnic staffing is one of the policy issues that need urgent attention. There was a clear need for policy to address staffing especially for instructors in the youth polytechnics. It also found out that there are no technicians to assist the instructions in handling the practicals. The study recommended polytechnic staffing will require restoring confidence and enhanced motivation and the beginning point being the

development of scheme of service for the youth polytechnic instructors. The study also recommended that equipments in youth polytechnic are inadequate and old.

UNDP (2012) in a study titled, Skills gap analysis for graduates of youth polytechnic, vocational training Centers and out-of-school youth found out that existing infrastructure and equipment in public youth polytechnics are dilapidated, inadequate and require renovation and modernizing if they are to produce high quality graduates. Most of the instructors are not competent enough to deliver quality skills training to the youth polytechnic trainees. Formalized partnership particularly between youth polytechnics and the industry was found to be lacking thereby making it difficult to align the youth polytechnic training with the demands of the industry and therefore reducing the contribution of Youth Polytechnic graduates in entrepreneurship development. The project investigated whether graduates from the youth polytechnics are involved in starting business enterprises and stimulating investment interests. Were the graduates able to generate income, provide training ground for other people, convene and utilizes local resources and start new business?

## **2.7 Innovations Started by YP Graduates and Entrepreneurship Development**

Schumpeter (1934) said entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before. Apart from being innovators, entrepreneurs are risk-takers and take advantage of business opportunities and transform these into products. This spirit has greatly contributed to the modernization of economics and new technologies. The project investigated whether the polytechnic graduates are able to start new products and create employment. Were the graduates able to use their innovations to satisfy human needs in a more convenient and pleasant way. Application of new technology is necessary for the future growth of business. A technical entrepreneur is as good as a craftsman. Because of the craftsmanship they develop quality goods. They also develop alternative marketing and distribution strategies in order to promote business. Entrepreneurs are creative. They can create customers and buyers. Due to their innovative nature they persist on discerning new sources of materials to improve their enterprises and transform these into profits.

Entrepreneurs like starting something new or different. Kelemba (2010) in a survey of initiatives in current use of integrating of education for sustainable development in centre's of excellence carried out in six TVET institutions in Kenya found out that there was an approach to inspire trainees to think about what they can achieve through their own lives and future careers, however, the major barriers to enacting sustainable development include overcrowding in some part of the curriculum, the perceived relevance by the staff, limited internal accreditation including institutional commitment and validation systems, financial obligation and confusion over what and how to teach sustainable development in youth polytechnics. Every year there are new technologies, new markets, and new products and therefore the project investigated whether the youth polytechnics graduates are able to utilize the opportunities and develop their entrepreneurship skills.

## **2.8. Theoretical Framework**

The theoretical framework on technical training and entrepreneurship development advanced in the project is-

### **2.8.1 The Goal Theory by Latham and Lockie**

According to Goal theory as developed by Latham and Lockie, (1979) there are four main mechanisms that connect goals to training outcomes. They direct attention to priorities , stimulate efforts, challenge people to bring their knowledge and skills to bear and increase their chances of success and the more challenging the goal, the more people will draw on their full repertoire of skills. The theory emphasizes on setting and agreeing on objectives against which performance is measured and managed. It also emphasizes on feedback and review aspects of performance management (Armstrong, 2010).It is against this framework that the project investigated whether graduates of youth polytechnics used the theory to succeed in what they do after graduating from the youth polytechnics. They combined their skills training and career progression by engaging in business, introducing new products, new methods of doing business, new marketing strategies and other income generating activities to enable them to succeed in life and develop their entrepreneurship skills.

### **2.8.2 Constructivism Theory of Training**

The theory advocates that we construct our own understanding of the world we live in. Each of us generates our own rules and mental models, which we use to make sense of our experiences. It advocates taking learning as a process of adjusting mental models to accommodate new experiences. Constructivists believe that learners construct their own reality or at least interpret it based upon their perception of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures, and beliefs that are used to interpret objects and events. What someone knows is grounded in perception of the physical and social experiences that are comprehended by the mind (Jonassen, 1991).

Constructivists call for elimination of standardized curriculum and instead promote use of curriculum that is customized to the student's prior knowledge and market based knowledge. It also emphasizes on hands on problem solving. They say education should focus on making connections between facts and fostering new understandings in students. Instructors should tailor their teaching strategies to student's response and encourage students to analyze, interpret, and predict information and use the knowledge to develop various skills that they can use in future after leaving school. It is against this framework that the project investigated whether graduates of youth polytechnics are using the theory to succeed in what they do after graduating from the youth polytechnics and whether their skills are market oriented and useful after graduation.

### **2.8.3 McClelland's Need for Achievement Theory**

McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence. Those people who have high need for achievement are more likely to succeed as entrepreneurs. Need for achievement refer to the desire to accomplish something with one's effort? It is the urge to excel or the will to do well. Need for power means the desire to dominate and influence others by controlling their actions and use of physical objects. Need for affiliation implies the desire to establish and maintain friendly and warm relation with others. The project investigated whether youth

polytechnics graduates are able to use this framework to ensure that they develop their entrepreneurship skills.

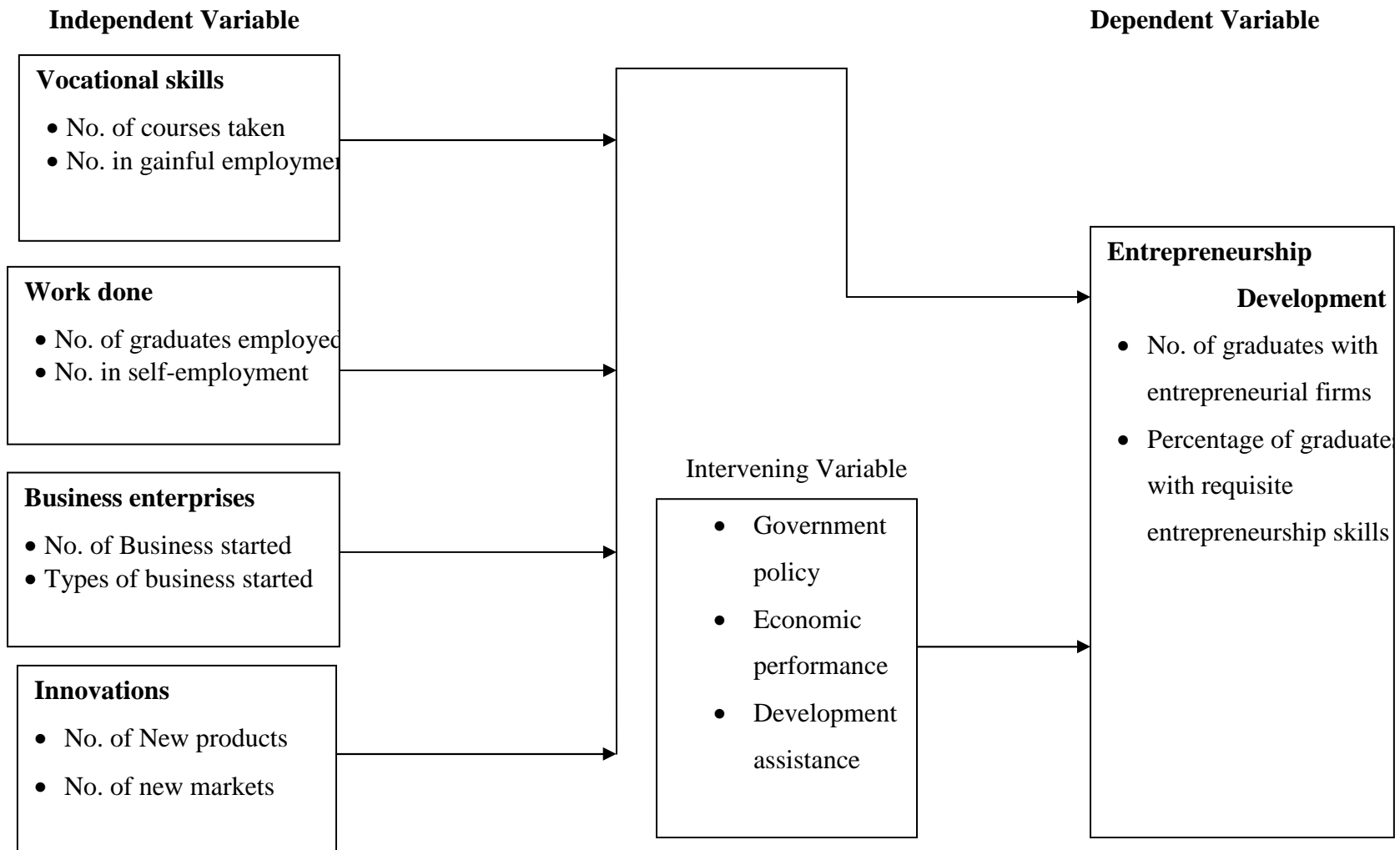
## **2.9 Conceptual Framework of the Study**

A conceptual framework helps simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda & Mugenda, 2003). The conceptual framework of the study was based on four independent variables namely; vocational skills acquired by the graduates, work done by the graduates, new business started by graduates and innovations stated by graduates.

An entrepreneur and his/her enterprise have been described as the engine of development. Scholars such as Schumpeter and Cantillon, see entrepreneur as the main catalyst through which any country achieves development. It is in this light that entrepreneurship is seen as the ability to perceive of a business opportunity and exploit it for the purposes of generating a profit, which in turn is used as capital for further investment or as a livelihood means. Entrepreneurship brings innovation through such activities as creation of new products, acquiring of new skills, investing in new technologies, acquiring new sources of raw materials, new production methods, creation of new markets and even new managerial innovations for developments. Entrepreneurship plays a major role in economic development of any economy by promoting capital formation by mobilizing the idle savings of the public, encourages effective resources mobilization of capital and skill that might otherwise remain unutilized and idle. Entrepreneurism an innovator who introduces new combinations of means of production. Innovation involves making use of new things or doing of things that are already being done in a new way. Entrepreneurs are risk takers and insecurity bearers. If the venture succeeds, the entrepreneur profits, if it does not, loses occur. The entrepreneurs must make use of his/her initiatives to reduce risks or uncertainties. They also make business decision, once the entrepreneur is convinced that a particular line of production offers large prospects, he/she has to formulate action plan regarding the product and the quality of products to be produced. He /she has to find the best possible method of production which ensures he/she succeeds. Entrepreneurs arrange finances, purchases raw materials, supervises, sells and markets and assures the role of manager in the enterprise.



In line with this definition and function of entrepreneurship taken above, the project used the below conceptual framework to explain the role of village polytechnics graduates in entrepreneurship development in Kenya. The project looked at whether what graduates of youth polytechnics do after graduation , business enterprises started by the YP graduates, innovations started by the youth polytechnic graduates and vocational skills acquired by the graduates contributes to entrepreneurship development in Embu county and Kenya as a whole.



**Figure 2.1 Conceptual framework**

## 2.10 Knowledge Gaps

The gaps identified in the reviewed literature are as shown on table 2.1

**Table 2.1 Knowledge Gaps**

<b>Variable</b>	<b>Author and Year</b>	<b>Findings</b>	<b>Knowledge gap</b>
Vocational skills and entrepreneurial development by the graduates	Kelemba, (2012) Ndua,(1988) Moyas, (2012) Sifuna (1975) Waithaka, (1989)	Found out that their existed a strong relationship between vocational skills and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	There is need to explore this findings in the context of Kenyan youth polytechnics so as to clearly examine the exact relationship
Work done and entrepreneurial development by the graduates	Moyas (2012) Nzioka (1986) Kinyanjui (2007)	These studies found out that their existed a strong relationship between work done and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	These studies do not indicate clear methodologies that were used to reach this conclusion. On this basis, my study shall designed a clear methodology to verify this influence
Businesses and entrepreneurship development by the graduates	UNDP(2012) Kinyanjui (2007)	There seems to exist a strong relationship between business and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail.
Innovations and entrepreneurial development by the graduates	Schumpeter (2004) Kelemba (2010)	There seems to exist a strong relationship between innovations and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail

## **2.11 Summary of Literature Review**

This chapter highlights the review of the previous studies on youth polytechnics in Kenya and the three theories namely, the Goal theory, the Constructivism theory and McClelland need for achievement theory that have been advanced about training and entrepreneurship development. It further reviews the conceptual framework with the four independent variables under study (What graduates of youth polytechnic do after graduation, types of business enterprises started, vocational skills acquired and innovations started by graduates of the polytechnic has the dependent variables).

This is due to the fact that various development plans and policies associate human development with economic development (Kamunge, 1998). It has been argued that there are many countries with trained and educated populations yet they lag behind in development (Prichet, 1996). Those of contrary opinion such as Ngware (2002), Alam (2007), see investments in education and training as being beneficial. They argue that education and training improves one's creativity, enhances individual's participation in economic development, and enhances one's competitiveness in the job market as well as future earnings. Therefore there is need for further research to ascertain the impact of investment in training on enhancing individual's competitiveness in labour market especially for the youth polytechnics graduates.

The review showed research studies that has been done on the role of vocational and technical skills on entrepreneurship development However, no such studies has been done in Embu County particularly targeting the Karurumo youth polytechnic graduates. This study hopes to fill in the gap.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter explained the research design, target population, sampling techniques, research instruments, data collection and analysis procedures and the operation definition of variables used.

### **3.2 Research Design**

The research design used in this study was descriptive survey design. The project aimed at investigating role of village polytechnic graduates to entrepreneurship development in respondent's opinion in relation to their role in entrepreneurship development in the country. This enabled the researcher to bring out the elements of the findings in a more clear and comprehensive manner. According to Creswell (2002) descriptive survey design is used when data is collected to describe person, organization, settings, and phenomena. A survey reports the way things which include behavior, attitude, values and characteristics are formed (Mugenda and Mugenda, 2003). The above design was therefore used to investigate the role of village polytechnic graduates to entrepreneurship development in Embu County. A self-administered questionnaire was used to collect the required quantitative and qualitative data from former trainees of Karurumo Youth Polytechnic. The Questionnaire comprised of two sections. The first part was designed to determine the demographic characteristics of the respondents, while the second part consisted of questions focusing on the four independent variables to be studied (Work done by graduates after graduation, business enterprises started by graduates, new innovations started by the YP graduates and Vocational skills acquired by YP graduates) had a role to play in entrepreneurship development in Embu county and Kenya as whole.

The questionnaire was designed in line with the objective of the study. To enhance quality of data obtained, Likert types of questions were included whereby respondents indicated the extent to which the variables were practiced in a five part Likert scale (Gamer, 2010). Structured and un-structured questions were also used to facilitate analysis and encourage the responses to give an in-depth response about the variables

without feeling held back in revealing any information. Secondary data was collected from the ministry of youth affairs and sports at the headquarters and from the county director of youth training in the county. This included annual reports and other related returns.

### 3.3 Target Population

The target population according to Cox (2010) is the entire set of units for which the survey data are used to make references. The target population constitutes the entire or totality of the items under study (Kothari, 2004). The target population for this study was 325 former graduates from Karurumo village polytechnic who graduated between 2003 and 2012 (10 years).

**Table 3.1 Target Population**

	<b>population</b>
YP Graduates from 2003 to 2012	325
<b>Total</b>	<b>325</b>

### 3.4 Sampling Procedure and Sample Size

Mugenda and Mugenda (2003) defined sampling as the selection of a portion of a population such that the selected portion represents the population adequately. Mugenda and Mugenda (2003) suggest that for descriptive studies 10% or above of the accessible population is enough for the study. This study targeted 20% of the target population of 325 making a total sample size of  $(0.20 \times 325) = 65$  as indicated in the below table:-

**Table 3.2 Sample Size**

	<b>Sample size</b>
YP Graduates (20% of 325)	65
<b>Total</b>	<b>65</b>

The former graduates of Karurumo youth polytechnic were traced in the whole county by the four research assistants under my guidance as the principal researcher. The research assistants were briefed on the research problem and what was expected from the questionnaire. The research assistants were encouraged to work as a team where necessary. In order to identify the respondents, the researchers were advised to visit the YP manager, instructors and chiefs to help them in tracing the graduates.

### **3.5 Data Collection Methods and Instruments**

The study used questionnaires in collecting data from graduates. The questionnaire combined both open-ended and close-ended questions which were administered to the graduates. Questionnaires were considered ideal for collecting quick data from the graduates.

The data collection procedure entailed the researcher obtaining an introduction letter from the University. The researcher then sampled graduates to inform them about the study and made arrangements for issuing questionnaires. The respondents were given instructions and assured of confidentiality and were given enough time to fill in the questionnaires, after which the researcher collected the filled –in questionnaires.

The researcher therefore sourced data from both primary and secondary sources. Primary data was gathered directly from respondents through questionnaires. Secondary data was used because there were some data from published materials and information e.g. journals and the internet.

#### **3.5.1 Pilot Testing of the Questionnaires**

Pilot testing of the questionnaires before embarking on real research was important in order for it to reveal deficiencies (Mugenda and Mugenda (2003). Eleven questionnaires were used for pilot testing to ensure reliability and validity in the adjacent Tharaka Nithi County. Former graduates of Muthambi YP were traced and interviewed. The pilot data was not included in the study. The recommendations of the supervisor enhanced the validity of the instruments. This established the reliability and the validity of the instruments.

### **3.5.2 Reliability of the Research Instruments**

In order to ensure reliability of instruments, questions in the questionnaires were constructed and first pre-tested to ensure consistency in measurement. The test-retest technique of assessing reliability of a research involved in administering the same instruments twice to the same group of subjects. This was after a lapse of two weeks. Spearman rank order correlation was employed to compute the correlation coefficient in order to establish the extent to which the content of the questionnaires was consistent in eliciting the right responses every time the instrument was administered. A correlation coefficient ( $r$ ) of 0.85 was considered high enough in judging the reliability of the instruments.

### **3.5.3 Validity of the Research Instruments**

Just as it was observed by Patten (2004) and Wallen & Fraenkel (2001) that a study instrument is only valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed, the current study put in place measures to ensure that the instruments used in the study provided accurate result. The content validity of the instruments was measured. The researcher's supervisors helped the researcher to assess the concept the instruments was measuring in order to determine whether the set of items were accurately representing items under study. The recommendations of the supervisor enhanced the validity of the instruments.

### **3.6 Data Analysis Techniques**

The data collected was coded, cleaned and entered into the computer and analyzed using the statistical package for social sciences (SPSS). Descriptive statistics was used to analyze the data. Descriptive statistics provided for meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution and was used to analyze and generalize the results of analysis to the population (Kothari, 2008). This is because the variables studied were measured at ratio or interval scales and were continuous (Patton, 2003). For analysis of quantitative data, the data was converted into numeric codes representing attributes or measurements of variables. Coding included as much information as possible because once the coded data was entered into the computer,



it was possible to recover any details, which were omitted ( Mugenda &Mugenda, 2003). Generalization was done from the themes about the phenomena in question and interpreted in the light of available literature (Kumar, 2005). Qualitative analysis was important since it supplemented the quantitative analysis that created a better framework for the interpretation of the findings (Kothari 2008). Data was then presented in pie charts and tables and explained

### **3.7 Operational Definition of Variables**

To operationalize the research variables, the matrix below defines how the variables was measured

### 3.8 Operational Definition of Variables

To operationalize the research variables, the matrix below defines how the variables was measured

**Table 3.3 Operational definition of variables**

Objectives	Variables	Indicators of Measurements	Measurements scale	Tools of Analysis	Type of Analysis
To determine how vocational skills acquired by graduates from Karurumo Village Polytechnic in the last 10 years contributed to entrepreneurship development in Embu county	Independent: vocational skills acquired by graduates	<ul style="list-style-type: none"> <li>No. of graduates in gainful employment</li> <li>No. of courses taken by graduates</li> </ul>	Nominal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To find out whether what graduates from Karurumo village polytechnic do after graduation contributed to entrepreneur development in Embu county	Independent: what graduates from Karurumo village polytechnic do after graduation	<ul style="list-style-type: none"> <li>No. of graduates employment</li> <li>No. of graduates self- employment</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneur development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Nominal		
To determine whether types of business started by graduates from Karurumo Village Polytechnic in the last 10 years contribute to entrepreneurship development in Embu County	Independent: types of business started by graduates	<ul style="list-style-type: none"> <li>No. of business started</li> <li>Types of business started</li> </ul>		Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To establish whether innovations started by graduates of Karurumo Village Polytechnic in the last ten years contribute to entrepreneurship development in Embu County	Independent: Innovations started by graduates	<ul style="list-style-type: none"> <li>No. of new products started</li> <li>No. of new technologies started</li> <li>New markets started</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		

**Table 3. 4 The number of Trainees enrolled at Karurumo Youth Polytechnic since 2003 to December 2012**

Dist.	YP	Name of Course	Youth Polytechnic Graduates since 2003 to December, 2012																													
			2003			2014			2005			2006			2007			2008			2010			2011			2012					
			M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
Emb		MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10
		Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11
		Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10
		Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15
		Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17
<b>Grand Total</b>												25						36					18			34			53			63

### **3.9 Ethical Considerations**

To avoid biases in this study, the researcher took into consideration the qualitative research that uses a case study approach which tends to skew data in certain ways (Mason, 2002). All ethical procedures were considered. Multiple methods were used and acknowledgement of researchers' role assisted in mitigating all the biases in the study.

## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

### 4.1 Introduction

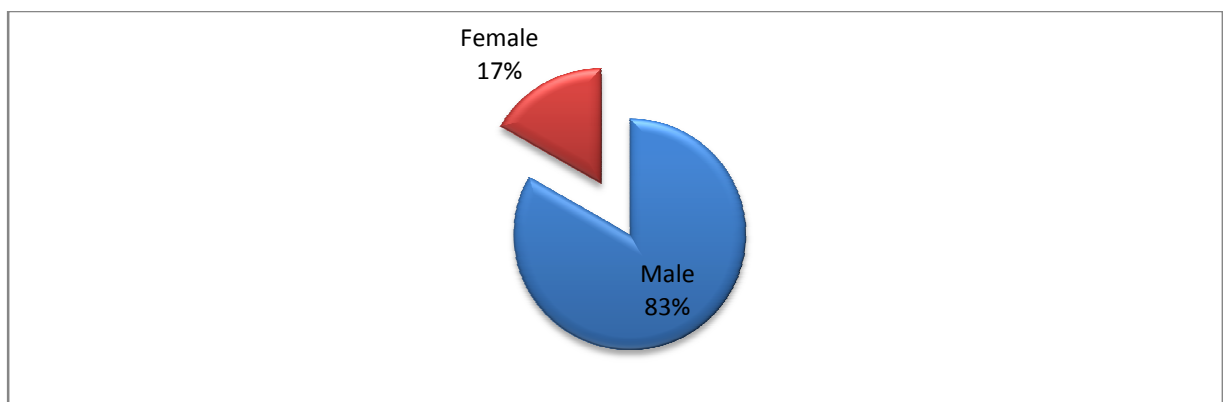
This chapter presents analysis and findings of the study as set out in the research methodology. The results were presented on the role of village polytechnics in entrepreneurship development. The study targeted 65 respondents out of which 60 responded and returned their questionnaires contributing to the response rate of 92.3%. This response rates were sufficient and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was due to extra efforts that were made via personal calls and visits to remind the respondent to fill-in and return the questionnaires. The chapter covers the demographic information, and the findings were based on the objectives.

### 4.2 Demographic Information

#### 4.2.1 Gender distribution of the respondents

The study sought to establish the respondent's gender distribution. The findings are as stipulated in figure 4.1.

**Figure 4.1 Gender of the respondents**



From the findings illustrated in figure 4.1 the majority of the respondents (83%) were males while 17% were females. This illustrates that there was gender disparity as majority of the respondents were males.

### 4.2.2 Highest level of Education

The research sought to establish respondents' highest level of Education. The findings are as stipulated in figure 4.2.

**Figure 4.2 Highest level of Education**

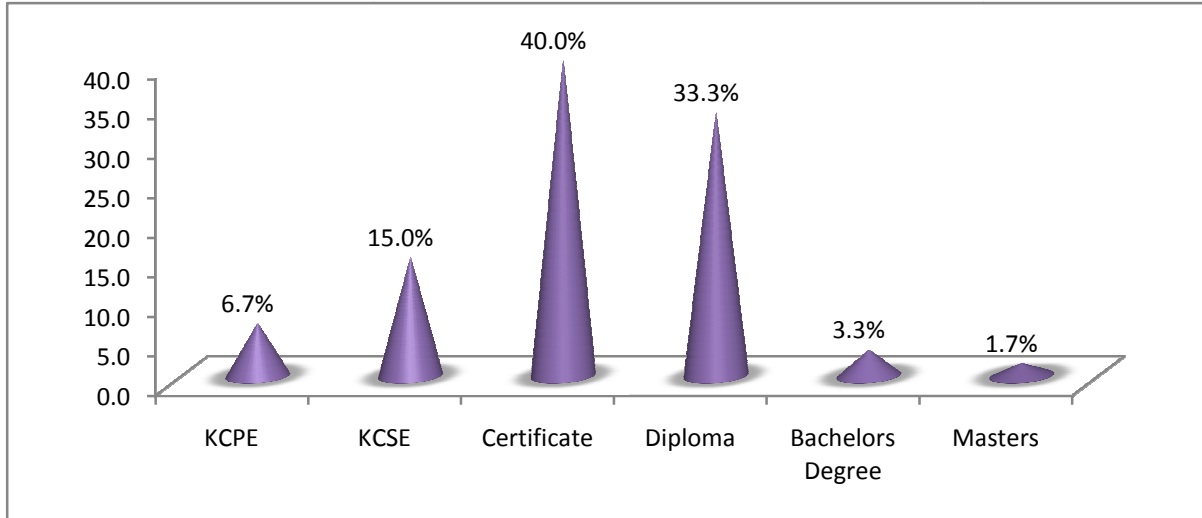
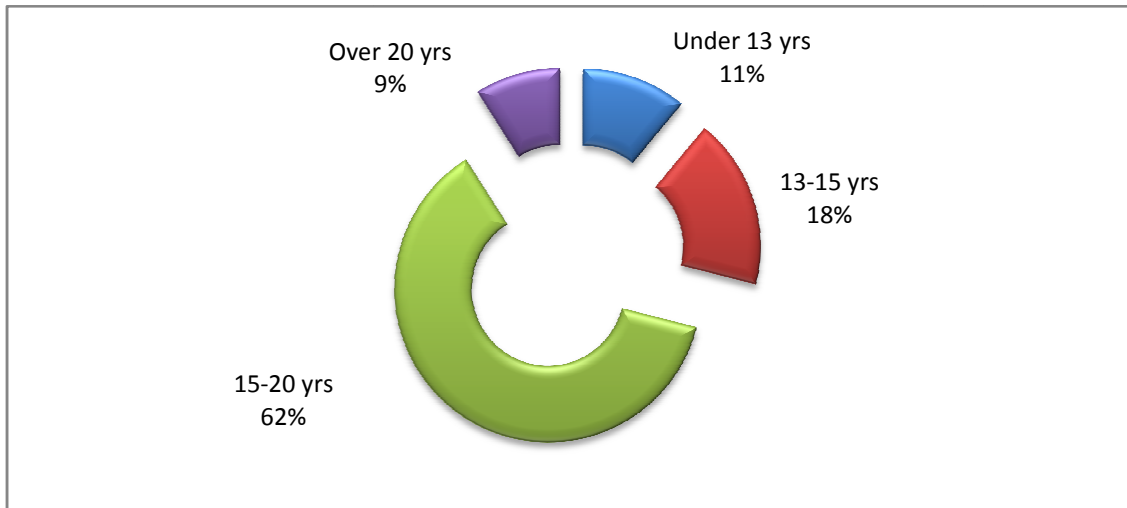


Figure 4.2 indicates that most of the former graduates from Karurumo youth polytechnic (40%) had college certificates level of education, 33.3% had college diplomas and 15% had Kenya certificate of secondary education while 6.7%, 3.3% and 1.7% had Kenya certificate of primary education, bachelor's degree and Masters degree respectively. This illustrates that majority of the graduates from Karurumo Youth Polytechnic had college certificates and diplomas respectively. This shows that most of the graduates were able to carry out entrepreneurship development without many problems owing to their level of education.

### 4.2.3 Age the trainees joined the Polytechnic

The study also sought to establish the age at which the respondents joined the Polytechnic. The findings are as stipulated in figure 4.3.

**Figure 4.3 Age trainees joined Polytechnic**



From the study findings, majority of the respondents (62%) joined the Polytechnic at the age of 15-20 years, 18% at the age of 13-15 years while 11% and 9% joined the polytechnic at the age of less than 13 years and over 20 years respectively. This implies that majority of the graduates from Karurumo youth polytechnic had joined the institution at the age of 15-20 years. This was the normal age at which students/trainees are enrolled in the polytechnics and therefore they were suitable to join the training.

**4.2.4 Number of Years trainees spent in the Polytechnic**

The study further sought to establish the number of years that the respondents spent in the polytechnic. The findings are as stipulated in table 4.1.

**Table 4.1 Number of Years trainees spent in the Polytechnic**

	Frequency	Percentage
< 1 yr	3	5.0
1 & < 2 yr	14	23.3
2 & <3 yrs	23	38.3
3 & < 4 yrs	11	18.3
> 4 years	9	15.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents (38.3%) had spent 2-3 years at Karurumo youth polytechnic, 23% had spent 1-2 years and 18.3% had spent 3-4 years while 15% had spent over four years at Karurumo Youth Polytechnic. This implies that majority of the graduates from Karurumo Youth Polytechnic had spent 2-3 years in the institution that was relatively enough to acquire the desired skills. This is the normal duration that the trainees take in the polytechnics.

#### 4.2.5 Reasons for enrolling in the Youth Polytechnic

The study sought to establish the reasons why the respondents enrolled in the youth polytechnic. The findings are as stipulated in table 4.2.

**Table 4.2 Reasons for enrolling in the Youth Polytechnic**

	Frequency	Percentage
Acquiring of skills	53	88.3
Interested or liked courses offered in the YPs	44	73.3
Forced by circumstances	49	81.7
Lack of school fees for secondary education	51	85.0
Failure to score good grades in KCPE	53	88.3
To be self employed	39	65.0
Polytechnic education is affordable	46	76.7

From the study findings, majority of the respondents (88.3%) indicated acquiring of skills and failure to score good grades in KCPE as the reasons why they enrolled in the youth polytechnic, 85% cited lack of school fees for secondary education and 81.7% indicated that they were forced by circumstances to enroll in the youth polytechnic. On the other hand, 76.7% indicated that polytechnic education was affordable and 73.3% cited that they were interested or liked courses offered in the YPs while 65% indicated that they enrolled in the youth polytechnic due to failure to score good grades in KCPE. Majority of the trainees had divergent reasons why they joined the polytechnics but acquiring of skills and failure to score good grades in KCPE stood out.

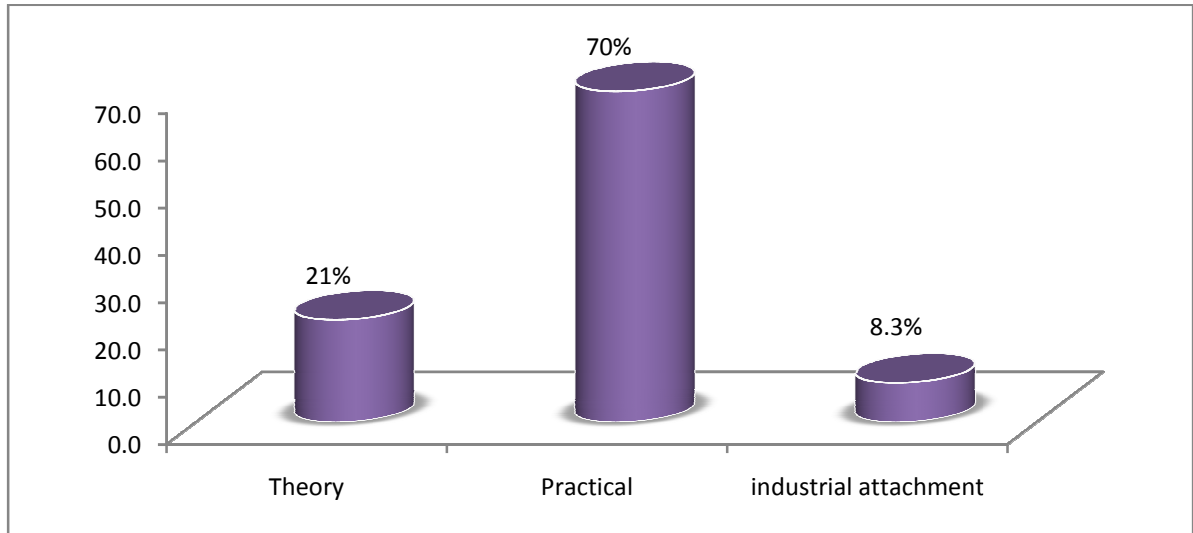


### 4.3 Vocational Skills and Entrepreneurship Development

#### 4.3.1 Aspects of the course undertaken in the polytechnic and day today life

The study asked the respondents to indicate the aspects of the course undertaken in the polytechnic and what they were doing on day today life. The findings are as stipulated in figure 4.4.

**Figure 4.4 Aspects of the course undertaken in the polytechnic**



From the study findings, majority of the respondents (70%) indicated that the aspects of the course undertaken in the polytechnic was practical in their day to day life, 21% indicated that it was theoretical while 8.3% indicated that the aspects of the course undertaken in the polytechnic helped the respondents in their industrial attachment. This meant that the respondents were able to acquire practical skills that they used when they got out from the polytechnic and were able to use it to develop their entrepreneurship skills. This shows that the graduates were able to get the right practical skills that enabled them to be competent, effective and efficient in the operations of the day to day life.

#### 4.3.2 Outcome of vocational skills acquired in the polytechnic

The study also sought to establish the outcome of vocational skills acquired in the polytechnic among the respondents. The findings are as stipulated in table 4.3.

**Table 4.3 Outcome of vocational skills acquired in the polytechnic**

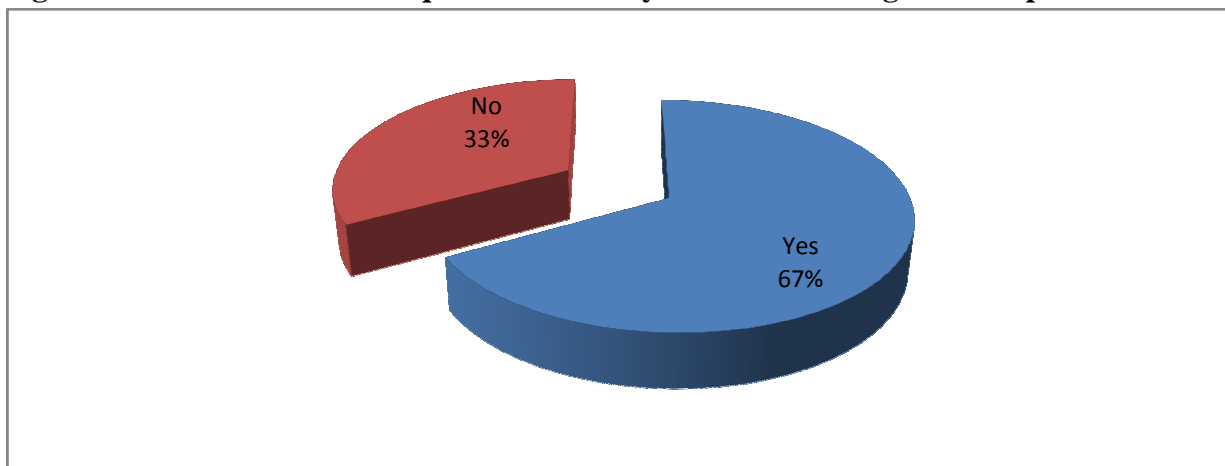
	Frequency	Percentage
Entrepreneur	23	38.3
Trainer	11	18.3
Self-employed	18	30.0
Employed	8	13.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents, 38.3% indicated that the vocational skills acquired in the polytechnic helped them to be entrepreneurs, 30% indicated self-employed while 18.3% and 13.3% indicated that the vocational skills acquired in the polytechnic helped them to be trainers and employed respectively. This implies that the vocational skills acquired in the polytechnic helped majority of the graduates from Karurumo Youth Polytechnic to be entrepreneurs. It also shows that Karurumo Youth Polytechnic graduates were doing well in life because of the vocational skills they acquired during their training. This was in line with expectation as they joined the polytechnic.

#### **4.3.3 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

The study asked the respondents to indicate whether the Vocational skills acquired in the Polytechnic helped them become an Entrepreneur. The findings are as stipulated in figure 4.5.

**Figure 4.5 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

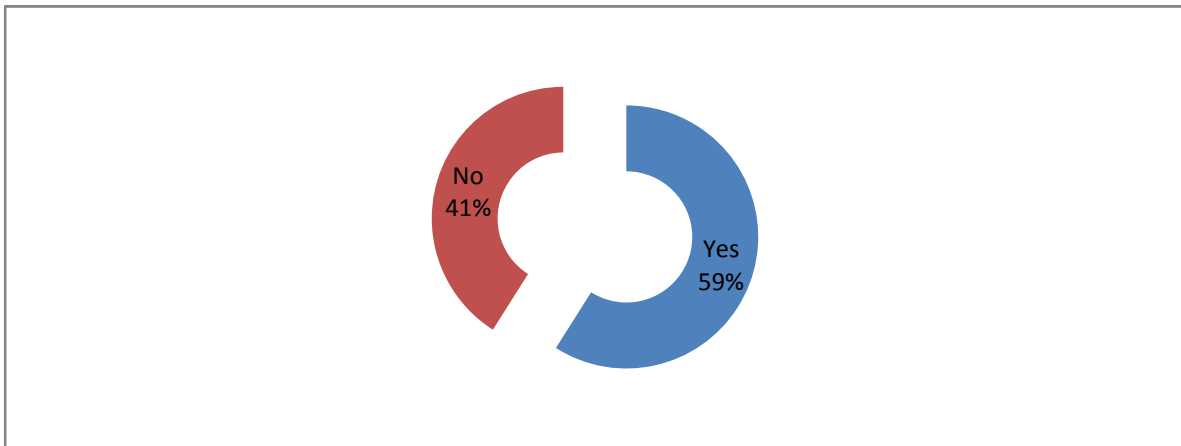


From the study findings, majority (67%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them become an entrepreneur while 33% were of a contrary opinion. This implies that vocational skills acquired in the Polytechnic help graduates become Entrepreneurs.

#### 4.3.4 Vocational skills acquired in the Polytechnic

The study further asked the respondents to indicate whether the vocational skills acquired in the polytechnic helped them improving entrepreneurship skills. The findings are as stipulated in figure 4.6.

**Figure 4.6 Vocational skills acquired in the Polytechnic**



From the study findings in the figure above, majority (59%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them improve their entrepreneurship skills while 41% were of a contrary opinion. This is in line with Waithaka, (1989) who observed that young school graduates with relevant skills and attitudes would lead the young people to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities.

#### 4.3.5 Vocational skills and Entrepreneurship development

The study sought to establish the role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. The findings are as stipulated in table 4.4.

**Table 4.4 Vocational skills and Entrepreneurship development**

	<b>Frequency</b>	<b>Percentage</b>
Promotion of new business	33	55.0
Promotion of innovations	44	73.3
Provision of new technologies	49	81.7
Creation of new products	51	85.0
Acquiring of new skills	56	93.3
Creation of new markets	39	65.0

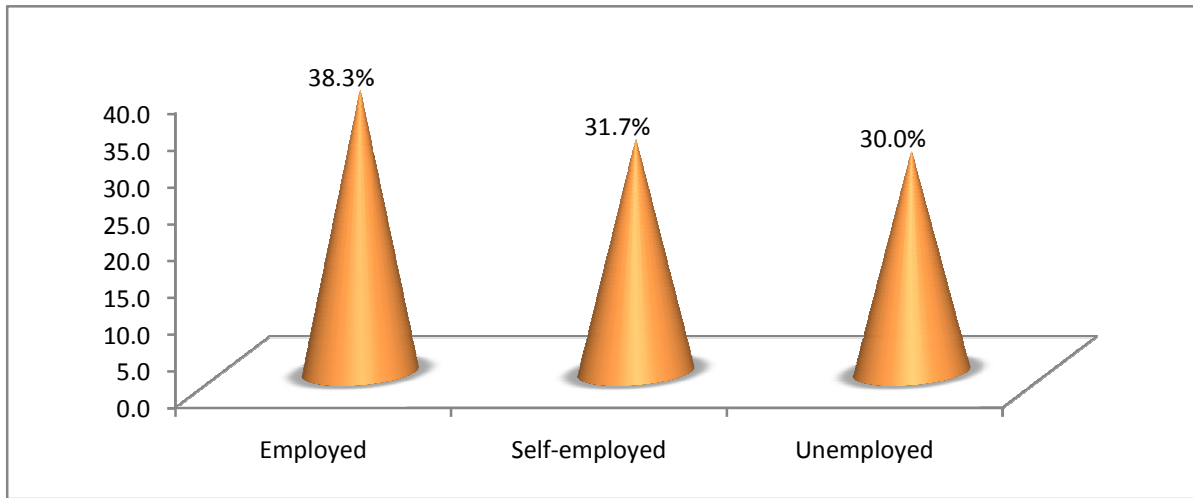
From the study findings, majority of the respondents (93.3%) indicated acquiring of new skills as the role of promotion of entrepreneurship development, 85% indicated creation of new products, 81.7% indicated provision of new technologies and 76.7% indicated new production methods while 73.3% indicated Promotion of innovations. On the other hand, 65% indicated creation of new markets and 55% indicated promotion of new business. This implies that acquiring of new skills was the main role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. This agrees with Schumpeter (1934) who indicated that entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before.

#### **4.4 What graduates do and Entrepreneurship Development**

##### **4.4.1 Employment status**

The study sought to establish the employment status of the graduates from Karurumo youth polytechnic. The findings are as stipulated in figure 4.7.

**Figure 4.7 Employment status**

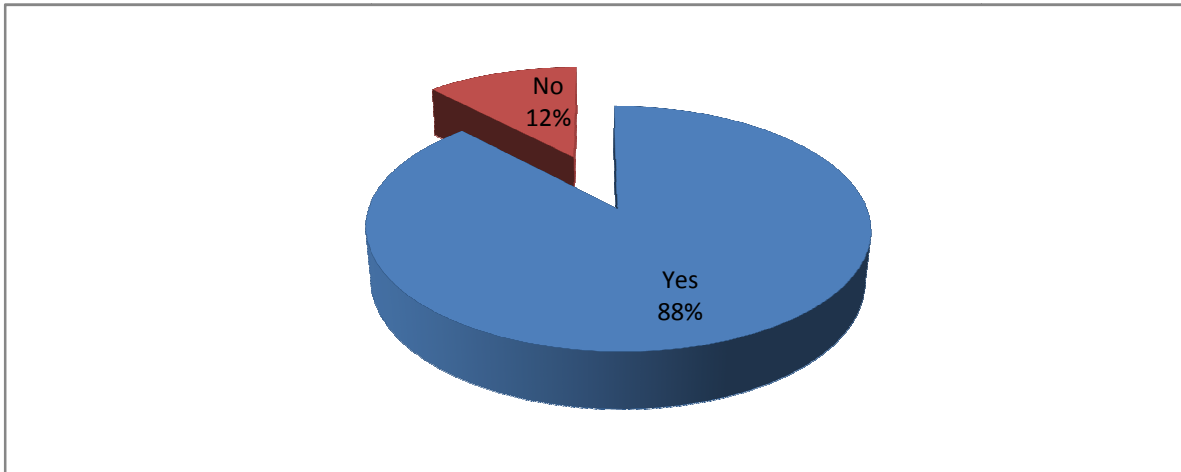


From the study findings, most (38.3%) of the graduates from Karurumo youth polytechnic indicated that they were employed, 31.7% were self-employed while 30% were unemployed. This implies majority of the graduates from Karurumo youth polytechnic were employed. This finding concur with the findings of Achieng (2012) on the study of factors affecting acquisition of vocational skills among learners in Maranda division of Siaya district that found that vocational education main aim is to offer skills to learners that can help them to be self-employed. Vocational skills create greater impact on human resource development and economic growth.

#### **4.4.2 Certificate from Youth Polytechnic and chances of employment**

The study asked the respondents to indicate whether skill training certificate from youth polytechnic enhanced their chances of employment. The findings are as stipulated in figure 4.8.

**Figure 4.8 Certificate from Youth Polytechnic and chances of employment**

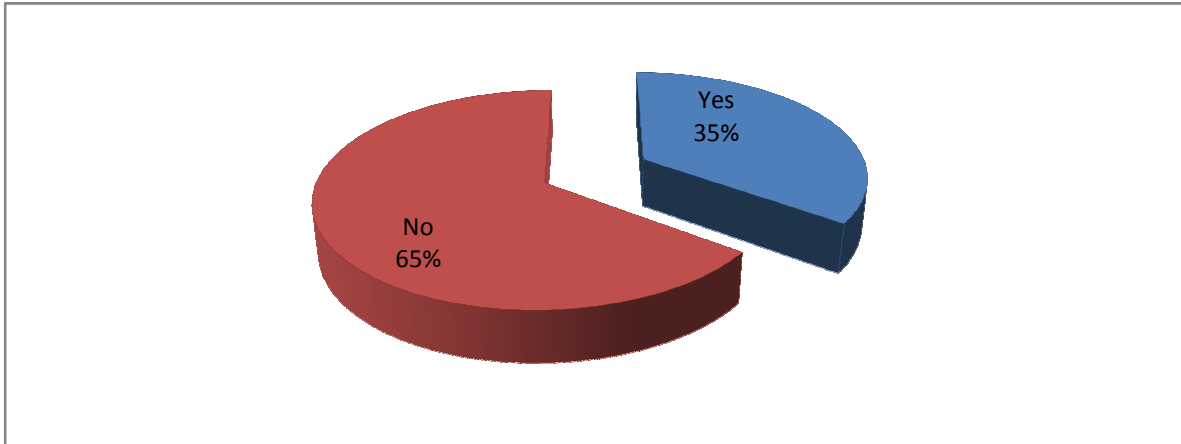


From the figure above, majority (88%) of the graduates from Karurumo youth polytechnic agreed that skill training certificate from youth polytechnic enhanced their chances of employment while 12% disagreed. This implies that skill training certificate from youth polytechnic enhanced graduates chances of employment. This concurred with the findings of Ibuathu (2013) on the study of the impact of vocational training for rural development in Nyambene district in Kenya that found out that 60% of the respondents said youth polytechnic graduates were marketable were learning their own business that included tailoring, carpentry and welding shops.

#### **4.4.3 Offering of Training by the former Polytechnic Graduates**

The study sought to establish whether the graduates from Karurumo youth polytechnic offered any training. The findings are as stipulated in figure 4.9.

**Figure 4.9 Offering of Training by the former Polytechnic Graduates**

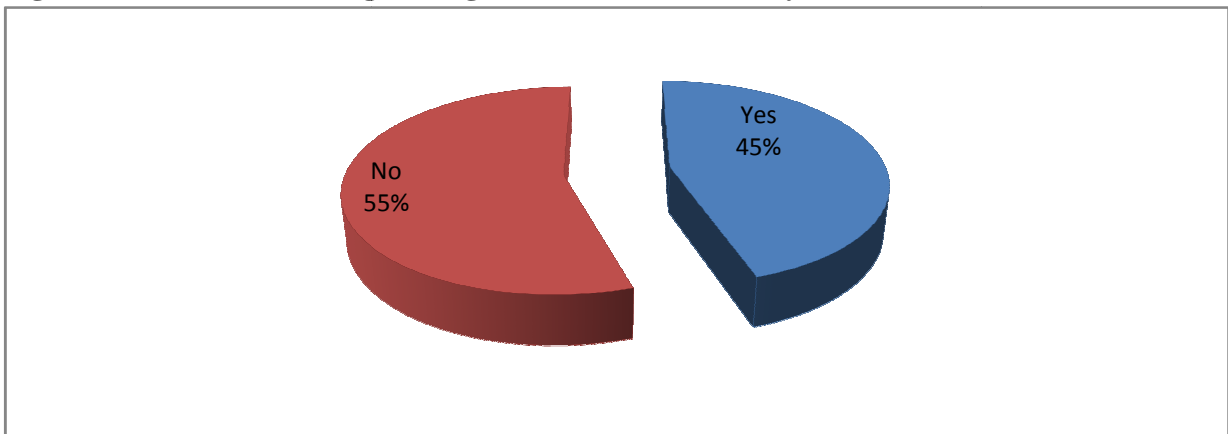


From the findings of the study, majority (65%) of the graduates from Karurumo youth polytechnic disagreed that they offered trainings with 35% agreeing that they offered trainings. This implies that graduates from Karurumo youth polytechnic did not offer trainings. This is in line with Kinyanjui (2007) the youth polytechnic employees enter the labour market as employees, Self-employment and only 22.2% of the graduates were unemployed.

**4.4.4 Use of Training skills gained in the Youth Polytechnic to train**

The study further sought to establish whether the graduates from Karurumo Youth Polytechnic used the training skills gained in the Youth Polytechnic to train. The findings are as stipulated in figure 4.10.

**Figure 4.10 Use of Training skills gained in the Youth Polytechnic to train**



From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic disagreed that they used the training skills gained in the Youth Polytechnic to train with 45% who used the training skills gained in the Youth Polytechnic to train. This implies that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train.

#### 4.4.5 Role of training in entrepreneurship development

The study asked the respondents to indicate the role of training in entrepreneurship development in the County. The findings are as stipulated in table 4.5.

**Table 4.5 Role of training in entrepreneurship development**

	Frequency	Percentage
started new business	33	55.0
Created new products in the market	35	58.3
Value addition to products	49	81.7
New technology	32	53.3
Opening new markets	53	88.3
Providing new services	41	68.3
Providing training services	58	96.7

From the table above, majority (96.7%) of the graduates from Karurumo youth polytechnic indicated provision of training services as the role of training in entrepreneurship development in Embu County, 88.3% indicated opening of new markets, 81.7% indicated value addition to products and 68.3% indicated provision of new services while 58.3%, 55% and 53.3% indicated creation of new products in the market, starting of new businesses and new technology as the role of training in entrepreneurship development in Embu County. McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence.

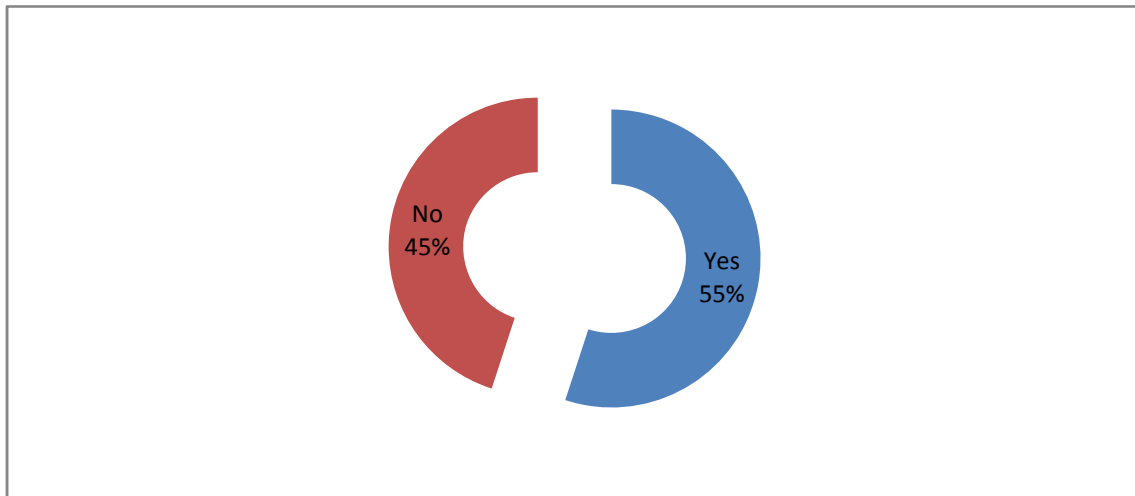


## 4.5 Business started and their role in entrepreneurship

### 4.5.1 Business enterprise after graduation

The study asked the respondents to indicate whether they had started any business enterprise after graduation. The findings are as stipulated in figure 4.11.

**Figure 4.11 Business enterprise after graduation**

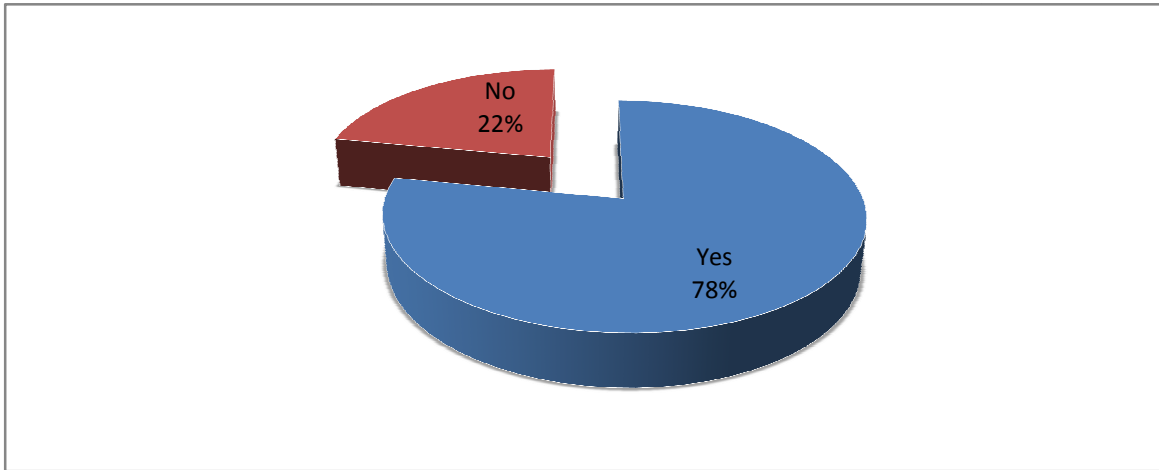


From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic agreed that they had started business enterprise after graduation while 45% had not. This implies that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation.

### 4.5.2 Business started and course taken at polytechnic

The study also sought to find out whether the businesses started were related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.12.

**Figure 4.12 Business started and course taken at polytechnic**

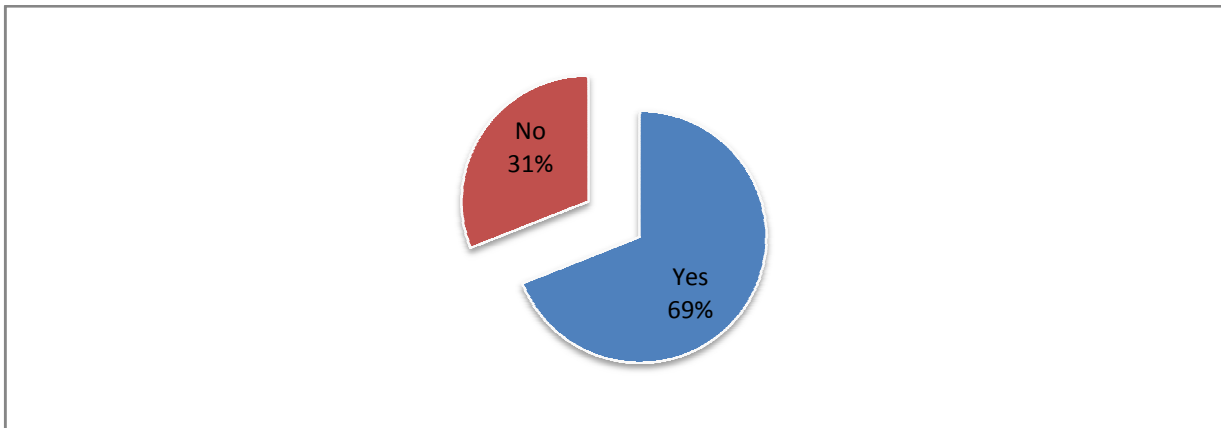


From the findings of the study, majority (78%) of the graduates from Karurumo youth polytechnic agreed that the businesses they had were related to the course undertaken at the polytechnic. This implies that majority of the graduates from Karurumo youth polytechnic had started businesses related to the course undertaken at the polytechnic.

#### **4.5.3 Business enterprise and improvement of entrepreneurship skills**

The study further sought to find out whether the business enterprise stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.13.

**Figure 4.13 Business enterprise and improvement of entrepreneurship skills**



From the figure above, majority (69%) of the graduates from Karurumo youth polytechnic agreed that the business enterprise stated assisted them to improve their entrepreneurship skills. This findings agrees with the findings of Kivu (2013) on the study of influence of leadership on the growth of enterprises in Machakos county that found innovation influenced growth of entrepreneurs in Machakos and that emotional intelligence plays a key role in product and process innovation.

#### **4.5.4 Role of business in improving economic development in the county**

The study asked the respondents to indicate the role of business in improving economic development in the County. The findings are as stipulated in table 4.6.

**Table 4.6 Role of business in improving economic development in the county**

	<b>Frequency</b>	<b>Percentage</b>
Training others	33	55
Doing things better, faster and at less cost	57	95
Opening new markets	51	85
Use of newly found material	32	53
Brought new technologies	53	88

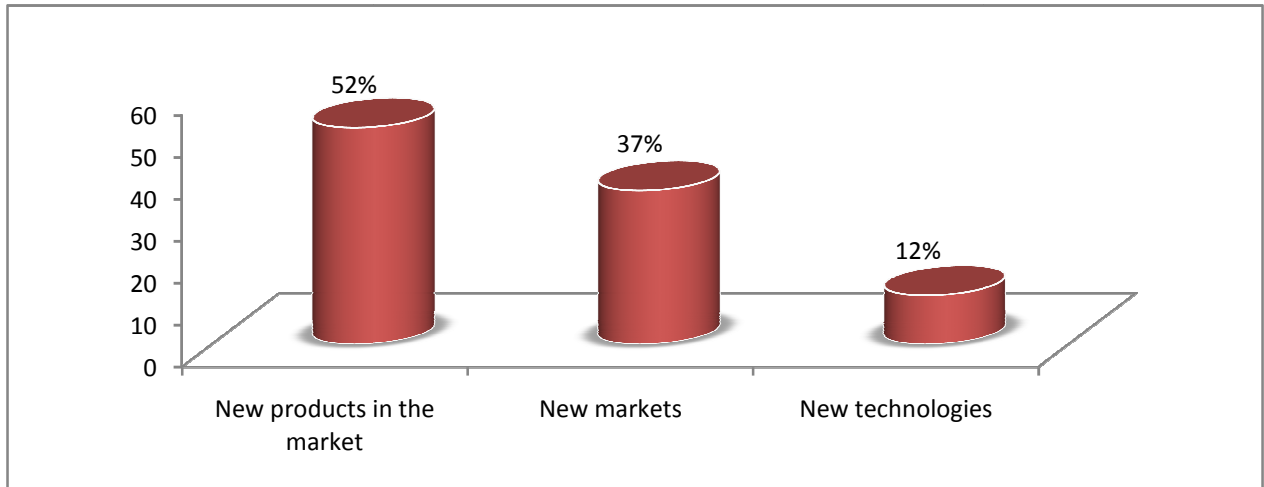
From the table above, majority (95%) of the graduates from Karurumo Youth Polytechnic indicated that the role of business in improving economic development in the County was through doing things better, faster and at less cost, 88% indicated that it brought new technologies, 85% cited that it opened new markets and 55% said that they trained others while 53% indicated that it was through use of newly found materials. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing.

## 4.6 Innovations started and entrepreneurship development

### 4.6.1 Innovations started since leaving polytechnic

The study sought to find out the innovations started by the graduates since they left polytechnic. The findings are as stipulated in figure 4.14.

**Figure 4.14 Innovations started since leaving polytechnic**

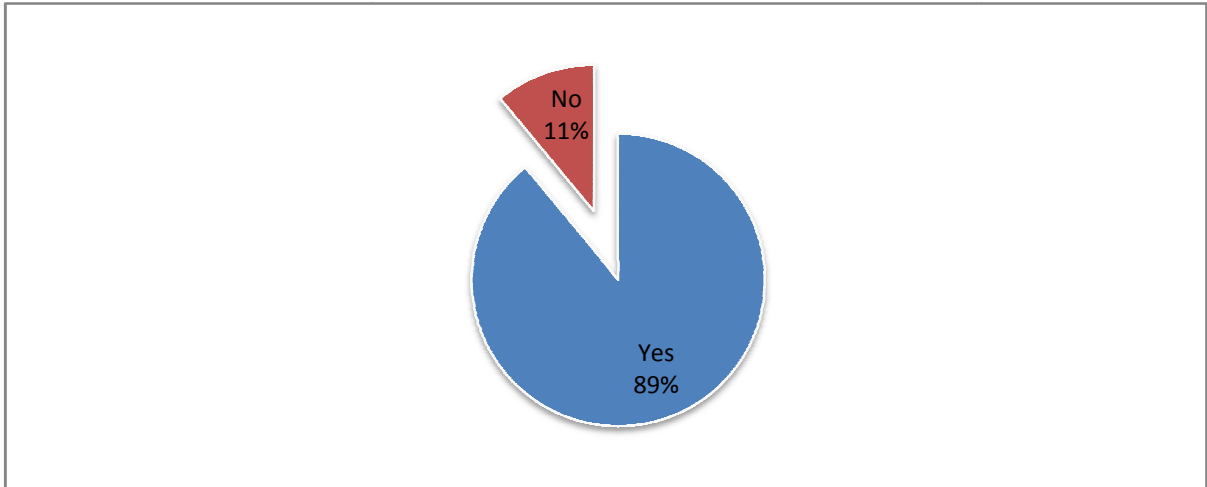


From the study findings, majority (52%) of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic, 37% had introduced new markets while 12% had introduced new technologies since they left polytechnic. This agrees with Yambo (1986) who observed that youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education.

### 4.6.2 Innovations started and course taken at polytechnic

The study also sought to find out whether the innovations stated was related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.15.

**Figure 4.15 Innovations started and course taken at polytechnic**

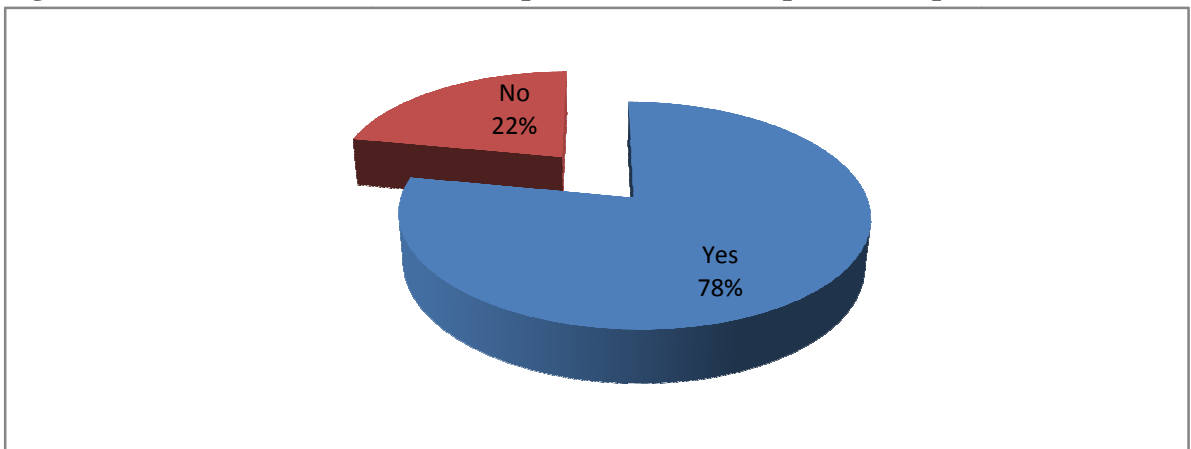


From the figure above, majority (89%) of the graduates from Karurumo youth polytechnic agreed that the innovations stated were related to the course undertaken at the polytechnic.

#### **4.6.3 Innovation started and improvement of entrepreneurship skills**

The study further sought to find out whether the innovation stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.16.

**Figure 4.16 Innovation started and improvement of entrepreneurship skills**

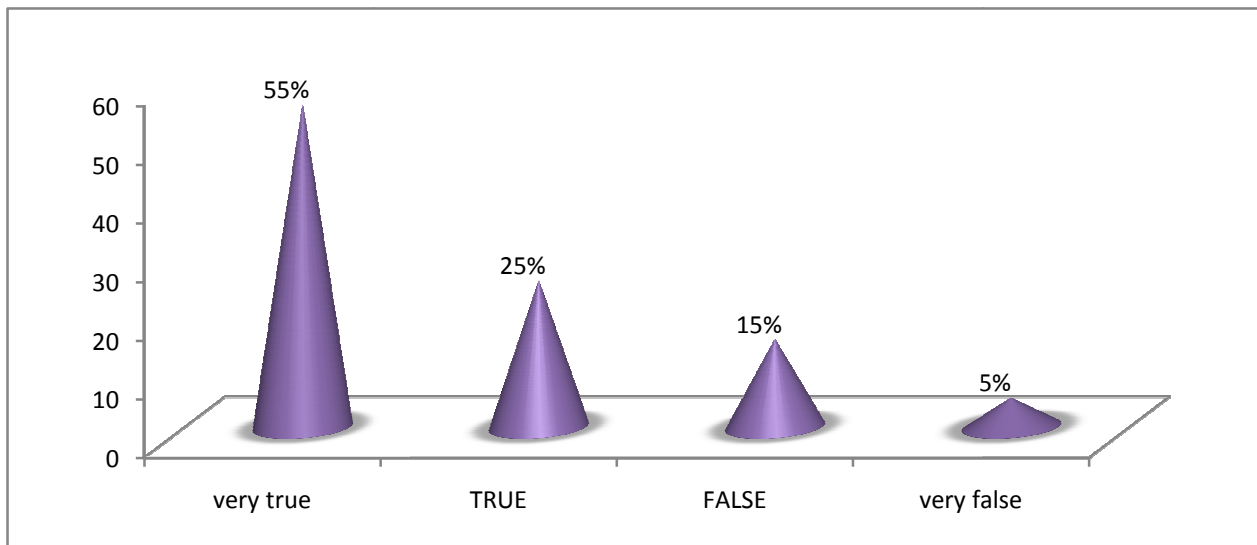


From the figure above, majority (78%) of the graduates from Karurumo youth polytechnic agreed that innovation stated assisted them to improve their entrepreneurship skills.

#### 4.6.4 Innovation started and graduate's role in economic services

The study further sought to find out whether the innovation stated assisted the respondents to enhance their role in providing economic services to the people. The findings are as stipulated in figure 4.17.

**Figure 4.17 Innovation started and graduate's role in economic services**



From the study findings, majority (55%) of the graduates from Karurumo youth polytechnic indicated that it was very true that the innovation stated assisted them to enhance their role in providing economic services to the people while 25% indicated that it was true and 15% indicated that it was false. This implies that the innovation stated assisted the graduates to enhance their role in providing economic services to the people. These findings concur with the findings of Wanyoko (2013) on his study on the influences of business incubation services on growth of small and medium enterprises in Kenya that found out that majority of the respondents in the study (83%) stated that innovation influenced the growth of business and entrepreneurship development and affects business to a greater extent.

#### 4.6.5 Extent to which innovations played role in entrepreneurship development

The study sought to establish the extent to which innovations started by graduates of the polytechnics play in entrepreneurship development. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly

disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

**Table 4.7 Extent to which innovations played role in entrepreneurship development**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>Mean</b>	<b>STDev</b>
Innovations make one risk money and fortunes and combine resources to start new products and services.	46	7	4	3	4.65	0.482
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people	41	12	5	2	4.44	0.524
New technologies assist in provision of efficient and effective services to ones customers	48	6	2	4	4.53	0.621

From the study findings in Table 4.7, majority of the respondents strongly agreed that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people as shown by the mean scores of 4.65, 4.53 and 4.44 respectively and the standard deviation of 0.482, 0621 and 0.524 respectively. This shows that most of respondents either agreed or strongly agreed to the statement.

It also shows the graduates used innovations to satisfy human needs in a more convenient and pleasant way and were able to grow their businesses. They were also able to discern new sources of materials to improve their entrepreneurship. This is in line with Kelemba (2010) who found out that every year graduate of Youth Polytechnic were able to start new technologies, new materials, new products and used their skills to improve their enterprises.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of the study findings, conclusion and recommendations drawn from the study findings. The chapter is based on the study objectives, which were to determine whether the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 have contributed to entrepreneurship development in Embu county; to find out whether what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu county; to establish whether innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county and whether types of business started by the graduates of Karurumo villages polytechnic have contributed to entrepreneur development in Embu county.

### **5.2 Summary of findings**

The study established that the aspects of the course undertaken by the graduates from Karurumo Youth Polytechnic was practical in their day to day life since majority of the graduates ended up being entrepreneurs. Further, the study established that the vocational skills acquired in the polytechnic helped graduates from Karurumo Youth Polytechnic become Entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills by the graduates of Karurumo village polytechnic promoted entrepreneurship development in the County.

The study also established that skill training certificate from youth polytechnic enhanced graduates chances of employment thus majority of the graduates from Karurumo youth polytechnic were employed. Further, majority of the graduates did not offer trainings, however, the study established that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu county.

The study also found out that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation and the businesses were related to the



course undertaken at the polytechnic while business enterprise stated assisted them to improve their entrepreneurship skills. The study further established that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets.

The study found out that majority of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic; the innovations stated were related to the course undertaken at the polytechnic and the innovation stated assisted them to improve their entrepreneurship skills. Further, the study established that the innovation stated assisted the graduates to enhance their role in providing economic services to the people of Embu county. Lastly, the study found out that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assisted in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

### **5.3 Conclusion**

The study concludes that there was gender disparity as majority of the graduates from Karurumo Youth Polytechnic were male who joined the institution at the age of 15-20 years and had spent 2-3 years in the institution. The study also concluded that majority of the graduates had enrolled in the youth polytechnic to acquire of skills and failure to score good grades in KCPE. The study also concludes that many youth polytechnics graduates find self-employment or start new business as a means of making a living. This creates growth and wealth.

The analysis reveals that graduates are making significant contributions in the labour market either as workers in business or in self-employment. In order to cater for the unemployed polytechnic graduates, the economy in the counties needs to be diversified while polytechnics should be upgraded and reconstituted in such a way that they are able to meet demands for market based knowledge and skill acquisition. The other issue that emerged in the analysis is that polytechnics are institutions whose goal is to ensure that trainees acquire

skills that assists' them in personal development as well as for the economic development of the counties and the country at large. Polytechnic education should aim at imparting creativity, innovation, independent thought and precision in polytechnic graduates.

The study concludes that the vocational skills acquired in the polytechnic helped graduates from Karurumo youth polytechnic become entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills was the main role of vocational skills acquired in the polytechnic which promoted entrepreneurship development. The study also concluded that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu County.

The study further conclude that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets. Lastly, the study concluded that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

#### **5.4 Recommendations of the study**

The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. The graduates are making significant contribution in the labour market either in business or self –employment. Youth polytechnics are grassroots institutions that serve the needs of poor youth who are hopeless and helpless. Acquisition of skills and failure to perform well in the examinations are the key factors that drive the youth to enroll in polytechnics. The above perception must be done away with and a deliberate effort to position the youth polytechnics as centers of excellence for all.

The study also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. A deliberate effort to diversify the choice of courses for girls in the youth polytechnics be put in place. Some of the courses that might improve the choice of courses for girls are: secretarial, catering and housekeeping. More effort should also be put in order to encourage girls to enroll in male trades such as mechanic, electrical installations and welding. Communities need to be sensitized to ensure they also take girls to the polytechnics.

The study further recommends the vocational skills offered in the YPs be made more practical and entrepreneurial oriented to prepare the trainees for the world of work both in formal or self-employment. This will reduce the challenges of poverty in the counties and rural areas. There is also need to encourage the formation of right frameworks, networks and facilities that could encourage polytechnic graduates to enter into self-employment. The relationship between policy consumers, facilitators and implementers need to be defined.

Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya.

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**APPENDICES**

**APPENDIX I : DATA COLLECTION QUESTIONNAIRE FOR YP GRADUATES**

This is a self- administered questionnaire to collect data for purely academic purposes. The study seeks to analyze the **“Role of Youth Polytechnics in Entrepreneurship Development in Embu County”** All information will be treated with strict confidence. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

**SECTION A: GENERAL INFORMATION**

1. Gender.....Male  Female

2 Highest Academic Qualifications

*KCPE*

*KCSE*

*Certificate*

*Diploma*

*Bachelors Degree*

*Masters*

3. Age at which you joined the Polytechnic

1. Under 13 years

2. between 13-15 years

3. 15-20 years

4. Over 20 years

5. Year you enrolled in the Polytechnic-----

6. Number of Years you spent in the Polytechnic.....

**SECTION B: ON WETHER, VOCATIONAL SKILLS ACQUIRED BY GRADUATES  
PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMEMT.**

1. What aspects of the course undertaken in the polytechnic are relevant to what you are doing in your day today life?.....  
.....

2. In what way has the vocational skills acquired in the polytechnic prepared you in what you are doing now?.....

3. Has the vocational skills acquired in YP assisted you in being an entrepreneur?

Yes

No

If Yes, Specify.....

If No, specify.....

4. Is the Vocational skills started above assisting to improve your entrepreneurship skills?

1. Yes

2. No

3. If Yes, Specify.....

4. If No, specify.....

5. Do you have suggestion on courses taken in the polytechnic that could help improving entrepreneurship skills in the county.....  
.....

6. What role does vocational skills acquired in YPs play in promotion of entrepreneurship development?

1. ....

2. ....

3. ....

**SECTION C: ON WHETHER WHAT GRADUATES FROM KARURUMO VILLAGE POLYTECHNIC DO AFTER GRADUATION CONTRIBUTE TO ENTERPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Are you employed or in self-employment or unemployed?

Yes  No

- (ii) If employed, specify type of job.....
- (iii) If Self –employed, specify type of business.....
- (iv) If unemployed, specify for how long.....

2. In what way did the Youth Polytechnic skills training prepare you for employment or self-employment?

- 1. Self-employment aspect.....
- 2. Employment aspect.....

3. What factors did you consider when choosing where to seek employment or locate business?

- 1. Self-employment .....
- 2. Locate business.....

4. How long did you take to find employment or to start business?

- 1. Find employment .....
- 2. Self-employment .....

5. Did skills training certificate from youth polytechnic enhance your chances of employment?

Yes  No

- (ii) If Yes, specify.....
- (iii) If No, specify.....

6. Do you offer any training?

Yes  No

- (ii) If Yes, specify.....
- (iii) If No, specify.....

7. Do you use training skills learnt at the polytechnic in your training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

8. What role as your training played in entrepreneurship development in Embu County?

1. Started new business

2. Created new product in the market

3. Value additions to products

4. New technology

5. Opening new markets

6. Providing new services

7. Providing Training services

Other(specify).....

**SECTION D:ON WHETHER TYPES OF BUSINESS ENTERPRISESSTARTED BY GRADUATES FROM KARURUMO POLYTECHNIC PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Have you started any business enterprise after graduation?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

2. Is the business related to what you did at the polytechnic?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

3. Has your business enterprise assisted in improving your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, specify.....
- 4. If No, specify.....

4. What role does your business play in improving economic development in the County?

- 1. Training others
- 2. Doing things better, faster and at less cost
- 3. Opening up new markets
- 4. Use of newly found material
- 5. Brought new technologies
- 6. Other (Specify).....

**SECTION E: ON WETHER INNOVATIONS STARTED BY GRADUATES PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT?**

1. What innovations have you started since leaving the polytechnic?

- 1. Started new product in the market
- 2. Started New markets
- 3. Started New technologies
- 4. Other (specify).....

(ii) If, Yes above, specify-----

2. Is the innovation started above related to the course you did in the polytechnic?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

3. Is the innovation started above assisting to improve your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

4. Does the innovation started above enhance your role in providing economic services to people?

- 1. Very True
- 2. True
- 1. False
- 2. Very false

5. What role do the graduates play in promotion of innovation?

- 1. ....
- 2. ....
- 3. ....
- 4. ....

6. State your level of agreement to the following statement as regards whether innovations started by graduates of the polytechnics play a role in entrepreneurship development on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree.

Statement	SA	A	N	D	SD
Innovations make one risk money and fortunes and combine resources to start new products and services.					
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people					
New technologies assist in provision of efficient and effective services to ones customers					

7. What would be your advice to Youth Polytechnic trainees in enhancing entrepreneurship development in the County?

- 1.....
- 2.....
- 3.....

## APPENDIX II : NUMBER OF TRAINEES AT KARURUMO YOUTH POLYTECHNIC FROM 2003 TO 2012

Cou	District	YP	Name of Course	Youth Polytechnic Graduates since 2003																														
				2003			2014			2005			2006			2007			2008			2009			2010			2011			2012			GT
Em				M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
Cou	Embu	Karurumo	MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10	
			Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11	
			Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10	
			Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15	
			Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17	
<b>Grand Total</b>						<b>20</b>			<b>26</b>			<b>19</b>			<b>25</b>			<b>31</b>			<b>36</b>			<b>18</b>			<b>34</b>			<b>53</b>			<b>63</b>	<b>325</b>





**UNIVERSITY OF NAIROBI**  
**DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK**

**THE ROLE OF VILLAGE POLYTECHNICS IN ENTREPRENEURSHIP  
DEVELOPMENT: A TRACER STUDY OF GRADUATES OF KARURUMO  
VILLAGE POLYTECHNIC, EMBUCOUNTY**

**BY**  
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**C50/67801/2011**

**A RESEARCH PROJECTSUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS  
IN SOCIOLOGY (ENTREPRENEURSHIP DEVELOPMENT) OF THE  
UNIVERSITY OF NAIROBI**

**NOVEMBER 2014**

## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signed .....

Date.....

**NJERU ZAVERIO NDUGUTUSON**  
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This research project has been submitted for examination with my approval as a university supervisor.

Signed .....

Date.....

**PROF. EDWARD MBURUGU**  
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## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to individuals that assisted me in one way or another in the course of writing this project.

Special thanks go to my supervisors, Mr. Geoffrey Njeru and Professor Edward Mburugu, who tirelessly guided me and provided professional advice as well as encouragement during the study period.

I am greatly indebted to Madam Emily Nkoroi, the Embu county director of youth training who providing the relevant information, documents and generally facilitated the study.

Further gratitude goes to Mr. Graham Kangethe of curriculum, instruction and examinations division, of the department of youth training in the ministry of youth affairs and sports at the headquarters for providing me with relevant information on youth polytechnics nationally.

I cannot forget the Karurumo youth polytechnic manager and the instructors for their cooperation in giving me the preliminary information and the former trainees who will targets in the study.

Finally, I wish to thank everybody I may not have mentioned here but made this work possible.

Thank you all.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>KCSE</b>	-	Kenya Certificate of Secondary Education
<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>KIE</b>	-	Kenya Institute of Education
<b>MDGs</b>	-	Millennium Development Goals
<b>MOYAS</b>	-	Ministry of Youth Affairs and Sports
<b>NVCET</b>	-	National Vocational Certificate in Education and Training
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>SYPT</b>	-	Subsidised Youth Polytechnic Tuition
<b>TVET</b>	-	Technical and Vocational Education and Training
<b>TIQET</b>	-	Total Integrated Quality Education and Training
<b>UNDP</b>	-	United Nations Development Program
<b>UNESCO</b>	-	United Nations Education and Scientific and Cultural Organization
<b>YPs</b>	-	Youth Polytechnics

## **ABSTRACT**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and analyze their contribution to entrepreneurship development in Kenya. The study used descriptive survey design. The target population was 325 former graduates from Karurumo youth polytechnic who graduated between 2003 and 2012 with a sample size of 20% of the target population leading to 65 respondents. The data collected was analyzed using correlation matrix and multi regression analysis to establish the relationships between independent and dependent variable. The results revealed that vocational skills acquired, business enterprises started, innovations started and what graduates do after graduation separately contributed significantly to entrepreneurship development. The analysis further revealed that polytechnic graduates are making significant contributions in the labour market either as workers in business or in self-employment. The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. It also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The census report also document that over 62% of Kenyans are not in any form of employment and that only 25% of the secondary and university leavers are absorbed in regular employment. It is therefore important to boost vocational, technical, and entrepreneurial skills in youth polytechnic to cover the shortfall. Kenya needs a vibrant youth polytechnic training programs that can support the enhancement of the productivity of small and medium enterprises sector that currently account for 76% of the total employment but only contributes 18% of the natural gross domestic product.

Youth polytechnic education provides youth with technical and vocational skills for jobs in industry. The village polytechnics are an adoption of tailor made strategy to suit the village and rural labour markets (Kinyanjui,2007). The sectors of the rural labour market namely construction, furniture, garments and currently electrification is targeted. It is hoped that after graduating, the youth polytechnic graduates would be gainfully employed and contribute to the entrepreneur development in Kenya.

The UNDP,2012 in report entitled “ Skills gap analysis for graduates of youth polytechnic, vocational training centers and out- of- school youth” revealed that most of the graduates of the youth polytechnics lack competency in modern technology and have no practical skills required to exploit untapped opportunities in our country. They also have weakness in work attitude, communication, customer care and social skills and hence affecting their contribution to entrepreneurship development and their employability in the job market after graduating from the youth polytechnics. It is therefore against this background that the research proposes to investigate the role of youth polytechnic graduates to entrepreneurship development in Kenya through a tracer study of youth polytechnic graduates from Karurumo village polytechnic in Embu county in the last 10 years from 2003 to 2012 with a view of

coming up with interventions that will ensure the right kind and quality of skills training is given to them to enhance their contribution to entrepreneurship development.

## **1.2 Statement of the Problem**

Every year, graduates from Karurumo Village Polytechnic enter the labour market equipped with either grade II or grade III certificate. The whereabouts of these graduates was not visible in surveys of micro and small enterprises in Kenya. In a micro and small enterprise survey carried out in the Ziwani enterprise cluster in Nairobi, there was only one motor vehicle repair entrepreneur who had acquired skills in a village polytechnic (Kinyanjui, 2007). It was also reported that technical training, which is an important aspect of entrepreneurship development, was lacking in baseline surveys of micro and small enterprises (CBS, 1999), yet every year, trained youth graduate from village polytechnics enter the labor market. However, Wanyonyi (2009), Kelemba (2010) and UNDP (2012) reported that graduates from youth polytechnics had difficulties in using modern equipment and lacked the necessary and required skills that employment demands of them. They lacked work attitude, communication, customer care and social skills that are important for them to venture into business enterprises and use innovations that enable them to effectively contribute to entrepreneurship development in the country. Kinyanjui (2007) in a tracer and policy study of youth polytechnics graduates from Kwale, Kitui, Makueni and Taita Taveta also recommended a study on factors influencing technical training to be carried out in other areas to guide on youth polytechnics training policy . A study by Ministry of Youth Affairs and Sports (2012) on national evaluation of NVCET curriculum found out that Embu district had the highest percentage 52% of trainees who were incompetent and unable to fix a prescribed job process that was expected of them during the evaluation period. The purpose of this project was therefore to investigate the contribution of youth polytechnic graduates in entrepreneurship development through a tracer study of youth polytechnic graduates from Karurumo village youth polytechnic in Embu Country. The study specifically looked at whether what youth polytechnic graduates do after graduation, types of business enterprises started by graduates, innovations started by the graduates and vocational skills acquired by the graduates of village polytechnic contributed to entrepreneurship development in Embu county and Kenya as whole.

### **1.3. Overall Research Question**

What role do graduates from village polytechnics play in enhancing entrepreneurship development in the country?

#### **1.3.1 Specific Research Questions**

1. Does vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County?
2. Does what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu County?
3. Do types of businesses enterprises started by graduates of Karurumo village polytechnic started in the last ten years contribute to entrepreneurship development in Embu County?
4. Do innovations started by graduates of Karurumo village polytechnic in the last ten years contribute to entrepreneurship development?

#### **1.3.2 Overall Objective of the Study**

The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and investigate their contribution to entrepreneurship development in Kenya.

#### **1.3.3 Specific Objectives**

The following specific objectives were addressed:-

1. To determine how the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 to 2012 contributed to entrepreneurship development in Embu county.
2. To find out whether what graduates of Karurumo village polytechnic do after graduation contributed to entrepreneurship development in Embu county
3. To determine how types of business started by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County.
4. To establish how innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county

#### **1.4 Significance of the Study**

The study sought to identify and document the role of village polytechnic graduates in enhancing entrepreneurship development in Embu County. The data generated would assist in the provision of appropriate entrepreneurship development services that can address the concerns of village youth polytechnic graduates before entry into the labor market. The study would help to increase the knowledge of the relevant stakeholders and the community about the fate of village polytechnics trainees after graduating and their role in entrepreneurship development. It would also add to the existing knowledge of the impact of youth Polytechnic education on entrepreneurship development.

#### **1.5 Scope and Limitations of the Study**

This study focused on graduates of Karurumo Village Polytechnic, Embu County. The reason Karurumo Village Polytechnic was chosen was because the researcher was from that area and so it offered an ideal setting that could be replicated with lesser complexities in other Karurumo Village Polytechnic in Kenya. This is a case study focusing only on the role of village polytechnics in entrepreneurship development: a tracer study of graduate's of Karurumo Village Polytechnic, Embu County. The study only focused in one village polytechnic of which may not be the same aspect in other village polytechnics, which was not a good representation of all types of village polytechnic. The questionnaire's data was based on the graduate's response, which could be untrue. In order to ensure the response was real and met the expectation of the result, respondent were given more time to read and understand the information that the study required.

Finally, the graduates sampled were fewer hence affecting the sampling size. In order to ensure sampled size was met, research assistance visited the respondents frequently till they met at least 80% of the sample size which was adequate for analysis.

## **1.6 Assumption of the Study**

The study assumed that all the sampled respondents from Karurumo village polytechnic were traceable and able to express themselves freely without hiding information. The other assumption is that this project will assist the policy makers in planning of technical and vocational educational and training of the youth in the country.

## **1.7 Definition of Significant Terms**

**Entrepreneurship:** Is the process of starting a business or other organization. The entrepreneur develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure.

**Entrepreneurship Development** This is success in producing desired or successful enterprises by graduates

**Innovations:** This referred to the introduction of new products or services, use of new methods of production, opening up new markets or use of new products.

**Self Employed:** 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.

**Tracer Study:** Is an approach which widely being used in most organization especially in the educational institutions to track and to keep record of their students once they have graduated from the institution. It is the follow up of graduates of higher education or institutes.

**Temporary Employment:**

Is a situation where the employee is expected to leave the employer within a certain period of time.

**Unemployed:**

Is a situation where someone of working age is not able to get a job but would like to be in full time employment.

**Vocational Skills:**

Are those skills which allow a person to master a particular subject or procedure that is applicable to a career.

**Youth Polytechnic:**

This refers to low cost based post-primary training institutions that prepare trainees on vocation and technical training.



## **1.8 Organization of the Study**

This study is organized in five chapters. Chapter one deals with background on the role of village polytechnics in entrepreneurial development in Kenya. It explores four key components that are involved in entrepreneurship development in youth polytechnics (Vocational skills acquired by the graduates, work done by the graduates after graduation, Business enterprises started by the graduates and innovations started by the graduates) can be used to improve the role the polytechnic play in entrepreneurship development in Country. Chapter two discusses the overview and development of youth polytechnics in Kenya. It looks at how the youth polytechnics can be used to equip young with relevant skills and attitudes that would lead the young people so trained into gainful self-employment in order for them to contribute in the entrepreneurship development of their communities by building up the economic strength of those communities. Chapter three deals with research methodology and expounds on the descriptive survey research design used and research instruments used questionnaires to collect both qualitative and quantitative data from the former Karurumo Youth Polytechnics graduates.

Chapter four deals with data analysis while Chapter five deals with recommendations, It looks at how graduates of Karurumo village polytechnic are making significant contribution in the labour market as workers in business or self-employment. It also looks at how vocational skills acquired have helped the graduates become entrepreneurs hence promoting entrepreneurship development in the country. It further examines how innovations make one risk money and fortunes and combine resources to start new products and services and also establish small and micro enterprises and create employment opportunities for other people.

## **CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

The purpose of the project was to investigate the role of village polytechnics in entrepreneurship development in Kenya. The present chapter reviews related literature and the theoretical and empirical literature on the subject investigated. It details overview of the Kenya education system after independence in 1963 with regard to vocational and technical education and training systems, the establishment of youth polytechnics in Kenya, theoretical literature on vocational training and entrepreneurship development in Kenya, conceptual framework of the study and empirical literature of previous studies and findings about youth polytechnics in Kenya.

### **2.2 Overview of Kenya Vocational and Technical Education Systems since Independence**

Kenya sought ways to make changes in the inherited educational system on achieving independence. The aim was to make educational system supportive and responsive to the newly developed national goals (Merrifield 1986). In the years following independence, two major commissions (Ominde Commission, 1964 and the Gacathi Commission in 1976) were appointed to review the education system (Republic of Kenya, 1964; Republic of Kenya, 1976) and to plan for its future. This resulted to increased schooling. The provision of increased primary education was achieved as a result of Ominde commission. The 1976 commission addressed unemployment among product of formal education at all levels of education. Manpower issues were also addressed and a programme of action was formulated to further develop Vocational and technical education and training.

Attempts to alleviate the problem of unemployment among the youth, particularly the primary school graduates were directed towards the establishment of non-formal vocational education and training institutions such as youth polytechnics (Sifuna 1984). These programs were to absorb youth polytechnics graduates for a few years and give them marketable skills (Hoppers, 1985). Vocational training was also a way of developing attitudes for self reliance as well as imparting workable skills (Bacchus, 1988, Simiyu, 1990).

UNESCO (1984) defined vocational and technical education as: “A comprehensive term refers to education processes where it involves, in addition to general education, the study of technologies and related sciences and acquisitions of practical skills and knowledge relating to occupations in various economic and social life”. The report of the presidential working party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988) also stipulated the need to expand and streamline vocational and technical training institutions and their training to cater for training demands of the 8-4-4 system of education, provide greater opportunities for training primary and secondary school graduates and provide more trained manpower for the economy. The courses offered in youth polytechnics included masonry, carpentry, metal work, tailoring, dressmaking, and motor mechanics among others.

### **2.3 The Establishment of Youth Polytechnics in Kenya**

A youth polytechnic is a low cost community based post primary training institutions (Yambo,1986). Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics were to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). Youth polytechnics were established in Kenya in 1966 after a conference held at Kericho on Education employment and rural development. The conference observed that only a small portion of primary school graduates received places in secondary schools (Sheffield 1967) and youth polytechnics were seen as part of alleviating the primary school graduate unemployment problem. The youth polytechnics were closely related to the local needs and absorption capacities of the rural villages (Thompson, 1981). Between 1966 and 1977, more than 53 youth polytechnics were established and the demand for them was expanding. Currently, there are over 700 youth polytechnics with enrolment of over 100,000 trainees (Republic of Kenya, 2012). The structure of youth polytechnic program at the national level includes a director of youth

training with four major divisions (Curriculum, Institutions and Examinations, Research Division, quality Assurance and Standards and Infrastructure Division). At the County level, there is county director of youth training and the district youth training officer at the district level. The principal (project manager) is the executive officer at the institutional level and serves as the link between staff, trainees, the board of governors and the district youth training Officer. A number of commission reports, sessional papers and studies have made various recommendations on vocation and technical education in Kenya. The education sector reforms in Kenya dates back to the independence period, with commissions, committees, working parties and task forces generating reports, with recommendations, some of which have been implemented in part while others have never been implemented completely. In 1964, there was the Ominde Commission; In 1976, there was the National Committee on Educational Objectives and Policies led by Gachathi; In 1981 there was the Presidential Working Party on the Second University in Kenya led by Mackay; In 1988 there was the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond led by Kamunge; In 1999, there was the Commission of Inquiry into the Education System of Kenya led by Koech. To date, no government documentation is available to the public with chronological details on what recommendations from these reports were adopted and implemented.

The Ominde Commission outlined what education was and had to be during and after independence. The blueprint laid the foundation of post-independence education. It was mandated to survey existing educational resources and to advise the government on the formation and implementation of the required national policies for education (Republic of Kenya, 1964; It is important to note that despite its noble objectives the Ominde Commission recommendations were not implemented in full, a blunder that has had significant effects on education .The Gacathi Report reiterated objectives of the Ominde Commission and sought to enhance the use of the Kenyan educational goals to shape its national character and development. It recommended development of vocational, technical, and practical education. In 1979, the government realized that education was not doing much to achieve its stated objectives. Education curriculum was viewed as being too academic, narrow and examination centered (Republic of Kenya, 1979).

Rate of unemployment grew as school leavers went to urban centers to seek for white-collar jobs. In the 1980s the government changed its policy on education. This was because of the difficulties, which were faced by graduates of its education system at both primary and secondary levels. Most graduates who were matriculating from these levels could not be absorbed into the shrinking labor market. This made the government to reconsider changing its education system and to set up a Presidential Working Party in 1981 (Republic of Kenya, 1981). The report sought to investigate ways in which education could make graduates from these levels self-sufficient, productive in agriculture, industries, and commerce. Education system was expected to ensure that students acquired technical, scientific, and practical knowledge vital for self and salaried employment, lifelong skills, and nation building. The commission was also mandated to investigate the feasibility of establishing a second university that was development centered. It advocated for a practical curriculum that would offer a wide range of employment opportunities and equitable distribution of educational resources. It gave rise to the current education system, the 8::4:4. System.

Kamunge Report of (1988) noted that the youth polytechnics (YPs) were provided with basic facilities and equipments to enable them give quality training at artisan level. It recommended that vocational education and training instructors be trained in pedagogy and their terms and condition of service be improved. The youth polytechnics management be strengthened and local authorities be given full support. It further stressed those facilities of youth polytechnics to be improved. The country's training institutions were not only inadequate but also lacked the essential facilities and technology to prepare students for the challenging labour market.

The Government of Kenya appointed the Commission of Inquiry into the Education system of Kenya (Koech Commission) in 1999. The commission made recommendations on ways that could be used to provide quality education (Republic of Kenya, 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQET) to reflect the vision of Kenyan education. TIQET, as a concept embraced the values and substance that was to characterize the education system. It was to be total because it was expected to be inclusive, accommodative, and life-long. It focused on

quality of delivery and outcome of the education and training process. The report reiterated that, the proposed education system was to become a ticket to a better life, and future for the individual, community and the nation. As a departure from the 8-4-4 system of education, TIQET had some basic innovations, namely: the expansion of access to basic education; elimination of disparities in education based on geographical, social and gender factors; introduction of manageable curriculum content; introduction of modular learning approach and credit accumulation. Specifically, the report called for legal educational reforms, for instance: reviewing of the education act, political will and commitment by making public policy pronouncements on the required changes, enhancing of efficiency and effectiveness in educational administration and management, ensuring there is prudent governance and management of resources, building and strengthening genuine partnership and collaboration among educational stakeholders. In addition, the report also called for cutting-edge reforms including totally integrated quality education training, abolition of the 8-4-4 and replacement with a system not very distinct from the pre-8-4-4 system of 7-4-2-3, and universities maintenance of 1:10 ratio of graduate/undergraduate student; (Republic of Kenya, 1999). The reported also pointed out that one of the hindrances to the development of a technological culture was found in some cultural beliefs and practices among a number of Kenyan communities towards technically related work. Many of them design vocational education for other people's children instead of designing a universal system that is suited for all children who decide to join that career including their own children. In his recommendations, Koech Commission strongly pointed out that vocational training centers be encouraged to offer courses according to the needs of their localities such as short tailoring courses for upgrading courses as well as Jua – kali operators and health workers for the surrounding community. Despite its candid professional research, assessments and honesty on the challenges that were facing Kenyan education system, Koech Report was never implemented by the government. It was perceived as being expensive and complex.

Kenya Vision 2030 is the new long-term development blueprint for the country. It is motivated by a collective aspiration for a better society by the year 2030. The aim of Kenya Vision 2030 is to create “a globally competitive and prosperous country with a high quality of life by 2030”. It aims to transform Kenya into “a newly-industrializing, middle-income

country providing a high quality of life to all its citizens in a clean and secure environment. Simultaneously, the Vision aspires to meet the Millennium Development Goals for Kenyans by 2015. It proposes intensified application of science, technology, and innovation to raise productivity and efficiency levels across the three pillars. It recognizes the critical role played by research and development in accelerating economic development in all the newly industrializing countries of the world. More resources will be devoted to scientific research, technical capabilities of the workforce, and in raising the quality of teaching mathematics, science and technology in schools, polytechnics and universities.

#### **2.4 Vocational Skills acquired by YP Graduates and Entrepreneurship Development**

Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics are to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). The vocational education and training in polytechnics include masonry, tailoring, carpentry, driving, dressmaking, metalwork and many others. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing. However, Ndua suggested that research was required on the dropout rate of the trainees. Every year a number of these graduates get out to the field and therefore the project investigated whether this graduate are able to use the skills acquired in contributing to entrepreneurship development in Embu county.

#### **2.5 Work Done by YP Graduates after graduation and Entrepreneurship Development**

On what graduates of youth polytechnics do after graduation ( Nzioka 1986, Kinyanjui 2007, Yambo (1986) found that graduates who had been trained in carpentry and masonry

where somewhat more rural oriented than those trained in welding and plumbing. Yambo contended that many courses had economic value and predicted that new courses be eventually introduced in Youth Polytechnics. For a long time in Kenya, graduation from any level of education was associated with employment either in the private or public sector. The quality of an institution was based on how many of its graduates were employed after graduation. The reality is now different. The labour market has become very competitive and open joblessness is being experienced among graduates in all education levels. According to Kinyanjui, 2007, the youth polytechnic employees enter the labour market as employees (30%), Self-employment (42.2%) and only 22.2% of the graduates were unemployed. The key jobs for YP graduates were casual, contracts, carpentry, mechanics, welding and dress making among others. Polytechnic graduates were also employed in polytechnics as instructors, machine operators and electrical repairs. Some few graduates were employed in jobs such as hotel attendants, vegetable vending, and hairdressing. The studies revealed that polytechnic education is a holding ground for youth in village as they wait for their dream careers. The current project investigated whether these graduates played a role in entrepreneurship development in the County.

## **2.6 Creation of New Business Enterprises by YP Graduates**

The business perspective views entrepreneurship as the process of creating new business organization with intention of making profit. The entrepreneurs are organizers and coordinators of the major factors of production such as capital, labour and land. They properly mix these factors of production to start business enterprises. Entrepreneurs have initiative and self-confidence in accumulating and mobilizing capital resources for new business. Many youth polytechnics graduates find self-employment or starting new business as a means of making profitable career. This creates growth and wealth. Kinyanjui (2007) in a Trace and policy study of youth polytechnic graduates from Kwale, Kitui, Makueni and Taita Taveta found out that youth polytechnic staffing is one of the policy issues that need urgent attention. There was a clear need for policy to address staffing especially for instructors in the youth polytechnics. It also found out that there are no technicians to assist the instructions in handling the practicals. The study recommended polytechnic staffing will require restoring confidence and enhanced motivation and the beginning point being the



development of scheme of service for the youth polytechnic instructors. The study also recommended that equipments in youth polytechnic are inadequate and old.

UNDP (2012) in a study titled, Skills gap analysis for graduates of youth polytechnic, vocational training Centers and out-of-school youth found out that existing infrastructure and equipment in public youth polytechnics are dilapidated, inadequate and require renovation and modernizing if they are to produce high quality graduates. Most of the instructors are not competent enough to deliver quality skills training to the youth polytechnic trainees. Formalized partnership particularly between youth polytechnics and the industry was found to be lacking thereby making it difficult to align the youth polytechnic training with the demands of the industry and therefore reducing the contribution of Youth Polytechnic graduates in entrepreneurship development. The project investigated whether graduates from the youth polytechnics are involved in starting business enterprises and stimulating investment interests. Were the graduates able to generate income, provide training ground for other people, convene and utilizes local resources and start new business?

### **2.7 Innovations Started by YP Graduates and Entrepreneurship Development**

Schumpeter (1934) said entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before. Apart from being innovators, entrepreneurs are risk-takers and take advantage of business opportunities and transform these into products. This spirit has greatly contributed to the modernization of economics and new technologies. The project investigated whether the polytechnic graduates are able to start new products and create employment. Were the graduates able to use their innovations to satisfy human needs in a more convenient and pleasant way. Application of new technology is necessary for the future growth of business. A technical entrepreneur is as good as a craftsman. Because of the craftsmanship they develop quality goods. They also develop alternative marketing and distribution strategies in order to promote business. Entrepreneurs are creative. They can create customers and buyers. Due to their innovative nature they persist on discerning new sources of materials to improve their enterprises and transform these into profits.

Entrepreneurs like starting something new or different. Kelemba (2010) in a survey of initiatives in current use of integrating of education for sustainable development in centre's of excellence carried out in six TVET institutions in Kenya found out that there was an approach to inspire trainees to think about what they can achieve through their own lives and future careers, however, the major barriers to enacting sustainable development include overcrowding in some part of the curriculum, the perceived relevance by the staff, limited internal accreditation including institutional commitment and validation systems, financial obligation and confusion over what and how to teach sustainable development in youth polytechnics. Every year there are new technologies, new markets, and new products and therefore the project investigated whether the youth polytechnics graduates are able to utilize the opportunities and develop their entrepreneurship skills.

## **2.8. Theoretical Framework**

The theoretical framework on technical training and entrepreneurship development advanced in the project is-

### **2.8.1 The Goal Theory by Latham and Lockie**

According to Goal theory as developed by Latham and Lockie, (1979) there are four main mechanisms that connect goals to training outcomes. They direct attention to priorities , stimulate efforts, challenge people to bring their knowledge and skills to bear and increase their chances of success and the more challenging the goal, the more people will draw on their full repertoire of skills. The theory emphasizes on setting and agreeing on objectives against which performance is measured and managed. It also emphasizes on feedback and review aspects of performance management (Armstrong, 2010).It is against this framework that the project investigated whether graduates of youth polytechnics used the theory to succeed in what they do after graduating from the youth polytechnics. They combined their skills training and career progression by engaging in business, introducing new products, new methods of doing business, new marketing strategies and other income generating activities to enable them to succeed in life and develop their entrepreneurship skills.

### **2.8.2 Constructivism Theory of Training**

The theory advocates that we construct our own understanding of the world we live in. Each of us generates our own rules and mental models, which we use to make sense of our experiences. It advocates taking learning as a process of adjusting mental models to accommodate new experiences. Constructivists believe that learners construct their own reality or at least interpret it based upon their perception of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures, and beliefs that are used to interpret objects and events. What someone knows is grounded in perception of the physical and social experiences that are comprehended by the mind (Jonassen, 1991).

Constructivists call for elimination of standardized curriculum and instead promote use of curriculum that is customized to the student's prior knowledge and market based knowledge. It also emphasizes on hands on problem solving. They say education should focus on making connections between facts and fostering new understandings in students. Instructors should tailor their teaching strategies to student's response and encourage students to analyze, interpret, and predict information and use the knowledge to develop various skills that they can use in future after leaving school. It is against this framework that the project investigated whether graduates of youth polytechnics are using the theory to succeed in what they do after graduating from the youth polytechnics and whether their skills are market oriented and useful after graduation.

### **2.8.3 McClelland's Need for Achievement Theory**

McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence. Those people who have high need for achievement are more likely to succeed as entrepreneurs. Need for achievement refer to the desire to accomplish something with one's effort? It is the urge to excel or the will to do well. Need for power means the desire to dominate and influence others by controlling their actions and use of physical objects. Need for affiliation implies the desire to establish and maintain friendly and warm relation with others. The project investigated whether youth

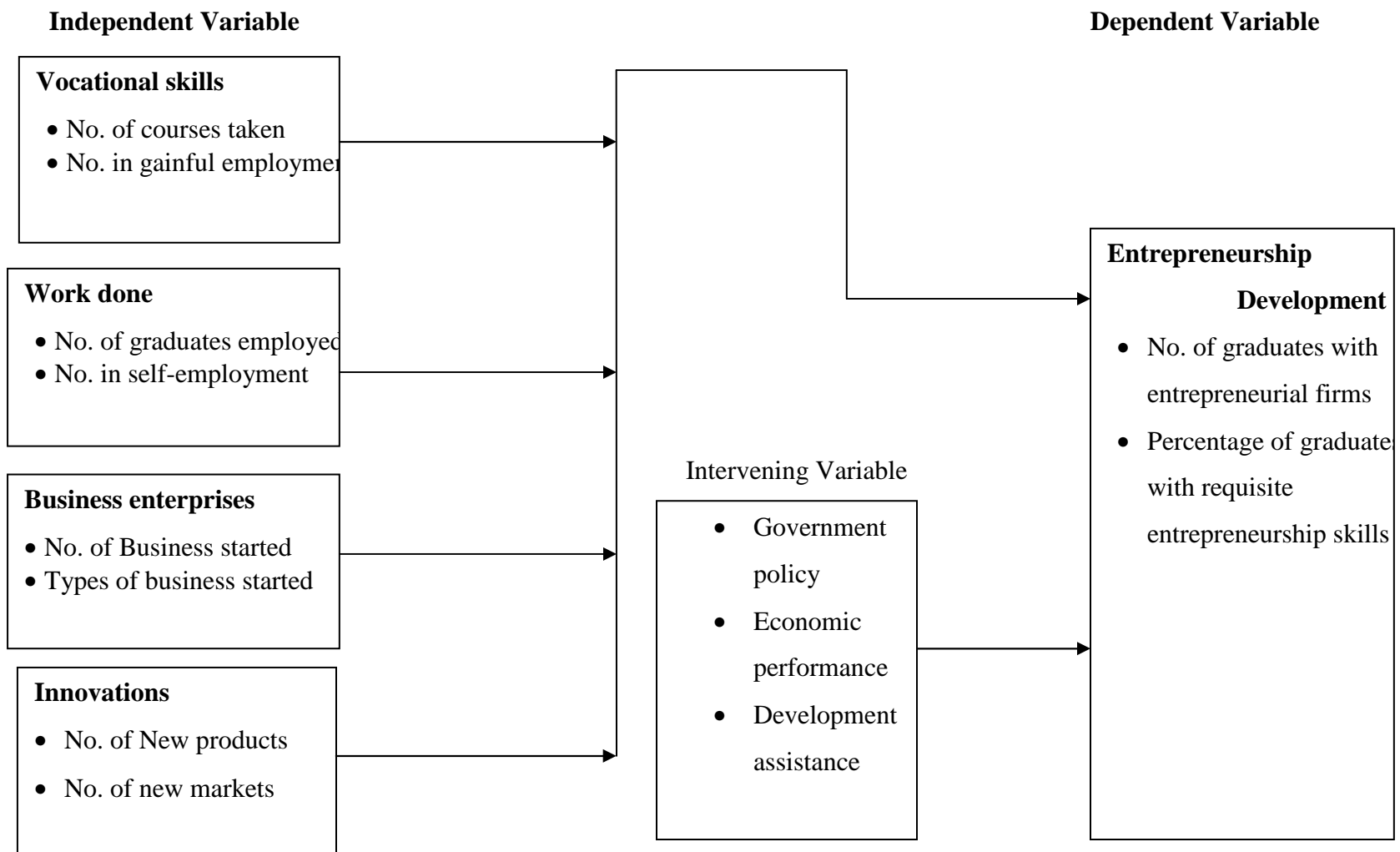
polytechnics graduates are able to use this framework to ensure that they develop their entrepreneurship skills.

## **2.9 Conceptual Framework of the Study**

A conceptual framework helps simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda & Mugenda, 2003). The conceptual framework of the study was based on four independent variables namely; vocational skills acquired by the graduates, work done by the graduates, new business started by graduates and innovations stated by graduates.

An entrepreneur and his/her enterprise have been described as the engine of development. Scholars such as Schumpeter and Cantillon, see entrepreneur as the main catalyst through which any country achieves development. It is in this light that entrepreneurship is seen as the ability to perceive of a business opportunity and exploit it for the purposes of generating a profit, which in turn is used as capital for further investment or as a livelihood means. Entrepreneurship brings innovation through such activities as creation of new products, acquiring of new skills, investing in new technologies, acquiring new sources of raw materials, new production methods, creation of new markets and even new managerial innovations for developments. Entrepreneurship plays a major role in economic development of any economy by promoting capital formation by mobilizing the idle savings of the public, encourages effective resources mobilization of capital and skill that might otherwise remain unutilized and idle. Entrepreneurism an innovator who introduces new combinations of means of production. Innovation involves making use of new things or doing of things that are already being done in a new way. Entrepreneurs are risk takers and insecurity bearers. If the venture succeeds, the entrepreneur profits, if it does not, loses occur. The entrepreneurs must make use of his/her initiatives to reduce risks or uncertainties. They also make business decision, once the entrepreneur is convinced that a particular line of production offers large prospects, he/she has to formulate action plan regarding the product and the quality of products to be produced. He /she has to find the best possible method of production which ensures he/she succeeds. Entrepreneurs arrange finances, purchases raw materials, supervises, sells and markets and assures the role of manager in the enterprise.

In line with this definition and function of entrepreneurship taken above, the project used the below conceptual framework to explain the role of village polytechnics graduates in entrepreneurship development in Kenya. The project looked at whether what graduates of youth polytechnics do after graduation , business enterprises started by the YP graduates, innovations started by the youth polytechnic graduates and vocational skills acquired by the graduates contributes to entrepreneurship development in Embu county and Kenya as a whole.



**Figure 2.1 Conceptual framework**

## 2.10 Knowledge Gaps

The gaps identified in the reviewed literature are as shown on table 2.1

**Table 2.1 Knowledge Gaps**

<b>Variable</b>	<b>Author and Year</b>	<b>Findings</b>	<b>Knowledge gap</b>
Vocational skills and entrepreneurial development by the graduates	Kelemba, (2012) Ndua,(1988) Moyas, (2012) Sifuna (1975) Waithaka, (1989)	Found out that their existed a strong relationship between vocational skills and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	There is need to explore this findings in the context of Kenyan youth polytechnics so as to clearly examine the exact relationship
Work done and entrepreneurial development by the graduates	Moyas (2012) Nzioka (1986) Kinyanjui (2007)	These studies found out that their existed a strong relationship between work done and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	These studies do not indicate clear methodologies that were used to reach this conclusion. On this basis, my study shall designed a clear methodology to verify this influence
Businesses and entrepreneurship development by the graduates	UNDP(2012) Kinyanjui (2007)	There seems to exist a strong relationship between business and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail.
Innovations and entrepreneurial development by the graduates	Schumpeter (2004) Kelemba (2010)	There seems to exist a strong relationship between innovations and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail

## **2.11 Summary of Literature Review**

This chapter highlights the review of the previous studies on youth polytechnics in Kenya and the three theories namely, the Goal theory, the Constructivism theory and McClelland need for achievement theory that have been advanced about training and entrepreneurship development. It further reviews the conceptual framework with the four independent variables under study (What graduates of youth polytechnic do after graduation, types of business enterprises started, vocational skills acquired and innovations started by graduates of the polytechnic has the dependent variables).

This is due to the fact that various development plans and policies associate human development with economic development (Kamunge, 1998). It has been argued that there are many countries with trained and educated populations yet they lag behind in development (Prichet, 1996). Those of contrary opinion such as Ngware (2002), Alam (2007), see investments in education and training as being beneficial. They argue that education and training improves one's creativity, enhances individual's participation in economic development, and enhances one's competitiveness in the job market as well as future earnings. Therefore there is need for further research to ascertain the impact of investment in training on enhancing individual's competitiveness in labour market especially for the youth polytechnics graduates.

The review showed research studies that has been done on the role of vocational and technical skills on entrepreneurship development However, no such studies has been done in Embu County particularly targeting the Karurumo youth polytechnic graduates. This study hopes to fill in the gap.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter explained the research design, target population, sampling techniques, research instruments, data collection and analysis procedures and the operation definition of variables used.

### **3.2 Research Design**

The research design used in this study was descriptive survey design. The project aimed at investigating role of village polytechnic graduates to entrepreneurship development in respondent's opinion in relation to their role in entrepreneurship development in the country. This enabled the researcher to bring out the elements of the findings in a more clear and comprehensive manner. According to Creswell (2002) descriptive survey design is used when data is collected to describe person, organization, settings, and phenomena. A survey reports the way things which include behavior, attitude, values and characteristics are formed (Mugenda and Mugenda, 2003). The above design was therefore used to investigate the role of village polytechnic graduates to entrepreneurship development in Embu County. A self-administered questionnaire was used to collect the required quantitative and qualitative data from former trainees of Karurumo Youth Polytechnic. The Questionnaire comprised of two sections. The first part was designed to determine the demographic characteristics of the respondents, while the second part consisted of questions focusing on the four independent variables to be studied (Work done by graduates after graduation, business enterprises started by graduates, new innovations started by the YP graduates and Vocational skills acquired by YP graduates) had a role to play in entrepreneurship development in Embu county and Kenya as whole.

The questionnaire was designed in line with the objective of the study. To enhance quality of data obtained, Likert types of questions were included whereby respondents indicated the extent to which the variables were practiced in a five part Likert scale (Gamer, 2010). Structured and un-structured questions were also used to facilitate analysis and encourage the responses to give an in-depth response about the variables

without feeling held back in revealing any information. Secondary data was collected from the ministry of youth affairs and sports at the headquarters and from the county director of youth training in the county. This included annual reports and other related returns.

### 3.3 Target Population

The target population according to Cox (2010) is the entire set of units for which the survey data are used to make references. The target population constitutes the entire or totality of the items under study (Kothari, 2004). The target population for this study was 325 former graduates from Karurumo village polytechnic who graduated between 2003 and 2012 (10 years).

**Table 3.1 Target Population**

	<b>population</b>
YP Graduates from 2003 to 2012	325
<b>Total</b>	<b>325</b>

### 3.4 Sampling Procedure and Sample Size

Mugenda and Mugenda (2003) defined sampling as the selection of a portion of a population such that the selected portion represents the population adequately. Mugenda and Mugenda (2003) suggest that for descriptive studies 10% or above of the accessible population is enough for the study. This study targeted 20% of the target population of 325 making a total sample size of  $(0.20 \times 325) = 65$  as indicated in the below table:-

**Table 3.2 Sample Size**

	<b>Sample size</b>
YP Graduates (20% of 325)	65
<b>Total</b>	<b>65</b>

The former graduates of Karurumo youth polytechnic were traced in the whole county by the four research assistants under my guidance as the principal researcher. The research assistants were briefed on the research problem and what was expected from the questionnaire. The research assistants were encouraged to work as a team where necessary. In order to identify the respondents, the researchers were advised to visit the YP manager, instructors and chiefs to help them in tracing the graduates.

### **3.5 Data Collection Methods and Instruments**

The study used questionnaires in collecting data from graduates. The questionnaire combined both open-ended and close-ended questions which were administered to the graduates. Questionnaires were considered ideal for collecting quick data from the graduates.

The data collection procedure entailed the researcher obtaining an introduction letter from the University. The researcher then sampled graduates to inform them about the study and made arrangements for issuing questionnaires. The respondents were given instructions and assured of confidentiality and were given enough time to fill in the questionnaires, after which the researcher collected the filled –in questionnaires.

The researcher therefore sourced data from both primary and secondary sources. Primary data was gathered directly from respondents through questionnaires. Secondary data was used because there were some data from published materials and information e.g. journals and the internet.

#### **3.5.1 Pilot Testing of the Questionnaires**

Pilot testing of the questionnaires before embarking on real research was important in order for it to reveal deficiencies (Mugenda and Mugenda (2003). Eleven questionnaires were used for pilot testing to ensure reliability and validity in the adjacent Tharaka Nithi County. Former graduates of Muthambi YP were traced and interviewed. The pilot data was not included in the study. The recommendations of the supervisor enhanced the validity of the instruments. This established the reliability and the validity of the instruments.

### **3.5.2 Reliability of the Research Instruments**

In order to ensure reliability of instruments, questions in the questionnaires were constructed and first pre-tested to ensure consistency in measurement. The test-retest technique of assessing reliability of a research involved in administering the same instruments twice to the same group of subjects. This was after a lapse of two weeks. Spearman rank order correlation was employed to compute the correlation coefficient in order to establish the extent to which the content of the questionnaires was consistent in eliciting the right responses every time the instrument was administered. A correlation coefficient ( $r$ ) of 0.85 was considered high enough in judging the reliability of the instruments.

### **3.5.3 Validity of the Research Instruments**

Just as it was observed by Patten (2004) and Wallen & Fraenkel (2001) that a study instrument is only valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed, the current study put in place measures to ensure that the instruments used in the study provided accurate result. The content validity of the instruments was measured. The researcher's supervisors helped the researcher to assess the concept the instruments was measuring in order to determine whether the set of items were accurately representing items under study. The recommendations of the supervisor enhanced the validity of the instruments.

### **3.6 Data Analysis Techniques**

The data collected was coded, cleaned and entered into the computer and analyzed using the statistical package for social sciences (SPSS). Descriptive statistics was used to analyze the data. Descriptive statistics provided for meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution and was used to analyze and generalize the results of analysis to the population (Kothari, 2008). This is because the variables studied were measured at ratio or interval scales and were continuous (Patton, 2003). For analysis of quantitative data, the data was converted into numeric codes representing attributes or measurements of variables. Coding included as much information as possible because once the coded data was entered into the computer,

it was possible to recover any details, which were omitted ( Mugenda &Mugenda, 2003). Generalization was done from the themes about the phenomena in question and interpreted in the light of available literature (Kumar, 2005). Qualitative analysis was important since it supplemented the quantitative analysis that created a better framework for the interpretation of the findings (Kothari 2008). Data was then presented in pie charts and tables and explained

### **3.7 Operational Definition of Variables**

To operationalize the research variables, the matrix below defines how the variables was measured

### 3.8 Operational Definition of Variables

To operationalize the research variables, the matrix below defines how the variables was measured

**Table 3.3 Operational definition of variables**

Objectives	Variables	Indicators of Measurements	Measurements scale	Tools of Analysis	Type of Analysis
To determine how vocational skills acquired by graduates from Karurumo Village Polytechnic in the last 10 years contributed to entrepreneurship development in Embu county	Independent: vocational skills acquired by graduates	<ul style="list-style-type: none"> <li>No. of graduates in gainful employment</li> <li>No. of courses taken by graduates</li> </ul>	Nominal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To find out whether what graduates from Karurumo village polytechnic do after graduation contributed to entrepreneur development in Embu county	Independent: what graduates from Karurumo village polytechnic do after graduation	<ul style="list-style-type: none"> <li>No. of graduates employment</li> <li>No. of graduates self- employment</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneur development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Nominal		
To determine whether types of business started by graduates from Karurumo Village Polytechnic in the last 10 years contribute to entrepreneurship development in Embu County	Independent: types of business started by graduates	<ul style="list-style-type: none"> <li>No. of business started</li> <li>Types of business started</li> </ul>		Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To establish whether innovations started by graduates of Karurumo Village Polytechnic in the last ten years contribute to entrepreneurship development in Embu County	Independent: Innovations started by graduates	<ul style="list-style-type: none"> <li>No. of new products started</li> <li>No. of new technologies started</li> <li>New markets started</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		

**Table 3. 4 The number of Trainees enrolled at Karurumo Youth Polytechnic since 2003 to December 2012**

Dist.	YP	Name of Course	Youth Polytechnic Graduates since 2003 to December, 2012																													
			2003			2014			2005			2006			2007			2008			2010			2011			2012					
			M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
Emb		MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10
		Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11
		Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10
		Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15
		Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17
<b>Grand Total</b>												25						36					18			34			53			63

### **3.9 Ethical Considerations**

To avoid biases in this study, the researcher took into consideration the qualitative research that uses a case study approach which tends to skew data in certain ways (Mason, 2002). All ethical procedures were considered. Multiple methods were used and acknowledgement of researchers' role assisted in mitigating all the biases in the study.



## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

### 4.1 Introduction

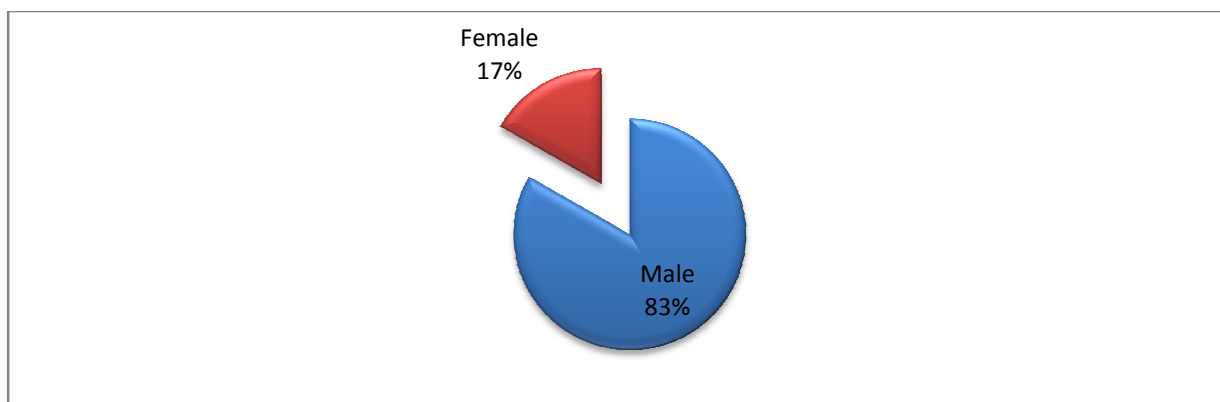
This chapter presents analysis and findings of the study as set out in the research methodology. The results were presented on the role of village polytechnics in entrepreneurship development. The study targeted 65 respondents out of which 60 responded and returned their questionnaires contributing to the response rate of 92.3%. This response rates were sufficient and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was due to extra efforts that were made via personal calls and visits to remind the respondent to fill-in and return the questionnaires. The chapter covers the demographic information, and the findings were based on the objectives.

### 4.2 Demographic Information

#### 4.2.1 Gender distribution of the respondents

The study sought to establish the respondent's gender distribution. The findings are as stipulated in figure 4.1.

**Figure 4.1 Gender of the respondents**



From the findings illustrated in figure 4.1 the majority of the respondents (83%) were males while 17% were females. This illustrates that there was gender disparity as majority of the respondents were males.

### 4.2.2 Highest level of Education

The research sought to establish respondents' highest level of Education. The findings are as stipulated in figure 4.2.

**Figure 4.2 Highest level of Education**

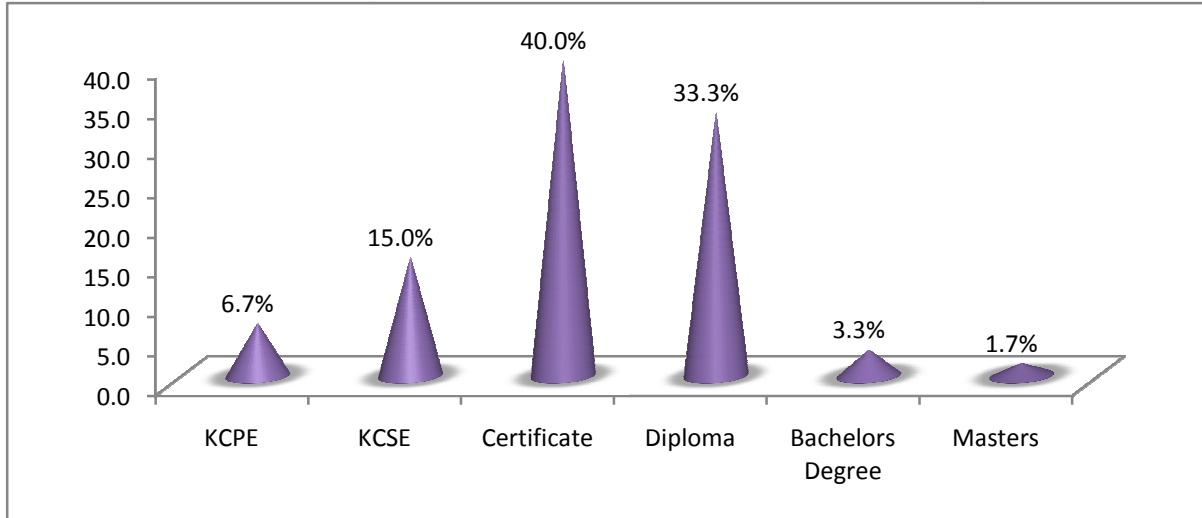
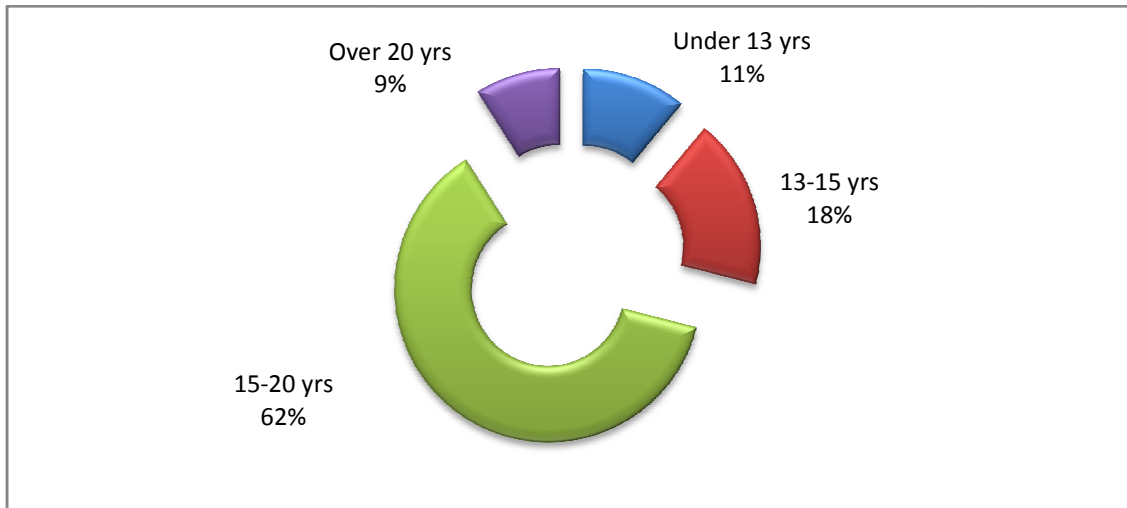


Figure 4.2 indicates that most of the former graduates from Karurumo youth polytechnic (40%) had college certificates level of education, 33.3% had college diplomas and 15% had Kenya certificate of secondary education while 6.7%, 3.3% and 1.7% had Kenya certificate of primary education, bachelor's degree and Masters degree respectively. This illustrates that majority of the graduates from Karurumo Youth Polytechnic had college certificates and diplomas respectively. This shows that most of the graduates were able to carry out entrepreneurship development without many problems owing to their level of education.

### 4.2.3 Age the trainees joined the Polytechnic

The study also sought to establish the age at which the respondents joined the Polytechnic. The findings are as stipulated in figure 4.3.

**Figure 4.3 Age trainees joined Polytechnic**



From the study findings, majority of the respondents (62%) joined the Polytechnic at the age of 15-20 years, 18% at the age of 13-15 years while 11% and 9% joined the polytechnic at the age of less than 13 years and over 20 years respectively. This implies that majority of the graduates from Karurumo youth polytechnic had joined the institution at the age of 15-20 years. This was the normal age at which students/trainees are enrolled in the polytechnics and therefore they were suitable to join the training.

**4.2.4 Number of Years trainees spent in the Polytechnic**

The study further sought to establish the number of years that the respondents spent in the polytechnic. The findings are as stipulated in table 4.1.

**Table 4.1 Number of Years trainees spent in the Polytechnic**

	Frequency	Percentage
< 1 yr	3	5.0
1 & < 2 yr	14	23.3
2 & <3 yrs	23	38.3
3 & < 4 yrs	11	18.3
> 4 years	9	15.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents (38.3%) had spent 2-3 years at Karurumo youth polytechnic, 23% had spent 1-2 years and 18.3% had spent 3-4 years while 15% had spent over four years at Karurumo Youth Polytechnic. This implies that majority of the graduates from Karurumo Youth Polytechnic had spent 2-3 years in the institution that was relatively enough to acquire the desired skills. This is the normal duration that the trainees take in the polytechnics.

#### 4.2.5 Reasons for enrolling in the Youth Polytechnic

The study sought to establish the reasons why the respondents enrolled in the youth polytechnic. The findings are as stipulated in table 4.2.

**Table 4.2 Reasons for enrolling in the Youth Polytechnic**

	Frequency	Percentage
Acquiring of skills	53	88.3
Interested or liked courses offered in the YPs	44	73.3
Forced by circumstances	49	81.7
Lack of school fees for secondary education	51	85.0
Failure to score good grades in KCPE	53	88.3
To be self employed	39	65.0
Polytechnic education is affordable	46	76.7

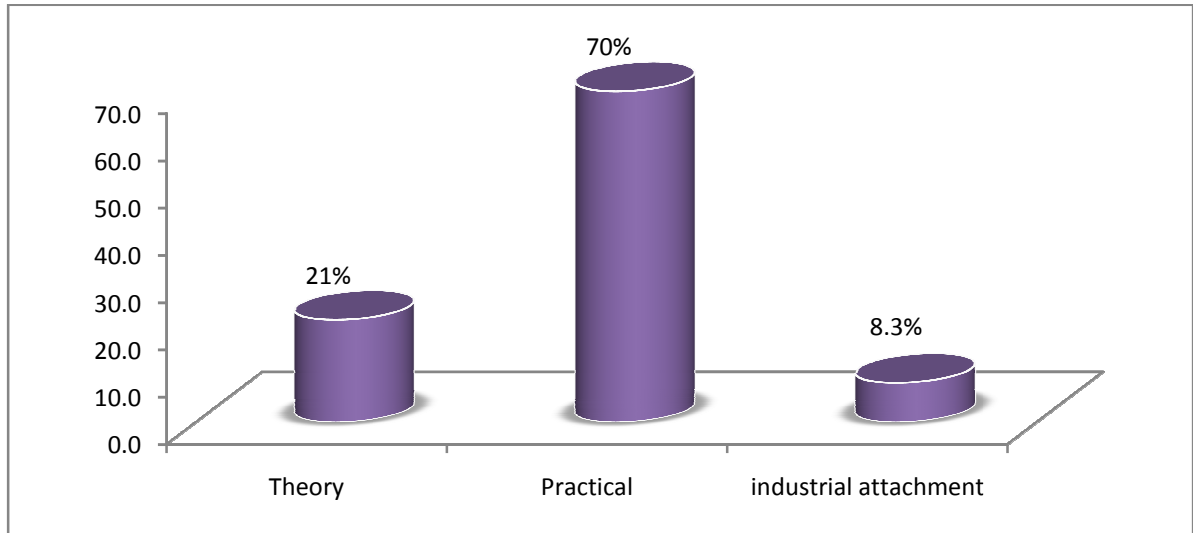
From the study findings, majority of the respondents (88.3%) indicated acquiring of skills and failure to score good grades in KCPE as the reasons why they enrolled in the youth polytechnic, 85% cited lack of school fees for secondary education and 81.7% indicated that they were forced by circumstances to enroll in the youth polytechnic. On the other hand, 76.7% indicated that polytechnic education was affordable and 73.3% cited that they were interested or liked courses offered in the YPs while 65% indicated that they enrolled in the youth polytechnic due to failure to score good grades in KCPE. Majority of the trainees had divergent reasons why they joined the polytechnics but acquiring of skills and failure to score good grades in KCPE stood out.

### 4.3 Vocational Skills and Entrepreneurship Development

#### 4.3.1 Aspects of the course undertaken in the polytechnic and day today life

The study asked the respondents to indicate the aspects of the course undertaken in the polytechnic and what they were doing on day today life. The findings are as stipulated in figure 4.4.

**Figure 4.4 Aspects of the course undertaken in the polytechnic**



From the study findings, majority of the respondents (70%) indicated that the aspects of the course undertaken in the polytechnic was practical in their day to day life, 21% indicated that it was theoretical while 8.3% indicated that the aspects of the course undertaken in the polytechnic helped the respondents in their industrial attachment. This meant that the respondents were able to acquire practical skills that they used when they got out from the polytechnic and were able to use it to develop their entrepreneurship skills. This shows that the graduates were able to get the right practical skills that enabled them to be competent, effective and efficient in the operations of the day to day life.

#### 4.3.2 Outcome of vocational skills acquired in the polytechnic

The study also sought to establish the outcome of vocational skills acquired in the polytechnic among the respondents. The findings are as stipulated in table 4.3.

**Table 4.3 Outcome of vocational skills acquired in the polytechnic**

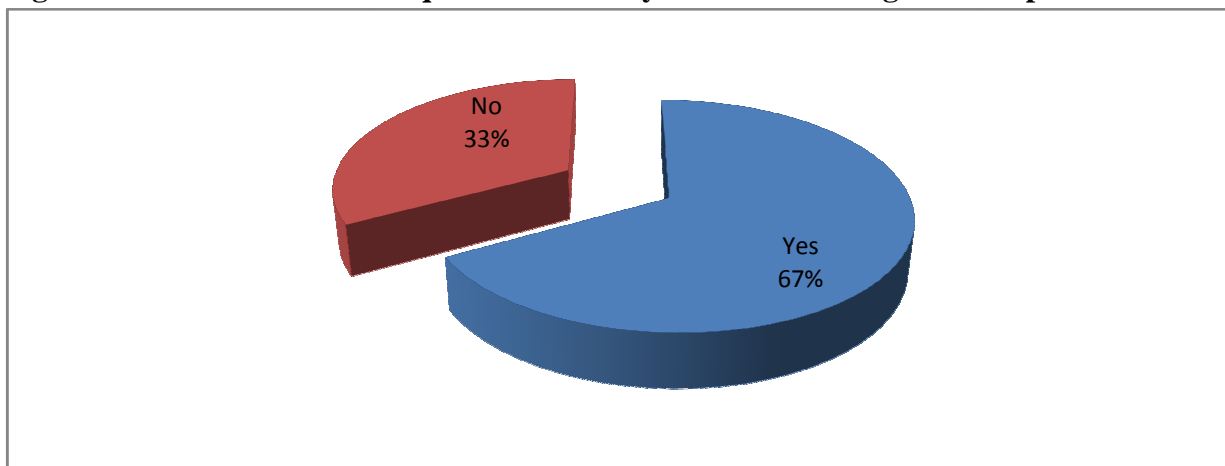
	Frequency	Percentage
Entrepreneur	23	38.3
Trainer	11	18.3
Self-employed	18	30.0
Employed	8	13.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents, 38.3% indicated that the vocational skills acquired in the polytechnic helped them to be entrepreneurs, 30% indicated self-employed while 18.3% and 13.3% indicated that the vocational skills acquired in the polytechnic helped them to be trainers and employed respectively. This implies that the vocational skills acquired in the polytechnic helped majority of the graduates from Karurumo Youth Polytechnic to be entrepreneurs. It also shows that Karurumo Youth Polytechnic graduates were doing well in life because of the vocational skills they acquired during their training. This was in line with expectation as they joined the polytechnic.

#### **4.3.3 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

The study asked the respondents to indicate whether the Vocational skills acquired in the Polytechnic helped them become an Entrepreneur. The findings are as stipulated in figure 4.5.

**Figure 4.5 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

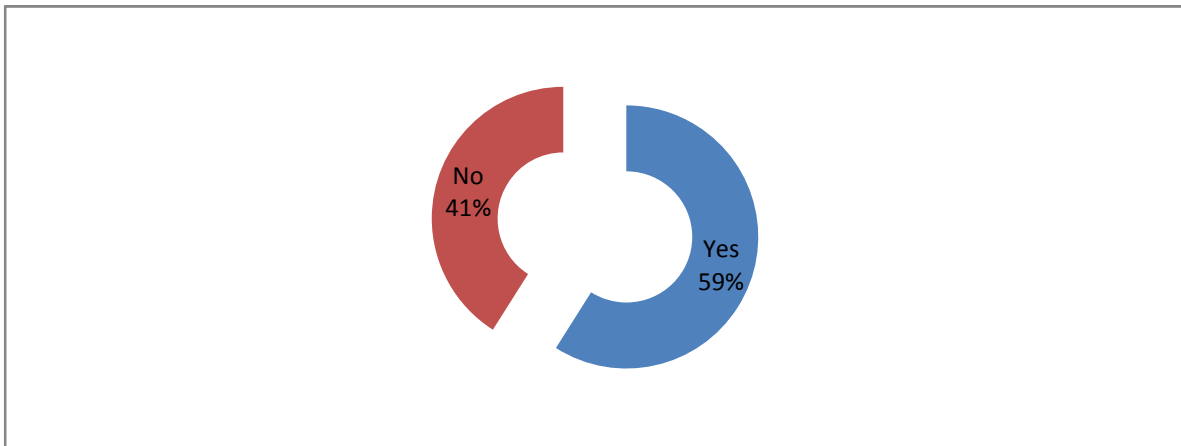


From the study findings, majority (67%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them become an entrepreneur while 33% were of a contrary opinion. This implies that vocational skills acquired in the Polytechnic help graduates become Entrepreneurs.

#### 4.3.4 Vocational skills acquired in the Polytechnic

The study further asked the respondents to indicate whether the vocational skills acquired in the polytechnic helped them improving entrepreneurship skills. The findings are as stipulated in figure 4.6.

**Figure 4.6 Vocational skills acquired in the Polytechnic**



From the study findings in the figure above, majority (59%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them improve their entrepreneurship skills while 41% were of a contrary opinion. This is in line with Waithaka, (1989) who observed that young school graduates with relevant skills and attitudes would lead the young people to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities.

#### 4.3.5 Vocational skills and Entrepreneurship development

The study sought to establish the role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. The findings are as stipulated in table 4.4.

**Table 4.4 Vocational skills and Entrepreneurship development**

	<b>Frequency</b>	<b>Percentage</b>
Promotion of new business	33	55.0
Promotion of innovations	44	73.3
Provision of new technologies	49	81.7
Creation of new products	51	85.0
Acquiring of new skills	56	93.3
Creation of new markets	39	65.0

From the study findings, majority of the respondents (93.3%) indicated acquiring of new skills as the role of promotion of entrepreneurship development, 85% indicated creation of new products, 81.7% indicated provision of new technologies and 76.7% indicated new production methods while 73.3% indicated Promotion of innovations. On the other hand, 65% indicated creation of new markets and 55% indicated promotion of new business. This implies that acquiring of new skills was the main role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. This agrees with Schumpeter (1934) who indicated that entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before.

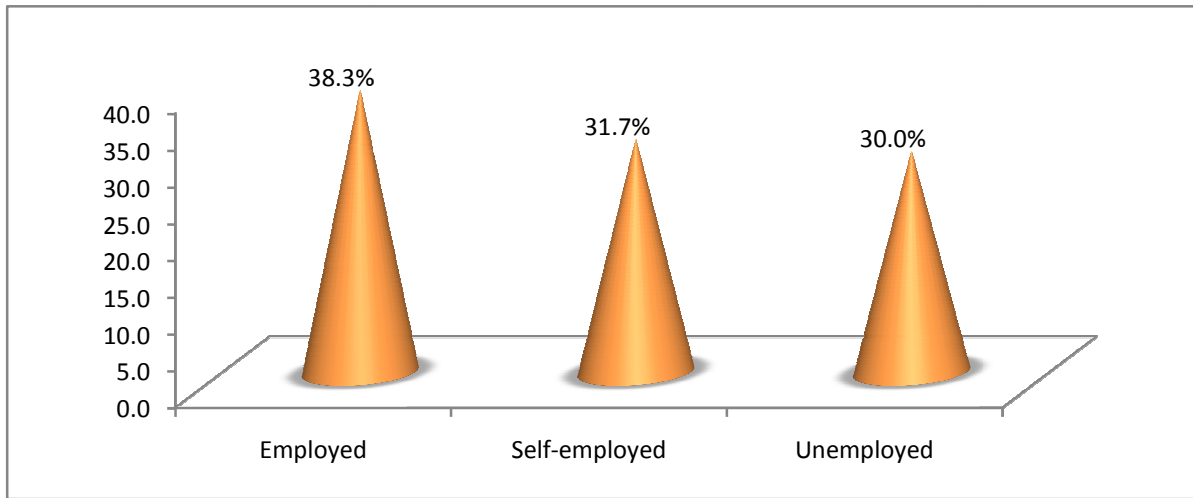
#### **4.4 What graduates do and Entrepreneurship Development**

##### **4.4.1 Employment status**

The study sought to establish the employment status of the graduates from Karurumo youth polytechnic. The findings are as stipulated in figure 4.7.



**Figure 4.7 Employment status**

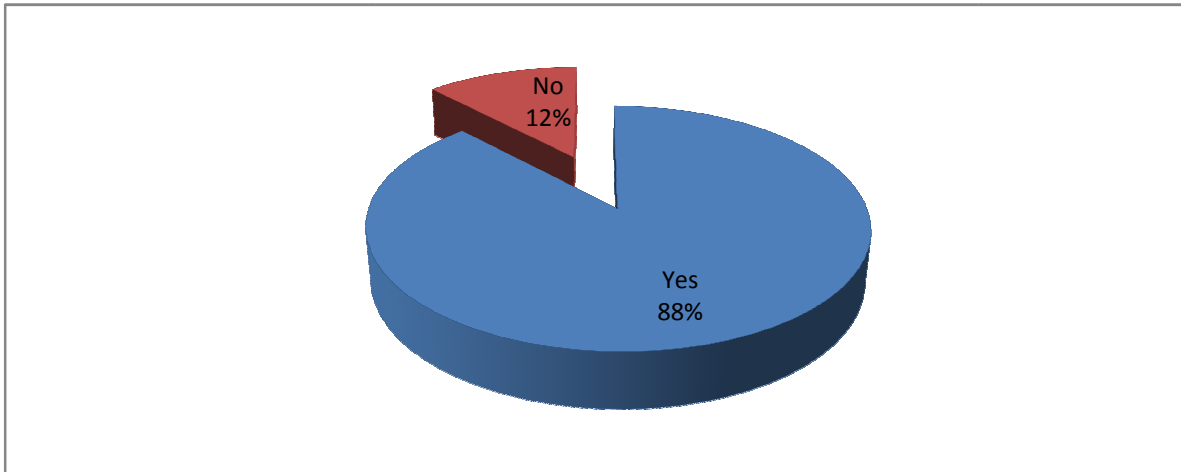


From the study findings, most (38.3%) of the graduates from Karurumo youth polytechnic indicated that they were employed, 31.7% were self-employed while 30% were unemployed. This implies majority of the graduates from Karurumo youth polytechnic were employed. This finding concur with the findings of Achieng (2012) on the study of factors affecting acquisition of vocational skills among learners in Maranda division of Siaya district that found that vocational education main aim is to offer skills to learners that can help them to be self-employed. Vocational skills create greater impact on human resource development and economic growth.

#### **4.4.2 Certificate from Youth Polytechnic and chances of employment**

The study asked the respondents to indicate whether skill training certificate from youth polytechnic enhanced their chances of employment. The findings are as stipulated in figure 4.8.

**Figure 4.8 Certificate from Youth Polytechnic and chances of employment**

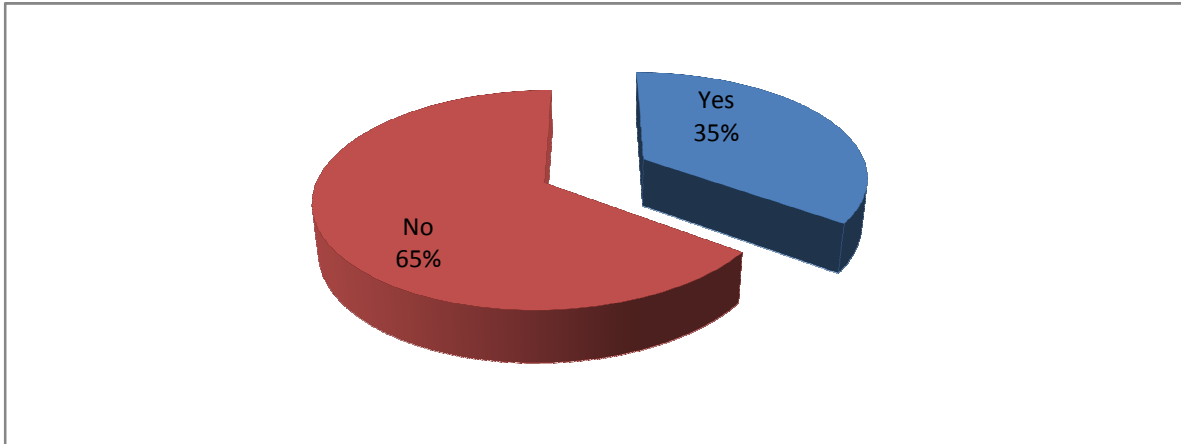


From the figure above, majority (88%) of the graduates from Karurumo youth polytechnic agreed that skill training certificate from youth polytechnic enhanced their chances of employment while 12% disagreed. This implies that skill training certificate from youth polytechnic enhanced graduates chances of employment. This concurred with the findings of Ibuathu (2013) on the study of the impact of vocational training for rural development in Nyambene district in Kenya that found out that 60% of the respondents said youth polytechnic graduates were marketable were learning their own business that included tailoring, carpentry and welding shops.

#### **4.4.3 Offering of Training by the former Polytechnic Graduates**

The study sought to establish whether the graduates from Karurumo youth polytechnic offered any training. The findings are as stipulated in figure 4.9.

**Figure 4.9 Offering of Training by the former Polytechnic Graduates**

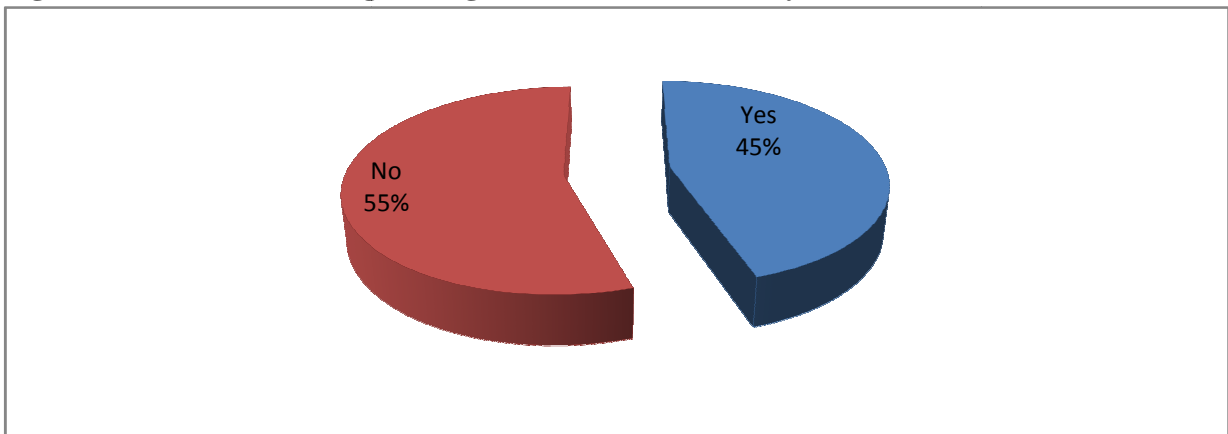


From the findings of the study, majority (65%) of the graduates from Karurumo youth polytechnic disagreed that they offered trainings with 35% agreeing that they offered trainings. This implies that graduates from Karurumo youth polytechnic did not offer trainings. This is in line with Kinyanjui (2007) the youth polytechnic employees enter the labour market as employees, Self-employment and only 22.2% of the graduates were unemployed.

**4.4.4 Use of Training skills gained in the Youth Polytechnic to train**

The study further sought to establish whether the graduates from Karurumo Youth Polytechnic used the training skills gained in the Youth Polytechnic to train. The findings are as stipulated in figure 4.10.

**Figure 4.10 Use of Training skills gained in the Youth Polytechnic to train**



From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic disagreed that they used the training skills gained in the Youth Polytechnic to train with 45% who used the training skills gained in the Youth Polytechnic to train. This implies that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train.

#### 4.4.5 Role of training in entrepreneurship development

The study asked the respondents to indicate the role of training in entrepreneurship development in the County. The findings are as stipulated in table 4.5.

**Table 4.5 Role of training in entrepreneurship development**

	Frequency	Percentage
started new business	33	55.0
Created new products in the market	35	58.3
Value addition to products	49	81.7
New technology	32	53.3
Opening new markets	53	88.3
Providing new services	41	68.3
Providing training services	58	96.7

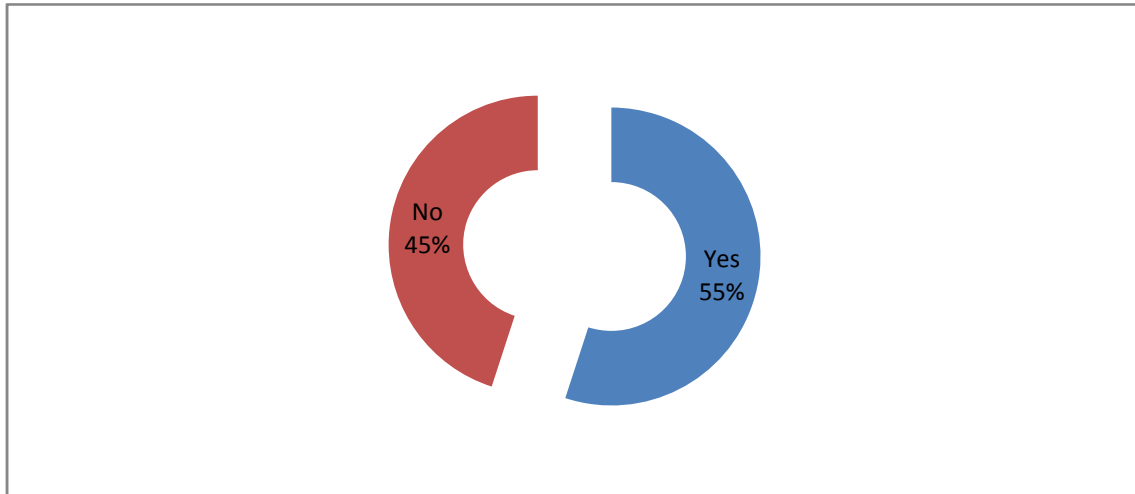
From the table above, majority (96.7%) of the graduates from Karurumo youth polytechnic indicated provision of training services as the role of training in entrepreneurship development in Embu County, 88.3% indicated opening of new markets, 81.7% indicated value addition to products and 68.3% indicated provision of new services while 58.3%, 55% and 53.3% indicated creation of new products in the market, starting of new businesses and new technology as the role of training in entrepreneurship development in Embu County. McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence.

## 4.5 Business started and their role in entrepreneurship

### 4.5.1 Business enterprise after graduation

The study asked the respondents to indicate whether they had started any business enterprise after graduation. The findings are as stipulated in figure 4.11.

**Figure 4.11 Business enterprise after graduation**

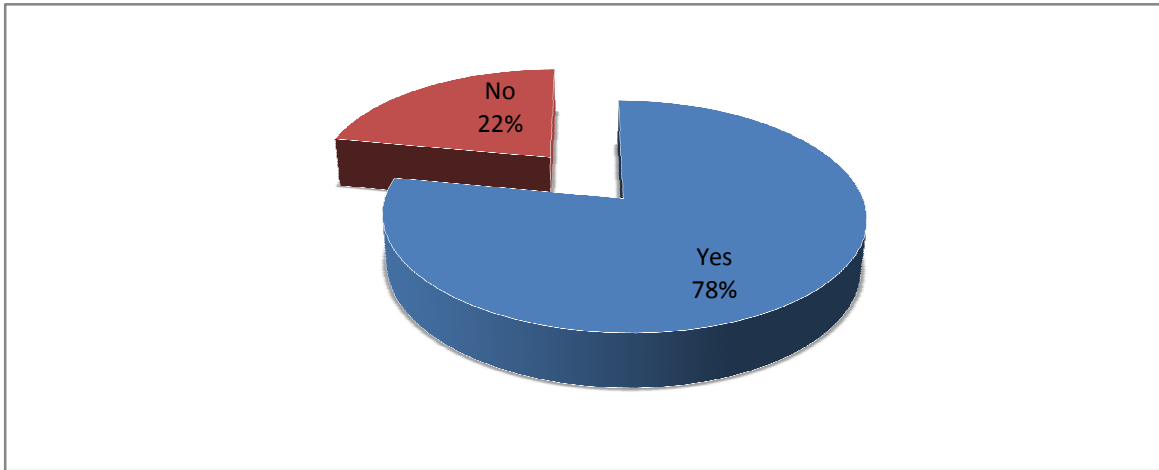


From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic agreed that they had started business enterprise after graduation while 45% had not. This implies that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation.

### 4.5.2 Business started and course taken at polytechnic

The study also sought to find out whether the businesses started were related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.12.

**Figure 4.12 Business started and course taken at polytechnic**

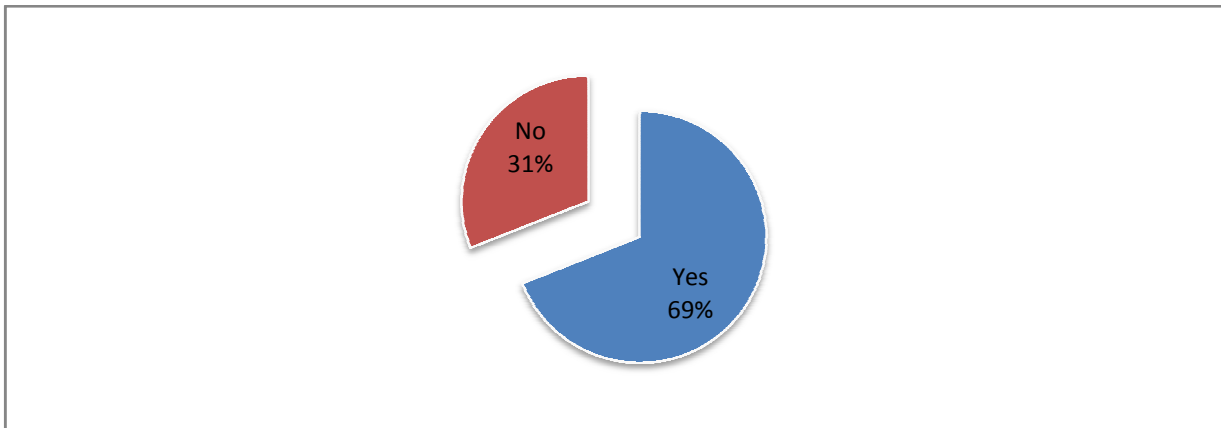


From the findings of the study, majority (78%) of the graduates from Karurumo youth polytechnic agreed that the businesses they had were related to the course undertaken at the polytechnic. This implies that majority of the graduates from Karurumo youth polytechnic had started businesses related to the course undertaken at the polytechnic.

#### **4.5.3 Business enterprise and improvement of entrepreneurship skills**

The study further sought to find out whether the business enterprise stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.13.

**Figure 4.13 Business enterprise and improvement of entrepreneurship skills**



From the figure above, majority (69%) of the graduates from Karurumo youth polytechnic agreed that the business enterprise stated assisted them to improve their entrepreneurship skills. This findings agrees with the findings of Kivu (2013) on the study of influence of leadership on the growth of enterprises in Machakos county that found innovation influenced growth of entrepreneurs in Machakos and that emotional intelligence plays a key role in product and process innovation.

#### **4.5.4 Role of business in improving economic development in the county**

The study asked the respondents to indicate the role of business in improving economic development in the County. The findings are as stipulated in table 4.6.

**Table 4.6 Role of business in improving economic development in the county**

	<b>Frequency</b>	<b>Percentage</b>
Training others	33	55
Doing things better, faster and at less cost	57	95
Opening new markets	51	85
Use of newly found material	32	53
Brought new technologies	53	88

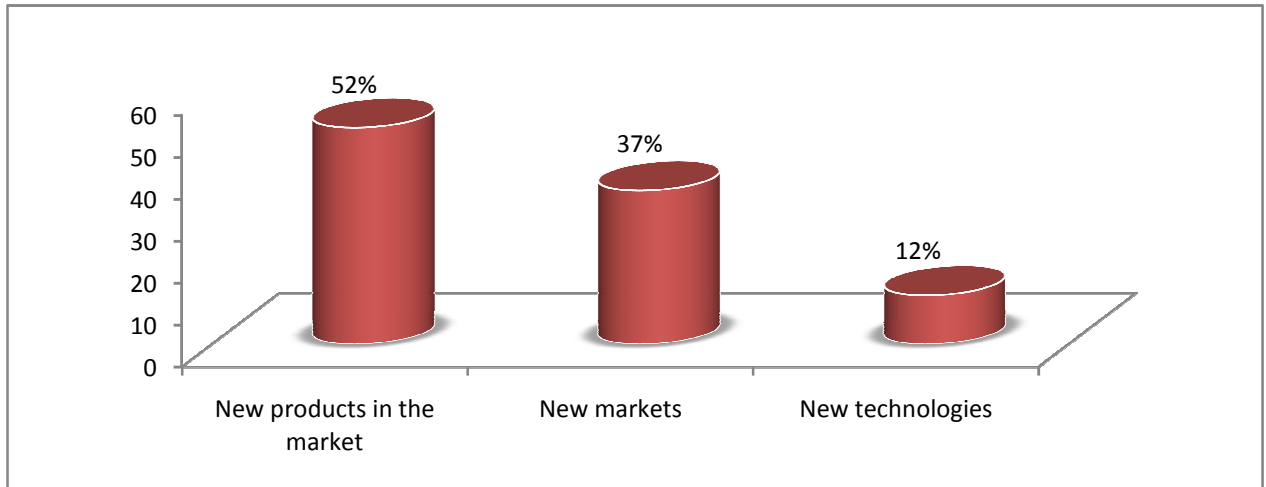
From the table above, majority (95%) of the graduates from Karurumo Youth Polytechnic indicated that the role of business in improving economic development in the County was through doing things better, faster and at less cost, 88% indicated that it brought new technologies, 85% cited that it opened new markets and 55% said that they trained others while 53% indicated that it was through use of newly found materials. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing.

## 4.6 Innovations started and entrepreneurship development

### 4.6.1 Innovations started since leaving polytechnic

The study sought to find out the innovations started by the graduates since they left polytechnic. The findings are as stipulated in figure 4.14.

**Figure 4.14 Innovations started since leaving polytechnic**



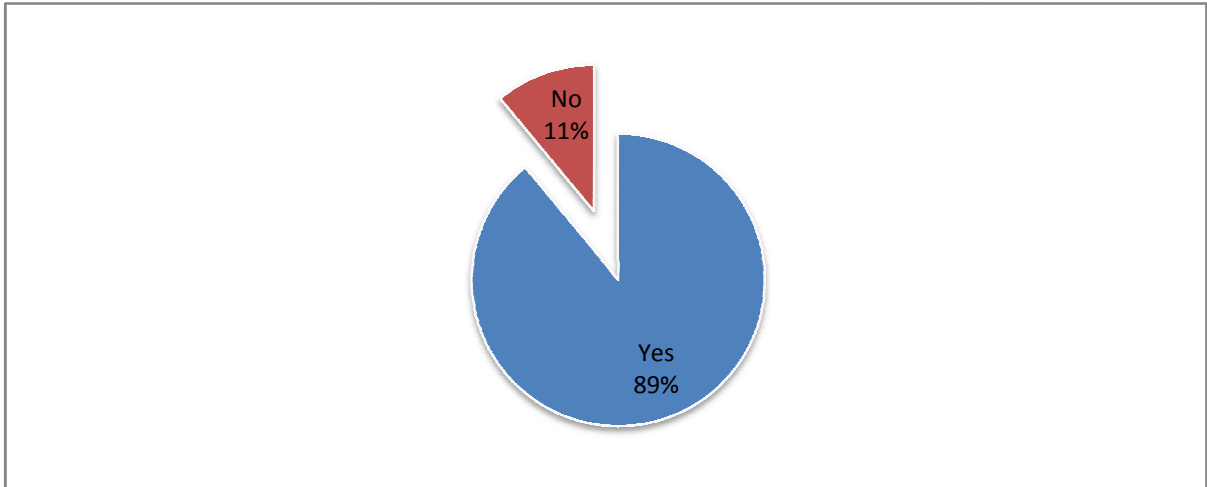
From the study findings, majority (52%) of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic, 37% had introduced new markets while 12% had introduced new technologies since they left polytechnic. This agrees with Yambo (1986) who observed that youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education.

### 4.6.2 Innovations started and course taken at polytechnic

The study also sought to find out whether the innovations stated was related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.15.



**Figure 4.15 Innovations started and course taken at polytechnic**

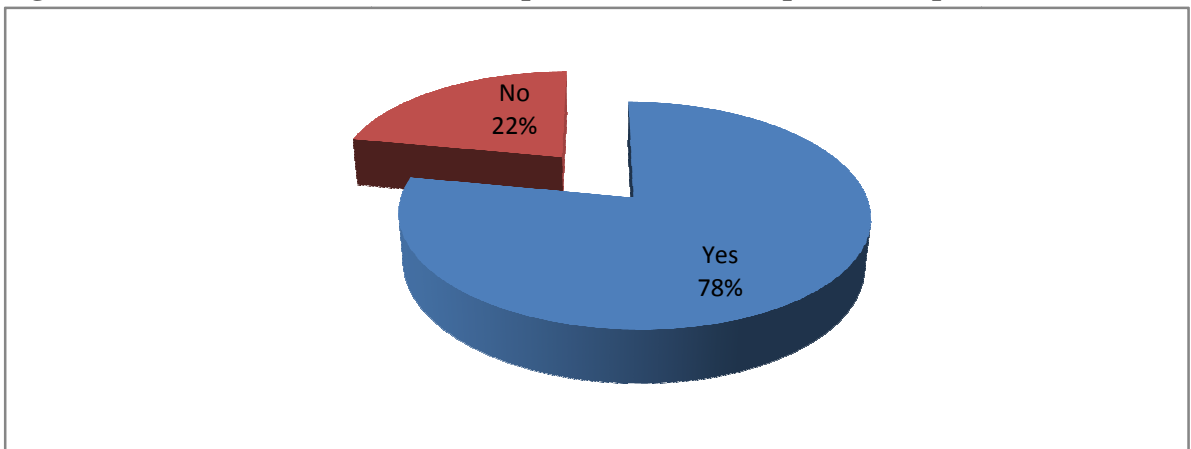


From the figure above, majority (89%) of the graduates from Karurumo youth polytechnic agreed that the innovations stated were related to the course undertaken at the polytechnic.

#### **4.6.3 Innovation started and improvement of entrepreneurship skills**

The study further sought to find out whether the innovation stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.16.

**Figure 4.16 Innovation started and improvement of entrepreneurship skills**

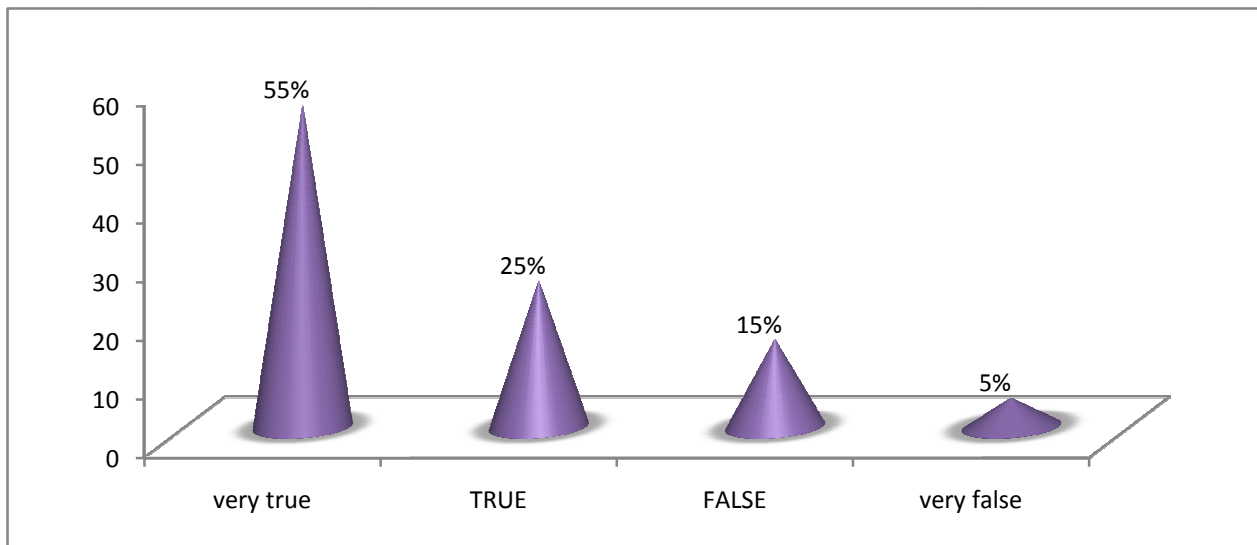


From the figure above, majority (78%) of the graduates from Karurumo youth polytechnic agreed that innovation stated assisted them to improve their entrepreneurship skills.

#### 4.6.4 Innovation started and graduate's role in economic services

The study further sought to find out whether the innovation stated assisted the respondents to enhance their role in providing economic services to the people. The findings are as stipulated in figure 4.17.

**Figure 4.17 Innovation started and graduate's role in economic services**



From the study findings, majority (55%) of the graduates from Karurumo youth polytechnic indicated that it was very true that the innovation stated assisted them to enhance their role in providing economic services to the people while 25% indicated that it was true and 15% indicated that it was false. This implies that the innovation stated assisted the graduates to enhance their role in providing economic services to the people. These findings concur with the findings of Wanyoko (2013) on his study on the influences of business incubation services on growth of small and medium enterprises in Kenya that found out that majority of the respondents in the study (83%) stated that innovation influenced the growth of business and entrepreneurship development and affects business to a greater extent.

#### 4.6.5 Extent to which innovations played role in entrepreneurship development

The study sought to establish the extent to which innovations started by graduates of the polytechnics play in entrepreneurship development. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly

disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

**Table 4.7 Extent to which innovations played role in entrepreneurship development**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>Mean</b>	<b>STDev</b>
Innovations make one risk money and fortunes and combine resources to start new products and services.	46	7	4	3	4.65	0.482
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people	41	12	5	2	4.44	0.524
New technologies assist in provision of efficient and effective services to ones customers	48	6	2	4	4.53	0.621

From the study findings in Table 4.7, majority of the respondents strongly agreed that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people as shown by the mean scores of 4.65, 4.53 and 4.44 respectively and the standard deviation of 0.482, 0621 and 0.524 respectively. This shows that most of respondents either agreed or strongly agreed to the statement.

It also shows the graduates used innovations to satisfy human needs in a more convenient and pleasant way and were able to grow their businesses. They were also able to discern new sources of materials to improve their entrepreneurship. This is in line with Kelemba (2010) who found out that every year graduate of Youth Polytechnic were able to start new technologies, new materials, new products and used their skills to improve their enterprises.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of the study findings, conclusion and recommendations drawn from the study findings. The chapter is based on the study objectives, which were to determine whether the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 have contributed to entrepreneurship development in Embu county; to find out whether what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu county; to establish whether innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county and whether types of business started by the graduates of Karurumo villages polytechnic have contributed to entrepreneur development in Embu county.

### **5.2 Summary of findings**

The study established that the aspects of the course undertaken by the graduates from Karurumo Youth Polytechnic was practical in their day to day life since majority of the graduates ended up being entrepreneurs. Further, the study established that the vocational skills acquired in the polytechnic helped graduates from Karurumo Youth Polytechnic become Entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills by the graduates of Karurumo village polytechnic promoted entrepreneurship development in the County.

The study also established that skill training certificate from youth polytechnic enhanced graduates chances of employment thus majority of the graduates from Karurumo youth polytechnic were employed. Further, majority of the graduates did not offer trainings, however, the study established that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu county.

The study also found out that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation and the businesses were related to the

course undertaken at the polytechnic while business enterprise stated assisted them to improve their entrepreneurship skills. The study further established that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets.

The study found out that majority of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic; the innovations stated were related to the course undertaken at the polytechnic and the innovation stated assisted them to improve their entrepreneurship skills. Further, the study established that the innovation stated assisted the graduates to enhance their role in providing economic services to the people of Embu county. Lastly, the study found out that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assisted in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

### **5.3 Conclusion**

The study concludes that there was gender disparity as majority of the graduates from Karurumo Youth Polytechnic were male who joined the institution at the age of 15-20 years and had spent 2-3 years in the institution. The study also concluded that majority of the graduates had enrolled in the youth polytechnic to acquire of skills and failure to score good grades in KCPE. The study also concludes that many youth polytechnics graduates find self-employment or start new business as a means of making a living. This creates growth and wealth.

The analysis reveals that graduates are making significant contributions in the labour market either as workers in business or in self-employment. In order to cater for the unemployed polytechnic graduates, the economy in the counties needs to be diversified while polytechnics should be upgraded and reconstituted in such a way that they are able to meet demands for market based knowledge and skill acquisition. The other issue that emerged in the analysis is that polytechnics are institutions whose goal is to ensure that trainees acquire

skills that assists' them in personal development as well as for the economic development of the counties and the country at large. Polytechnic education should aim at imparting creativity, innovation, independent thought and precision in polytechnic graduates.

The study concludes that the vocational skills acquired in the polytechnic helped graduates from Karurumo youth polytechnic become entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills was the main role of vocational skills acquired in the polytechnic which promoted entrepreneurship development. The study also concluded that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu County.

The study further conclude that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets. Lastly, the study concluded that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

#### **5.4 Recommendations of the study**

The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. The graduates are making significant contribution in the labour market either in business or self –employment. Youth polytechnics are grassroots institutions that serve the needs of poor youth who are hopeless and helpless. Acquisition of skills and failure to perform well in the examinations are the key factors that drive the youth to enroll in polytechnics. The above perception must be done away with and a deliberate effort to position the youth polytechnics as centers of excellence for all.

The study also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. A deliberate effort to diversify the choice of courses for girls in the youth polytechnics be put in place. Some of the courses that might improve the choice of courses for girls are: secretarial, catering and housekeeping. More effort should also be put in order to encourage girls to enroll in male trades such as mechanic, electrical installations and welding. Communities need to be sensitized to ensure they also take girls to the polytechnics.

The study further recommends the vocational skills offered in the YPs be made more practical and entrepreneurial oriented to prepare the trainees for the world of work both in formal or self-employment. This will reduce the challenges of poverty in the counties and rural areas. There is also need to encourage the formation of right frameworks, networks and facilities that could encourage polytechnic graduates to enter into self-employment. The relationship between policy consumers, facilitators and implementers need to be defined.

Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya.

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**APPENDICES**

**APPENDIX I : DATA COLLECTION QUESTIONNAIRE FOR YP GRADUATES**

This is a self- administered questionnaire to collect data for purely academic purposes. The study seeks to analyze the “**Role of Youth Polytechnics in Entrepreneurship Development in Embu County**” All information will be treated with strict confidence. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

**SECTION A: GENERAL INFORMATION**

1. Gender.....Male  Female

2 Highest Academic Qualifications

*KCPE*

*KCSE*

*Certificate*

*Diploma*

*Bachelors Degree*

*Masters*

3. Age at which you joined the Polytechnic

1. Under 13 years

2. between 13-15 years

3. 15-20 years

4. Over 20 years

5. Year you enrolled in the Polytechnic-----

6. Number of Years you spent in the Polytechnic.....

**SECTION B: ON WETHER, VOCATIONAL SKILLS ACQUIRED BY GRADUATES  
PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMEMT.**

1. What aspects of the course undertaken in the polytechnic are relevant to what you are doing in your day today life?.....  
.....

2. In what way has the vocational skills acquired in the polytechnic prepared you in what you are doing now?.....

3. Has the vocational skills acquired in YP assisted you in being an entrepreneur?

Yes

No

If Yes, Specify.....

If No, specify.....

4. Is the Vocational skills started above assisting to improve your entrepreneurship skills?

1. Yes

2. No

3. If Yes, Specify.....

4. If No, specify.....

5. Do you have suggestion on courses taken in the polytechnic that could help improving entrepreneurship skills in the county.....  
.....

6. What role does vocational skills acquired in YPs play in promotion of entrepreneurship development?

1. ....

2. ....

3. ....

**SECTION C: ON WHETHER WHAT GRADUATES FROM KARURUMO VILLAGE POLYTECHNIC DO AFTER GRADUATION CONTRIBUTE TO ENTERPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Are you employed or in self-employment or unemployed?

Yes  No

(ii) If employed, specify type of job.....

(iii) If Self –employed, specify type of business.....

(iv) If unemployed, specify for how long.....

2. In what way did the Youth Polytechnic skills training prepare you for employment or self-employment?

1. Self-employment aspect.....

2. Employment aspect.....

3. What factors did you consider when choosing where to seek employment or locate business?

1. Self-employment .....

2. Locate business.....

4. How long did you take to find employment or to start business?

1. Find employment .....

2. Self-employment .....

5. Did skills training certificate from youth polytechnic enhance your chances of employment?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

6. Do you offer any training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

7. Do you use training skills learnt at the polytechnic in your training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

8. What role as your training played in entrepreneurship development in Embu County?

- 1. Started new business
- 2. Created new product in the market
- 3. Value additions to products
- 4. New technology
- 5. Opening new markets
- 6. Providing new services
- 7. Providing Training services

Other(specify).....

**SECTION D:ON WHETHER TYPES OF BUSINESS ENTERPRISESSTARTED BY GRADUATES FROM KARURUMO POLYTECHNIC PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Have you started any business enterprise after graduation?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

2. Is the business related to what you did at the polytechnic?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....



3. Has your business enterprise assisted in improving your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, specify.....
- 4. If No, specify.....

4. What role does your business play in improving economic development in the County?

- 1. Training others
- 2. Doing things better, faster and at less cost
- 3. Opening up new markets
- 4. Use of newly found material
- 5. Brought new technologies
- 6. Other (Specify).....

**SECTION E: ON WETHER INNOVATIONS STARTED BY GRADUATES PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT?**

1. What innovations have you started since leaving the polytechnic?

- 1. Started new product in the market
- 2. Started New markets
- 3. Started New technologies
- 4. Other (specify).....

(ii) If, Yes above, specify-----

2. Is the innovation started above related to the course you did in the polytechnic?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

3. Is the innovation started above assisting to improve your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

4. Does the innovation started above enhance your role in providing economic services to people?

- 1. Very True
- 2. True
- 1. False
- 2. Very false

5. What role do the graduates play in promotion of innovation?

- 1. ....
- 2. ....
- 3. ....
- 4. ....

6. State your level of agreement to the following statement as regards whether innovations started by graduates of the polytechnics play a role in entrepreneurship development on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree.

Statement	SA	A	N	D	SD
Innovations make one risk money and fortunes and combine resources to start new products and services.					
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people					
New technologies assist in provision of efficient and effective services to ones customers					

7. What would be your advice to Youth Polytechnic trainees in enhancing entrepreneurship development in the County?

- 1.....
- 2.....
- 3.....

## APPENDIX II : NUMBER OF TRAINEES AT KARURUMO YOUTH POLYTECHNIC FROM 2003 TO 2012

Cou	District	YP	Name of Course	Youth Polytechnic Graduates since 2003																														
				2003			2014			2005			2006			2007			2008			2009			2010			2011			2012			GT
Em				M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
Cou	Embu	Karurumo	MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10	
			Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11	
			Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10	
			Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15	
			Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17	
<b>Grand Total</b>						<b>20</b>			<b>26</b>			<b>19</b>			<b>25</b>			<b>31</b>			<b>36</b>			<b>18</b>			<b>34</b>			<b>53</b>			<b>63</b>	<b>325</b>



**UNIVERSITY OF NAIROBI**  
**DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK**

**THE ROLE OF VILLAGE POLYTECHNICS IN ENTREPRENEURSHIP  
DEVELOPMENT: A TRACER STUDY OF GRADUATES OF KARURUMO  
VILLAGE POLYTECHNIC, EMBUCOUNTY**

**BY**  
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**C50/67801/2011**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS  
IN SOCIOLOGY (ENTREPRENEURSHIP DEVELOPMENT) OF THE  
UNIVERSITY OF NAIROBI**

**NOVEMBER 2014**

## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signed .....

Date.....

**NJERU ZAVERIO NDUGUTUSON**  
**C50/67801/2011**

This research project has been submitted for examination with my approval as a university supervisor.

Signed .....

Date.....

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## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to individuals that assisted me in one way or another in the course of writing this project.

Special thanks go to my supervisors, Mr. Geoffrey Njeru and Professor Edward Mburugu, who tirelessly guided me and provided professional advice as well as encouragement during the study period.

I am greatly indebted to Madam Emily Nkoroi, the Embu county director of youth training who providing the relevant information, documents and generally facilitated the study.

Further gratitude goes to Mr. Graham Kangethe of curriculum, instruction and examinations division, of the department of youth training in the ministry of youth affairs and sports at the headquarters for providing me with relevant information on youth polytechnics nationally.

I cannot forget the Karurumo youth polytechnic manager and the instructors for their cooperation in giving me the preliminary information and the former trainees who will targets in the study.

Finally, I wish to thank everybody I may not have mentioned here but made this work possible.

Thank you all.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>KCSE</b>	-	Kenya Certificate of Secondary Education
<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>KIE</b>	-	Kenya Institute of Education
<b>MDGs</b>	-	Millennium Development Goals
<b>MOYAS</b>	-	Ministry of Youth Affairs and Sports
<b>NVCET</b>	-	National Vocational Certificate in Education and Training
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>SYPT</b>	-	Subsidised Youth Polytechnic Tuition
<b>TVET</b>	-	Technical and Vocational Education and Training
<b>TIQET</b>	-	Total Integrated Quality Education and Training
<b>UNDP</b>	-	United Nations Development Program
<b>UNESCO</b>	-	United Nations Education and Scientific and Cultural Organization
<b>YPs</b>	-	Youth Polytechnics

## **ABSTRACT**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and analyze their contribution to entrepreneurship development in Kenya. The study used descriptive survey design. The target population was 325 former graduates from Karurumo youth polytechnic who graduated between 2003 and 2012 with a sample size of 20% of the target population leading to 65 respondents. The data collected was analyzed using correlation matrix and multi regression analysis to establish the relationships between independent and dependent variable. The results revealed that vocational skills acquired, business enterprises started, innovations started and what graduates do after graduation separately contributed significantly to entrepreneurship development. The analysis further revealed that polytechnic graduates are making significant contributions in the labour market either as workers in business or in self-employment. The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. It also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The census report also document that over 62% of Kenyans are not in any form of employment and that only 25% of the secondary and university leavers are absorbed in regular employment. It is therefore important to boost vocational, technical, and entrepreneurial skills in youth polytechnic to cover the shortfall. Kenya needs a vibrant youth polytechnic training programs that can support the enhancement of the productivity of small and medium enterprises sector that currently account for 76% of the total employment but only contributes 18% of the natural gross domestic product.

Youth polytechnic education provides youth with technical and vocational skills for jobs in industry. The village polytechnics are an adoption of tailor made strategy to suit the village and rural labour markets (Kinyanjui,2007). The sectors of the rural labour market namely construction, furniture, garments and currently electrification is targeted. It is hoped that after graduating, the youth polytechnic graduates would be gainfully employed and contribute to the entrepreneur development in Kenya.

The UNDP,2012 in report entitled “ Skills gap analysis for graduates of youth polytechnic, vocational training centers and out- of- school youth” revealed that most of the graduates of the youth polytechnics lack competency in modern technology and have no practical skills required to exploit untapped opportunities in our country. They also have weakness in work attitude, communication, customer care and social skills and hence affecting their contribution to entrepreneurship development and their employability in the job market after graduating from the youth polytechnics. It is therefore against this background that the research proposes to investigate the role of youth polytechnic graduates to entrepreneurship development in Kenya through a tracer study of youth polytechnic graduates from Karurumo village polytechnic in Embu county in the last 10 years from 2003 to 2012 with a view of

coming up with interventions that will ensure the right kind and quality of skills training is given to them to enhance their contribution to entrepreneurship development.

## **1.2 Statement of the Problem**

Every year, graduates from Karurumo Village Polytechnic enter the labour market equipped with either grade II or grade III certificate. The whereabouts of these graduates was not visible in surveys of micro and small enterprises in Kenya. In a micro and small enterprise survey carried out in the Ziwani enterprise cluster in Nairobi, there was only one motor vehicle repair entrepreneur who had acquired skills in a village polytechnic (Kinyanjui, 2007). It was also reported that technical training, which is an important aspect of entrepreneurship development, was lacking in baseline surveys of micro and small enterprises (CBS, 1999), yet every year, trained youth graduate from village polytechnics enter the labor market. However, Wanyonyi (2009), Kelemba (2010) and UNDP (2012) reported that graduates from youth polytechnics had difficulties in using modern equipment and lacked the necessary and required skills that employment demands of them. They lacked work attitude, communication, customer care and social skills that are important for them to venture into business enterprises and use innovations that enable them to effectively contribute to entrepreneurship development in the country. Kinyanjui (2007) in a tracer and policy study of youth polytechnics graduates from Kwale, Kitui, Makueni and Taita Taveta also recommended a study on factors influencing technical training to be carried out in other areas to guide on youth polytechnics training policy . A study by Ministry of Youth Affairs and Sports (2012) on national evaluation of NVCET curriculum found out that Embu district had the highest percentage 52% of trainees who were incompetent and unable to fix a prescribed job process that was expected of them during the evaluation period. The purpose of this project was therefore to investigate the contribution of youth polytechnic graduates in entrepreneurship development through a tracer study of youth polytechnic graduates from Karurumo village youth polytechnic in Embu Country. The study specifically looked at whether what youth polytechnic graduates do after graduation, types of business enterprises started by graduates, innovations started by the graduates and vocational skills acquired by the graduates of village polytechnic contributed to entrepreneurship development in Embu county and Kenya as whole.



### **1.3. Overall Research Question**

What role do graduates from village polytechnics play in enhancing entrepreneurship development in the country?

#### **1.3.1 Specific Research Questions**

1. Does vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County?
2. Does what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu County?
3. Do types of businesses enterprises started by graduates of Karurumo village polytechnic started in the last ten years contribute to entrepreneurship development in Embu County?
4. Do innovations started by graduates of Karurumo village polytechnic in the last ten years contribute to entrepreneurship development?

#### **1.3.2 Overall Objective of the Study**

The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and investigate their contribution to entrepreneurship development in Kenya.

#### **1.3.3 Specific Objectives**

The following specific objectives were addressed:-

1. To determine how the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 to 2012 contributed to entrepreneurship development in Embu county.
2. To find out whether what graduates of Karurumo village polytechnic do after graduation contributed to entrepreneurship development in Embu county
3. To determine how types of business started by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County.
4. To establish how innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county

#### **1.4 Significance of the Study**

The study sought to identify and document the role of village polytechnic graduates in enhancing entrepreneurship development in Embu County. The data generated would assist in the provision of appropriate entrepreneurship development services that can address the concerns of village youth polytechnic graduates before entry into the labor market. The study would help to increase the knowledge of the relevant stakeholders and the community about the fate of village polytechnics trainees after graduating and their role in entrepreneurship development. It would also add to the existing knowledge of the impact of youth Polytechnic education on entrepreneurship development.

#### **1.5 Scope and Limitations of the Study**

This study focused on graduates of Karurumo Village Polytechnic, Embu County. The reason Karurumo Village Polytechnic was chosen was because the researcher was from that area and so it offered an ideal setting that could be replicated with lesser complexities in other Karurumo Village Polytechnic in Kenya. This is a case study focusing only on the role of village polytechnics in entrepreneurship development: a tracer study of graduate's of Karurumo Village Polytechnic, Embu County. The study only focused in one village polytechnic of which may not be the same aspect in other village polytechnics, which was not a good representation of all types of village polytechnic. The questionnaire's data was based on the graduate's response, which could be untrue. In order to ensure the response was real and met the expectation of the result, respondent were given more time to read and understand the information that the study required.

Finally, the graduates sampled were fewer hence affecting the sampling size. In order to ensure sampled size was met, research assistance visited the respondents frequently till they met at least 80% of the sample size which was adequate for analysis.

## **1.6 Assumption of the Study**

The study assumed that all the sampled respondents from Karurumo village polytechnic were traceable and able to express themselves freely without hiding information. The other assumption is that this project will assist the policy makers in planning of technical and vocational educational and training of the youth in the country.

## **1.7 Definition of Significant Terms**

<b>Entrepreneurship:</b>	Is the process of starting a business or other organization. The entrepreneur develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure.
<b>Entrepreneurship Development</b>	This is success in producing desired or successful enterprises by graduates
<b>Innovations:</b>	This referred to the introduction of new products or services, use of new methods of production, opening up new markets or use of new products.
<b>Self Employed:</b>	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.
<b>Tracer Study:</b>	Is an approach which widely being used in most organization especially in the educational institutions to track and to keep record of their students once they have graduated from the institution. It is the follow up of graduates of higher education or institutes.

**Temporary Employment:**

Is a situation where the employee is expected to leave the employer within a certain period of time.

**Unemployed:**

Is a situation where someone of working age is not able to get a job but would like to be in full time employment.

**Vocational Skills:**

Are those skills which allow a person to master a particular subject or procedure that is applicable to a career.

**Youth Polytechnic:**

This refers to low cost based post-primary training institutions that prepare trainees on vocation and technical training.

## **1.8 Organization of the Study**

This study is organized in five chapters. Chapter one deals with background on the role of village polytechnics in entrepreneurial development in Kenya. It explores four key components that are involved in entrepreneurship development in youth polytechnics (Vocational skills acquired by the graduates, work done by the graduates after graduation, Business enterprises started by the graduates and innovations started by the graduates) can be used to improve the role the polytechnic play in entrepreneurship development in Country. Chapter two discusses the overview and development of youth polytechnics in Kenya. It looks at how the youth polytechnics can be used to equip young with relevant skills and attitudes that would lead the young people so trained into gainful self-employment in order for them to contribute in the entrepreneurship development of their communities by building up the economic strength of those communities. Chapter three deals with research methodology and expounds on the descriptive survey research design used and research instruments used questionnaires to collect both qualitative and quantitative data from the former Karurumo Youth Polytechnics graduates.

Chapter four deals with data analysis while Chapter five deals with recommendations, It looks at how graduates of Karurumo village polytechnic are making significant contribution in the labour market as workers in business or self-employment. It also looks at how vocational skills acquired have helped the graduates become entrepreneurs hence promoting entrepreneurship development in the country. It further examines how innovations make one risk money and fortunes and combine resources to start new products and services and also establish small and micro enterprises and create employment opportunities for other people.

## **CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

The purpose of the project was to investigate the role of village polytechnics in entrepreneurship development in Kenya. The present chapter reviews related literature and the theoretical and empirical literature on the subject investigated. It details overview of the Kenya education system after independence in 1963 with regard to vocational and technical education and training systems, the establishment of youth polytechnics in Kenya, theoretical literature on vocational training and entrepreneurship development in Kenya, conceptual framework of the study and empirical literature of previous studies and findings about youth polytechnics in Kenya.

### **2.2 Overview of Kenya Vocational and Technical Education Systems since Independence**

Kenya sought ways to make changes in the inherited educational system on achieving independence. The aim was to make educational system supportive and responsive to the newly developed national goals (Merrifield 1986). In the years following independence, two major commissions (Ominde Commission, 1964 and the Gacathi Commission in 1976) were appointed to review the education system (Republic of Kenya, 1964; Republic of Kenya, 1976) and to plan for its future. This resulted to increased schooling. The provision of increased primary education was achieved as a result of Ominde commission. The 1976 commission addressed unemployment among product of formal education at all levels of education. Manpower issues were also addressed and a programme of action was formulated to further develop Vocational and technical education and training.

Attempts to alleviate the problem of unemployment among the youth, particularly the primary school graduates were directed towards the establishment of non-formal vocational education and training institutions such as youth polytechnics (Sifuna 1984). These programs were to absorb youth polytechnics graduates for a few years and give them marketable skills (Hoppers, 1985). Vocational training was also a way of developing attitudes for self reliance as well as imparting workable skills (Bacchus, 1988, Simiyu, 1990).

UNESCO (1984) defined vocational and technical education as: “A comprehensive term refers to education processes where it involves, in addition to general education, the study of technologies and related sciences and acquisitions of practical skills and knowledge relating to occupations in various economic and social life”. The report of the presidential working party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988) also stipulated the need to expand and streamline vocational and technical training institutions and their training to cater for training demands of the 8-4-4 system of education, provide greater opportunities for training primary and secondary school graduates and provide more trained manpower for the economy. The courses offered in youth polytechnics included masonry, carpentry, metal work, tailoring, dressmaking, and motor mechanics among others.

### **2.3 The Establishment of Youth Polytechnics in Kenya**

A youth polytechnic is a low cost community based post primary training institutions (Yambo,1986). Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics were to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). Youth polytechnics were established in Kenya in 1966 after a conference held at Kericho on Education employment and rural development. The conference observed that only a small portion of primary school graduates received places in secondary schools (Sheffield 1967) and youth polytechnics were seen as part of alleviating the primary school graduate unemployment problem. The youth polytechnics were closely related to the local needs and absorption capacities of the rural villages (Thompson, 1981). Between 1966 and 1977, more than 53 youth polytechnics were established and the demand for them was expanding. Currently, there are over 700 youth polytechnics with enrolment of over 100,000 trainees (Republic of Kenya, 2012). The structure of youth polytechnic program at the national level includes a director of youth

training with four major divisions (Curriculum, Institutions and Examinations, Research Division, quality Assurance and Standards and Infrastructure Division). At the County level, there is county director of youth training and the district youth training officer at the district level. The principal (project manager) is the executive officer at the institutional level and serves as the link between staff, trainees, the board of governors and the district youth training Officer. A number of commission reports, sessional papers and studies have made various recommendations on vocation and technical education in Kenya. The education sector reforms in Kenya dates back to the independence period, with commissions, committees, working parties and task forces generating reports, with recommendations, some of which have been implemented in part while others have never been implemented completely. In 1964, there was the Ominde Commission; In 1976, there was the National Committee on Educational Objectives and Policies led by Gachathi; In 1981 there was the Presidential Working Party on the Second University in Kenya led by Mackay; In 1988 there was the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond led by Kamunge; In 1999, there was the Commission of Inquiry into the Education System of Kenya led by Koech. To date, no government documentation is available to the public with chronological details on what recommendations from these reports were adopted and implemented.

The Ominde Commission outlined what education was and had to be during and after independence. The blueprint laid the foundation of post-independence education. It was mandated to survey existing educational resources and to advise the government on the formation and implementation of the required national policies for education (Republic of Kenya, 1964; It is important to note that despite its noble objectives the Ominde Commission recommendations were not implemented in full, a blunder that has had significant effects on education .The Gacathi Report reiterated objectives of the Ominde Commission and sought to enhance the use of the Kenyan educational goals to shape its national character and development. It recommended development of vocational, technical, and practical education. In 1979, the government realized that education was not doing much to achieve its stated objectives. Education curriculum was viewed as being too academic, narrow and examination centered (Republic of Kenya, 1979).



Rate of unemployment grew as school leavers went to urban centers to seek for white-collar jobs. In the 1980s the government changed its policy on education. This was because of the difficulties, which were faced by graduates of its education system at both primary and secondary levels. Most graduates who were matriculating from these levels could not be absorbed into the shrinking labor market. This made the government to reconsider changing its education system and to set up a Presidential Working Party in 1981 (Republic of Kenya, 1981). The report sought to investigate ways in which education could make graduates from these levels self-sufficient, productive in agriculture, industries, and commerce. Education system was expected to ensure that students acquired technical, scientific, and practical knowledge vital for self and salaried employment, lifelong skills, and nation building. The commission was also mandated to investigate the feasibility of establishing a second university that was development centered. It advocated for a practical curriculum that would offer a wide range of employment opportunities and equitable distribution of educational resources. It gave rise to the current education system, the 8::4:4. System.

Kamunge Report of (1988) noted that the youth polytechnics (YPs) were provided with basic facilities and equipments to enable them give quality training at artisan level. It recommended that vocational education and training instructors be trained in pedagogy and their terms and condition of service be improved. The youth polytechnics management be strengthened and local authorities be given full support. It further stressed those facilities of youth polytechnics to be improved. The country's training institutions were not only inadequate but also lacked the essential facilities and technology to prepare students for the challenging labour market.

The Government of Kenya appointed the Commission of Inquiry into the Education system of Kenya (Koech Commission) in 1999. The commission made recommendations on ways that could be used to provide quality education (Republic of Kenya, 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQET) to reflect the vision of Kenyan education. TIQET, as a concept embraced the values and substance that was to characterize the education system. It was to be total because it was expected to be inclusive, accommodative, and life-long. It focused on

quality of delivery and outcome of the education and training process. The report reiterated that, the proposed education system was to become a ticket to a better life, and future for the individual, community and the nation. As a departure from the 8-4-4 system of education, TIQET had some basic innovations, namely: the expansion of access to basic education; elimination of disparities in education based on geographical, social and gender factors; introduction of manageable curriculum content; introduction of modular learning approach and credit accumulation. Specifically, the report called for legal educational reforms, for instance: reviewing of the education act, political will and commitment by making public policy pronouncements on the required changes, enhancing of efficiency and effectiveness in educational administration and management, ensuring there is prudent governance and management of resources, building and strengthening genuine partnership and collaboration among educational stakeholders. In addition, the report also called for cutting-edge reforms including totally integrated quality education training, abolition of the 8-4-4 and replacement with a system not very distinct from the pre-8-4-4 system of 7-4-2-3, and universities maintenance of 1:10 ratio of graduate/undergraduate student; (Republic of Kenya, 1999). The report also pointed out that one of the hindrances to the development of a technological culture was found in some cultural beliefs and practices among a number of Kenyan communities towards technically related work. Many of them design vocational education for other people's children instead of designing a universal system that is suited for all children who decide to join that career including their own children. In his recommendations, Koech Commission strongly pointed out that vocational training centers be encouraged to offer courses according to the needs of their localities such as short tailoring courses for upgrading courses as well as Jua – kali operators and health workers for the surrounding community. Despite its candid professional research, assessments and honesty on the challenges that were facing Kenyan education system, Koech Report was never implemented by the government. It was perceived as being expensive and complex.

Kenya Vision 2030 is the new long-term development blueprint for the country. It is motivated by a collective aspiration for a better society by the year 2030. The aim of Kenya Vision 2030 is to create “a globally competitive and prosperous country with a high quality of life by 2030”. It aims to transform Kenya into “a newly-industrializing, middle-income

country providing a high quality of life to all its citizens in a clean and secure environment. Simultaneously, the Vision aspires to meet the Millennium Development Goals for Kenyans by 2015. It proposes intensified application of science, technology, and innovation to raise productivity and efficiency levels across the three pillars. It recognizes the critical role played by research and development in accelerating economic development in all the newly industrializing countries of the world. More resources will be devoted to scientific research, technical capabilities of the workforce, and in raising the quality of teaching mathematics, science and technology in schools, polytechnics and universities.

#### **2.4 Vocational Skills acquired by YP Graduates and Entrepreneurship Development**

Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics are to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). The vocational education and training in polytechnics include masonry, tailoring, carpentry, driving, dressmaking, metalwork and many others. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing. However, Ndua suggested that research was required on the dropout rate of the trainees. Every year a number of these graduates get out to the field and therefore the project investigated whether this graduate are able to use the skills acquired in contributing to entrepreneurship development in Embu county.

#### **2.5 Work Done by YP Graduates after graduation and Entrepreneurship Development**

On what graduates of youth polytechnics do after graduation ( Nzioka 1986, Kinyanjui 2007, Yambo (1986) found that graduates who had been trained in carpentry and masonry

where somewhat more rural oriented than those trained in welding and plumbing. Yambo contended that many courses had economic value and predicted that new courses be eventually introduced in Youth Polytechnics. For a long time in Kenya, graduation from any level of education was associated with employment either in the private or public sector. The quality of an institution was based on how many of its graduates were employed after graduation. The reality is now different. The labour market has become very competitive and open joblessness is being experienced among graduates in all education levels. According to Kinyanjui, 2007, the youth polytechnic employees enter the labour market as employees (30%), Self-employment (42.2%) and only 22.2% of the graduates were unemployed. The key jobs for YP graduates were casual, contracts, carpentry, mechanics, welding and dress making among others. Polytechnic graduates were also employed in polytechnics as instructors, machine operators and electrical repairs. Some few graduates were employed in jobs such as hotel attendants, vegetable vending, and hairdressing. The studies revealed that polytechnic education is a holding ground for youth in village as they wait for their dream careers. The current project investigated whether these graduates played a role in entrepreneurship development in the County.

## **2.6 Creation of New Business Enterprises by YP Graduates**

The business perspective views entrepreneurship as the process of creating new business organization with intention of making profit. The entrepreneurs are organizers and coordinators of the major factors of production such as capital, labour and land. They properly mix these factors of production to start business enterprises. Entrepreneurs have initiative and self-confidence in accumulating and mobilizing capital resources for new business. Many youth polytechnics graduates find self-employment or starting new business as a means of making profitable career. This creates growth and wealth. Kinyanjui (2007) in a Trace and policy study of youth polytechnic graduates from Kwale, Kitui, Makueni and Taita Taveta found out that youth polytechnic staffing is one of the policy issues that need urgent attention. There was a clear need for policy to address staffing especially for instructors in the youth polytechnics. It also found out that there are no technicians to assist the instructions in handling the practicals. The study recommended polytechnic staffing will require restoring confidence and enhanced motivation and the beginning point being the

development of scheme of service for the youth polytechnic instructors. The study also recommended that equipments in youth polytechnic are inadequate and old.

UNDP (2012) in a study titled, Skills gap analysis for graduates of youth polytechnic, vocational training Centers and out-of-school youth found out that existing infrastructure and equipment in public youth polytechnics are dilapidated, inadequate and require renovation and modernizing if they are to produce high quality graduates. Most of the instructors are not competent enough to deliver quality skills training to the youth polytechnic trainees. Formalized partnership particularly between youth polytechnics and the industry was found to be lacking thereby making it difficult to align the youth polytechnic training with the demands of the industry and therefore reducing the contribution of Youth Polytechnic graduates in entrepreneurship development. The project investigated whether graduates from the youth polytechnics are involved in starting business enterprises and stimulating investment interests. Were the graduates able to generate income, provide training ground for other people, convene and utilizes local resources and start new business?

## **2.7 Innovations Started by YP Graduates and Entrepreneurship Development**

Schumpeter (1934) said entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before. Apart from being innovators, entrepreneurs are risk-takers and take advantage of business opportunities and transform these into products. This spirit has greatly contributed to the modernization of economics and new technologies. The project investigated whether the polytechnic graduates are able to start new products and create employment. Were the graduates able to use their innovations to satisfy human needs in a more convenient and pleasant way. Application of new technology is necessary for the future growth of business. A technical entrepreneur is as good as a craftsman. Because of the craftsmanship they develop quality goods. They also develop alternative marketing and distribution strategies in order to promote business. Entrepreneurs are creative. They can create customers and buyers. Due to their innovative nature they persist on discerning new sources of materials to improve their enterprises and transform these into profits.

Entrepreneurs like starting something new or different. Kelemba (2010) in a survey of initiatives in current use of integrating of education for sustainable development in centre's of excellence carried out in six TVET institutions in Kenya found out that there was an approach to inspire trainees to think about what they can achieve through their own lives and future careers, however, the major barriers to enacting sustainable development include overcrowding in some part of the curriculum, the perceived relevance by the staff, limited internal accreditation including institutional commitment and validation systems, financial obligation and confusion over what and how to teach sustainable development in youth polytechnics. Every year there are new technologies, new markets, and new products and therefore the project investigated whether the youth polytechnics graduates are able to utilize the opportunities and develop their entrepreneurship skills.

## **2.8. Theoretical Framework**

The theoretical framework on technical training and entrepreneurship development advanced in the project is-

### **2.8.1 The Goal Theory by Latham and Lockie**

According to Goal theory as developed by Latham and Lockie, (1979) there are four main mechanisms that connect goals to training outcomes. They direct attention to priorities , stimulate efforts, challenge people to bring their knowledge and skills to bear and increase their chances of success and the more challenging the goal, the more people will draw on their full repertoire of skills. The theory emphasizes on setting and agreeing on objectives against which performance is measured and managed. It also emphasizes on feedback and review aspects of performance management (Armstrong, 2010).It is against this framework that the project investigated whether graduates of youth polytechnics used the theory to succeed in what they do after graduating from the youth polytechnics. They combined their skills training and career progression by engaging in business, introducing new products, new methods of doing business, new marketing strategies and other income generating activities to enable them to succeed in life and develop their entrepreneurship skills.

### **2.8.2 Constructivism Theory of Training**

The theory advocates that we construct our own understanding of the world we live in. Each of us generates our own rules and mental models, which we use to make sense of our experiences. It advocates taking learning as a process of adjusting mental models to accommodate new experiences. Constructivists believe that learners construct their own reality or at least interpret it based upon their perception of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures, and beliefs that are used to interpret objects and events. What someone knows is grounded in perception of the physical and social experiences that are comprehended by the mind (Jonassen, 1991).

Constructivists call for elimination of standardized curriculum and instead promote use of curriculum that is customized to the student's prior knowledge and market based knowledge. It also emphasizes on hands on problem solving. They say education should focus on making connections between facts and fostering new understandings in students. Instructors should tailor their teaching strategies to student's response and encourage students to analyze, interpret, and predict information and use the knowledge to develop various skills that they can use in future after leaving school. It is against this framework that the project investigated whether graduates of youth polytechnics are using the theory to succeed in what they do after graduating from the youth polytechnics and whether their skills are market oriented and useful after graduation.

### **2.8.3 McClelland's Need for Achievement Theory**

McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence. Those people who have high need for achievement are more likely to succeed as entrepreneurs. Need for achievement refer to the desire to accomplish something with one's effort? It is the urge to excel or the will to do well. Need for power means the desire to dominate and influence others by controlling their actions and use of physical objects. Need for affiliation implies the desire to establish and maintain friendly and warm relation with others. The project investigated whether youth

polytechnics graduates are able to use this framework to ensure that they develop their entrepreneurship skills.

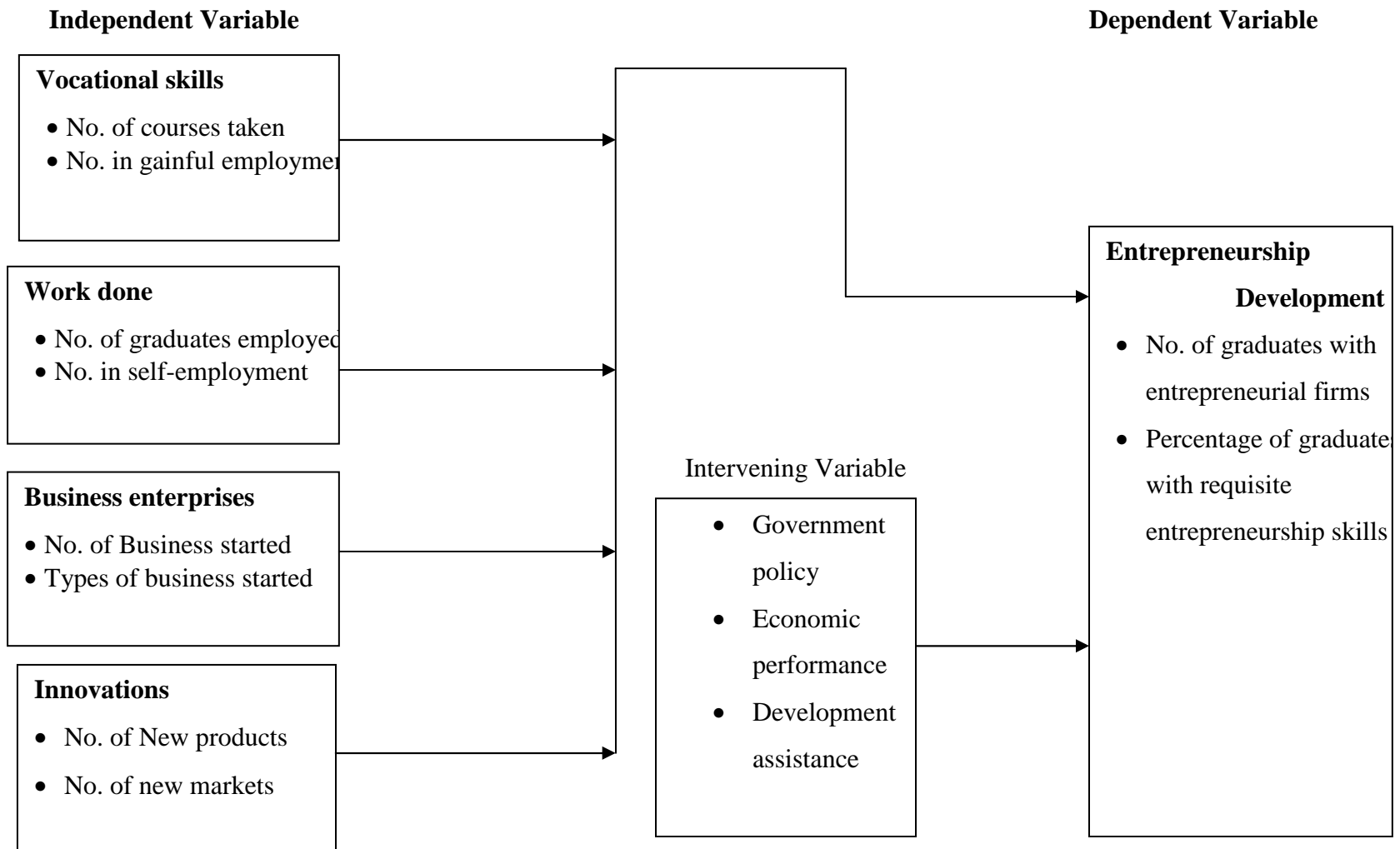
## **2.9 Conceptual Framework of the Study**

A conceptual framework helps simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda & Mugenda, 2003). The conceptual framework of the study was based on four independent variables namely; vocational skills acquired by the graduates, work done by the graduates, new business started by graduates and innovations stated by graduates.

An entrepreneur and his/her enterprise have been described as the engine of development. Scholars such as Schumpeter and Cantillon, see entrepreneur as the main catalyst through which any country achieves development. It is in this light that entrepreneurship is seen as the ability to perceive of a business opportunity and exploit it for the purposes of generating a profit, which in turn is used as capital for further investment or as a livelihood means. Entrepreneurship brings innovation through such activities as creation of new products, acquiring of new skills, investing in new technologies, acquiring new sources of raw materials, new production methods, creation of new markets and even new managerial innovations for developments. Entrepreneurship plays a major role in economic development of any economy by promoting capital formation by mobilizing the idle savings of the public, encourages effective resources mobilization of capital and skill that might otherwise remain unutilized and idle. Entrepreneurism an innovator who introduces new combinations of means of production. Innovation involves making use of new things or doing of things that are already being done in a new way. Entrepreneurs are risk takers and insecurity bearers. If the venture succeeds, the entrepreneur profits, if it does not, loses occur. The entrepreneurs must make use of his/her initiatives to reduce risks or uncertainties. They also make business decision, once the entrepreneur is convinced that a particular line of production offers large prospects, he/she has to formulate action plan regarding the product and the quality of products to be produced. He /she has to find the best possible method of production which ensures he/she succeeds. Entrepreneurs arrange finances, purchases raw materials, supervises, sells and markets and assures the role of manager in the enterprise.



In line with this definition and function of entrepreneurship taken above, the project used the below conceptual framework to explain the role of village polytechnics graduates in entrepreneurship development in Kenya. The project looked at whether what graduates of youth polytechnics do after graduation , business enterprises started by the YP graduates, innovations started by the youth polytechnic graduates and vocational skills acquired by the graduates contributes to entrepreneurship development in Embu county and Kenya as a whole.



**Figure 2.1 Conceptual framework**

## 2.10 Knowledge Gaps

The gaps identified in the reviewed literature are as shown on table 2.1

**Table 2.1 Knowledge Gaps**

<b>Variable</b>	<b>Author and Year</b>	<b>Findings</b>	<b>Knowledge gap</b>
Vocational skills and entrepreneurial development by the graduates	Kelemba, (2012) Ndua,(1988) Moyas, (2012) Sifuna (1975) Waithaka, (1989)	Found out that their existed a strong relationship between vocational skills and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	There is need to explore this findings in the context of Kenyan youth polytechnics so as to clearly examine the exact relationship
Work done and entrepreneurial development by the graduates	Moyas (2012) Nzioka (1986) Kinyanjui (2007)	These studies found out that their existed a strong relationship between work done and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	These studies do not indicate clear methodologies that were used to reach this conclusion. On this basis, my study shall designed a clear methodology to verify this influence
Businesses and entrepreneurship development by the graduates	UNDP(2012) Kinyanjui (2007)	There seems to exist a strong relationship between business and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail.
Innovations and entrepreneurial development by the graduates	Schumpeter (2004) Kelemba (2010)	There seems to exist a strong relationship between innovations and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail

## **2.11 Summary of Literature Review**

This chapter highlights the review of the previous studies on youth polytechnics in Kenya and the three theories namely, the Goal theory, the Constructivism theory and McClelland need for achievement theory that have been advanced about training and entrepreneurship development. It further reviews the conceptual framework with the four independent variables under study (What graduates of youth polytechnic do after graduation, types of business enterprises started, vocational skills acquired and innovations started by graduates of the polytechnic has the dependent variables).

This is due to the fact that various development plans and policies associate human development with economic development (Kamunge, 1998). It has been argued that there are many countries with trained and educated populations yet they lag behind in development (Prichet, 1996). Those of contrary opinion such as Ngware (2002), Alam (2007), see investments in education and training as being beneficial. They argue that education and training improves one's creativity, enhances individual's participation in economic development, and enhances one's competitiveness in the job market as well as future earnings. Therefore there is need for further research to ascertain the impact of investment in training on enhancing individual's competitiveness in labour market especially for the youth polytechnics graduates.

The review showed research studies that has been done on the role of vocational and technical skills on entrepreneurship development However, no such studies has been done in Embu County particularly targeting the Karurumo youth polytechnic graduates. This study hopes to fill in the gap.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter explained the research design, target population, sampling techniques, research instruments, data collection and analysis procedures and the operation definition of variables used.

### **3.2 Research Design**

The research design used in this study was descriptive survey design. The project aimed at investigating role of village polytechnic graduates to entrepreneurship development in respondent's opinion in relation to their role in entrepreneurship development in the country. This enabled the researcher to bring out the elements of the findings in a more clear and comprehensive manner. According to Creswell (2002) descriptive survey design is used when data is collected to describe person, organization, settings, and phenomena. A survey reports the way things which include behavior, attitude, values and characteristics are formed (Mugenda and Mugenda, 2003). The above design was therefore used to investigate the role of village polytechnic graduates to entrepreneurship development in Embu County. A self-administered questionnaire was used to collect the required quantitative and qualitative data from former trainees of Karurumo Youth Polytechnic. The Questionnaire comprised of two sections. The first part was designed to determine the demographic characteristics of the respondents, while the second part consisted of questions focusing on the four independent variables to be studied (Work done by graduates after graduation, business enterprises started by graduates, new innovations started by the YP graduates and Vocational skills acquired by YP graduates) had a role to play in entrepreneurship development in Embu county and Kenya as whole.

The questionnaire was designed in line with the objective of the study. To enhance quality of data obtained, Likert types of questions were included whereby respondents indicated the extent to which the variables were practiced in a five part Likert scale (Gamer, 2010). Structured and un-structured questions were also used to facilitate analysis and encourage the responses to give an in-depth response about the variables

without feeling held back in revealing any information. Secondary data was collected from the ministry of youth affairs and sports at the headquarters and from the county director of youth training in the county. This included annual reports and other related returns.

### 3.3 Target Population

The target population according to Cox (2010) is the entire set of units for which the survey data are used to make references. The target population constitutes the entire or totality of the items under study (Kothari, 2004). The target population for this study was 325 former graduates from Karurumo village polytechnic who graduated between 2003 and 2012 (10 years).

**Table 3.1 Target Population**

	<b>population</b>
YP Graduates from 2003 to 2012	325
<b>Total</b>	<b>325</b>

### 3.4 Sampling Procedure and Sample Size

Mugenda and Mugenda (2003) defined sampling as the selection of a portion of a population such that the selected portion represents the population adequately. Mugenda and Mugenda (2003) suggest that for descriptive studies 10% or above of the accessible population is enough for the study. This study targeted 20% of the target population of 325 making a total sample size of  $(0.20 \times 325) = 65$  as indicated in the below table:-

**Table 3.2 Sample Size**

	<b>Sample size</b>
YP Graduates (20% of 325)	65
<b>Total</b>	<b>65</b>

The former graduates of Karurumo youth polytechnic were traced in the whole county by the four research assistants under my guidance as the principal researcher. The research assistants were briefed on the research problem and what was expected from the questionnaire. The research assistants were encouraged to work as a team where necessary. In order to identify the respondents, the researchers were advised to visit the YP manager, instructors and chiefs to help them in tracing the graduates.

### **3.5 Data Collection Methods and Instruments**

The study used questionnaires in collecting data from graduates. The questionnaire combined both open-ended and close-ended questions which were administered to the graduates. Questionnaires were considered ideal for collecting quick data from the graduates.

The data collection procedure entailed the researcher obtaining an introduction letter from the University. The researcher then sampled graduates to inform them about the study and made arrangements for issuing questionnaires. The respondents were given instructions and assured of confidentiality and were given enough time to fill in the questionnaires, after which the researcher collected the filled-in questionnaires.

The researcher therefore sourced data from both primary and secondary sources. Primary data was gathered directly from respondents through questionnaires. Secondary data was used because there were some data from published materials and information e.g. journals and the internet.

#### **3.5.1 Pilot Testing of the Questionnaires**

Pilot testing of the questionnaires before embarking on real research was important in order for it to reveal deficiencies (Mugenda and Mugenda (2003). Eleven questionnaires were used for pilot testing to ensure reliability and validity in the adjacent Tharaka Nithi County. Former graduates of Muthambi YP were traced and interviewed. The pilot data was not included in the study. The recommendations of the supervisor enhanced the validity of the instruments. This established the reliability and the validity of the instruments.

### **3.5.2 Reliability of the Research Instruments**

In order to ensure reliability of instruments, questions in the questionnaires were constructed and first pre-tested to ensure consistency in measurement. The test-retest technique of assessing reliability of a research involved in administering the same instruments twice to the same group of subjects. This was after a lapse of two weeks. Spearman rank order correlation was employed to compute the correlation coefficient in order to establish the extent to which the content of the questionnaires was consistent in eliciting the right responses every time the instrument was administered. A correlation coefficient ( $r$ ) of 0.85 was considered high enough in judging the reliability of the instruments.

### **3.5.3 Validity of the Research Instruments**

Just as it was observed by Patten (2004) and Wallen & Fraenkel (2001) that a study instrument is only valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed, the current study put in place measures to ensure that the instruments used in the study provided accurate result. The content validity of the instruments was measured. The researcher's supervisors helped the researcher to assess the concept the instruments was measuring in order to determine whether the set of items were accurately representing items under study. The recommendations of the supervisor enhanced the validity of the instruments.

### **3.6 Data Analysis Techniques**

The data collected was coded, cleaned and entered into the computer and analyzed using the statistical package for social sciences (SPSS). Descriptive statistics was used to analyze the data. Descriptive statistics provided for meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution and was used to analyze and generalize the results of analysis to the population (Kothari, 2008). This is because the variables studied were measured at ratio or interval scales and were continuous (Patton, 2003). For analysis of quantitative data, the data was converted into numeric codes representing attributes or measurements of variables. Coding included as much information as possible because once the coded data was entered into the computer,



it was possible to recover any details, which were omitted ( Mugenda &Mugenda, 2003). Generalization was done from the themes about the phenomena in question and interpreted in the light of available literature (Kumar, 2005). Qualitative analysis was important since it supplemented the quantitative analysis that created a better framework for the interpretation of the findings (Kothari 2008). Data was then presented in pie charts and tables and explained

### **3.7 Operational Definition of Variables**

To operationalize the research variables, the matrix below defines how the variables was measured

### 3.8 Operational Definition of Variables

To operationalize the research variables, the matrix below defines how the variables was measured

**Table 3.3 Operational definition of variables**

Objectives	Variables	Indicators of Measurements	Measurements scale	Tools of Analysis	Type of Analysis
To determine how vocational skills acquired by graduates from Karurumo Village Polytechnic in the last 10 years contributed to entrepreneurship development in Embu county	Independent: vocational skills acquired by graduates	<ul style="list-style-type: none"> <li>No. of graduates in gainful employment</li> <li>No. of courses taken by graduates</li> </ul>	Nominal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To find out whether what graduates from Karurumo village polytechnic do after graduation contributed to entrepreneur development in Embu county	Independent: what graduates from Karurumo village polytechnic do after graduation	<ul style="list-style-type: none"> <li>No. of graduates employment</li> <li>No. of graduates self- employment</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneur development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Nominal		
To determine whether types of business started by graduates from Karurumo Village Polytechnic in the last 10 years contribute to entrepreneurship development in Embu County	Independent: types of business started by graduates	<ul style="list-style-type: none"> <li>No. of business started</li> <li>Types of business started</li> </ul>		Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To establish whether innovations started by graduates of Karurumo Village Polytechnic in the last ten years contribute to entrepreneurship development in Embu County	Independent: Innovations started by graduates	<ul style="list-style-type: none"> <li>No. of new products started</li> <li>No. of new technologies started</li> <li>New markets started</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		

**Table 3. 4 The number of Trainees enrolled at Karurumo Youth Polytechnic since 2003 to December 2012**

Dist.	YP	Name of Course	Youth Polytechnic Graduates since 2003 to December, 2012																													
			2003			2014			2005			2006			2007			2008			2010			2011			2012					
			M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
Emb		MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10
		Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11
		Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10
		Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15
		Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17
<b>Grand Total</b>												25						36			18			34			53			63		

### **3.9 Ethical Considerations**

To avoid biases in this study, the researcher took into consideration the qualitative research that uses a case study approach which tends to skew data in certain ways (Mason, 2002). All ethical procedures were considered. Multiple methods were used and acknowledgement of researchers' role assisted in mitigating all the biases in the study.

## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

### 4.1 Introduction

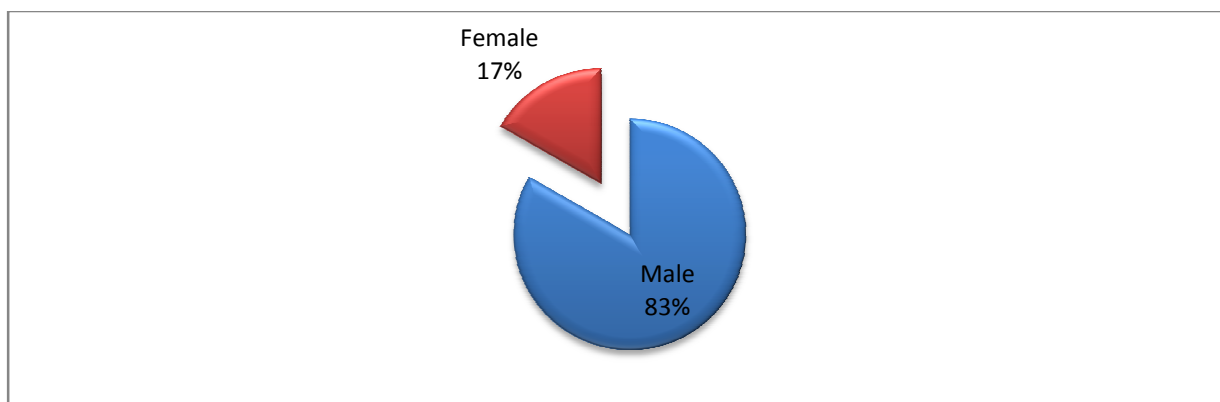
This chapter presents analysis and findings of the study as set out in the research methodology. The results were presented on the role of village polytechnics in entrepreneurship development. The study targeted 65 respondents out of which 60 responded and returned their questionnaires contributing to the response rate of 92.3%. This response rates were sufficient and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was due to extra efforts that were made via personal calls and visits to remind the respondent to fill-in and return the questionnaires. The chapter covers the demographic information, and the findings were based on the objectives.

### 4.2 Demographic Information

#### 4.2.1 Gender distribution of the respondents

The study sought to establish the respondent's gender distribution. The findings are as stipulated in figure 4.1.

**Figure 4.1 Gender of the respondents**



From the findings illustrated in figure 4.1 the majority of the respondents (83%) were males while 17% were females. This illustrates that there was gender disparity as majority of the respondents were males.

### 4.2.2 Highest level of Education

The research sought to establish respondents' highest level of Education. The findings are as stipulated in figure 4.2.

**Figure 4.2 Highest level of Education**

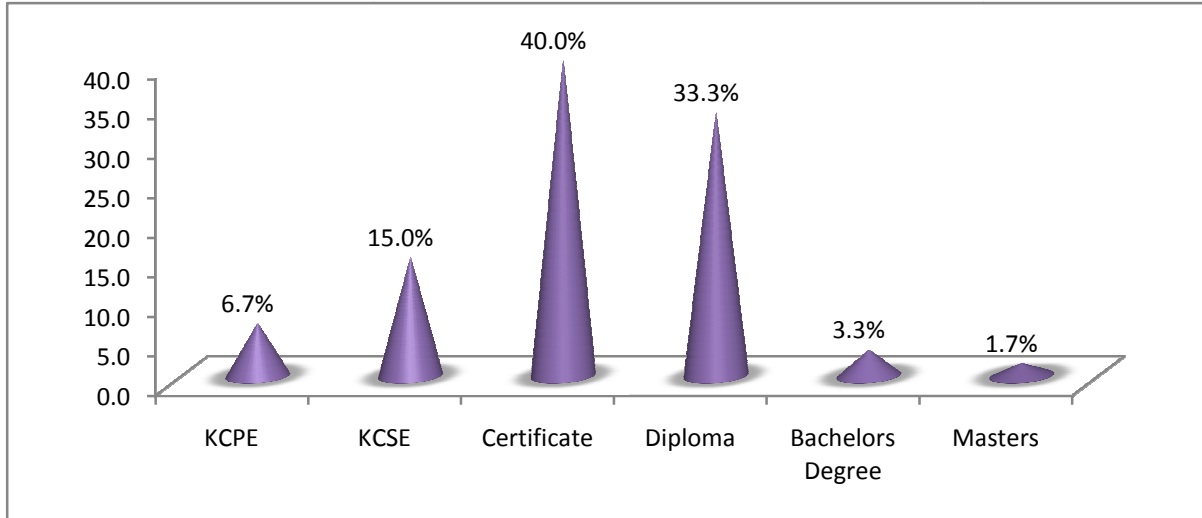
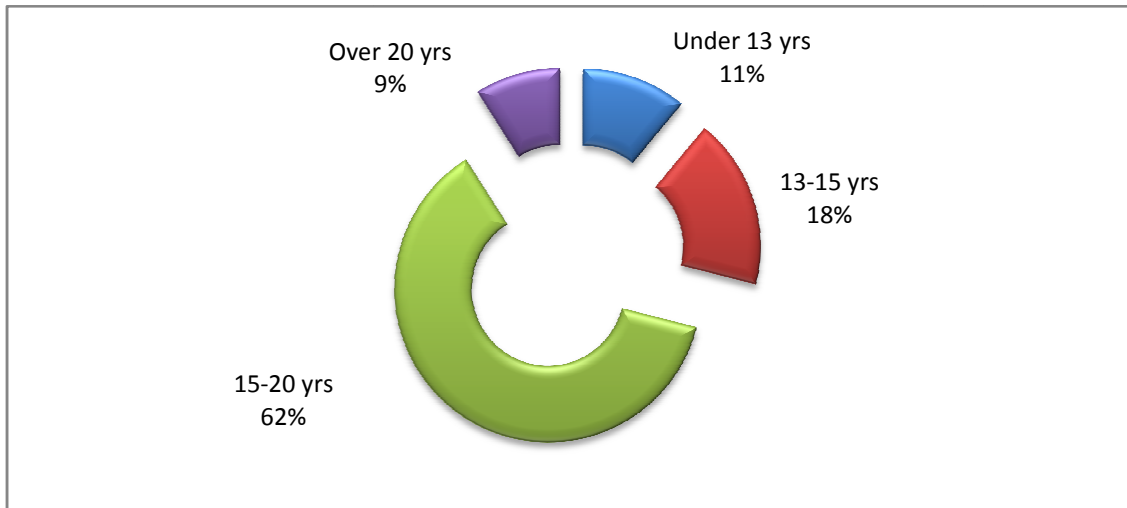


Figure 4.2 indicates that most of the former graduates from Karurumo youth polytechnic (40%) had college certificates level of education, 33.3% had college diplomas and 15% had Kenya certificate of secondary education while 6.7%, 3.3% and 1.7% had Kenya certificate of primary education, bachelor's degree and Masters degree respectively. This illustrates that majority of the graduates from Karurumo Youth Polytechnic had college certificates and diplomas respectively. This shows that most of the graduates were able to carry out entrepreneurship development without many problems owing to their level of education.

### 4.2.3 Age the trainees joined the Polytechnic

The study also sought to establish the age at which the respondents joined the Polytechnic. The findings are as stipulated in figure 4.3.

**Figure 4.3 Age trainees joined Polytechnic**



From the study findings, majority of the respondents (62%) joined the Polytechnic at the age of 15-20 years, 18% at the age of 13-15 years while 11% and 9% joined the polytechnic at the age of less than 13 years and over 20 years respectively. This implies that majority of the graduates from Karurumo youth polytechnic had joined the institution at the age of 15-20 years. This was the normal age at which students/trainees are enrolled in the polytechnics and therefore they were suitable to join the training.

**4.2.4 Number of Years trainees spent in the Polytechnic**

The study further sought to establish the number of years that the respondents spent in the polytechnic. The findings are as stipulated in table 4.1.

**Table 4.1 Number of Years trainees spent in the Polytechnic**

	Frequency	Percentage
< 1 yr	3	5.0
1 & < 2 yr	14	23.3
2 & <3 yrs	23	38.3
3 & < 4 yrs	11	18.3
> 4 years	9	15.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents (38.3%) had spent 2-3 years at Karurumo youth polytechnic, 23% had spent 1-2 years and 18.3% had spent 3-4 years while 15% had spent over four years at Karurumo Youth Polytechnic. This implies that majority of the graduates from Karurumo Youth Polytechnic had spent 2-3 years in the institution that was relatively enough to acquire the desired skills. This is the normal duration that the trainees take in the polytechnics.

#### 4.2.5 Reasons for enrolling in the Youth Polytechnic

The study sought to establish the reasons why the respondents enrolled in the youth polytechnic. The findings are as stipulated in table 4.2.

**Table 4.2 Reasons for enrolling in the Youth Polytechnic**

	Frequency	Percentage
Acquiring of skills	53	88.3
Interested or liked courses offered in the YPs	44	73.3
Forced by circumstances	49	81.7
Lack of school fees for secondary education	51	85.0
Failure to score good grades in KCPE	53	88.3
To be self employed	39	65.0
Polytechnic education is affordable	46	76.7

From the study findings, majority of the respondents (88.3%) indicated acquiring of skills and failure to score good grades in KCPE as the reasons why they enrolled in the youth polytechnic, 85% cited lack of school fees for secondary education and 81.7% indicated that they were forced by circumstances to enroll in the youth polytechnic. On the other hand, 76.7% indicated that polytechnic education was affordable and 73.3% cited that they were interested or liked courses offered in the YPs while 65% indicated that they enrolled in the youth polytechnic due to failure to score good grades in KCPE. Majority of the trainees had divergent reasons why they joined the polytechnics but acquiring of skills and failure to score good grades in KCPE stood out.

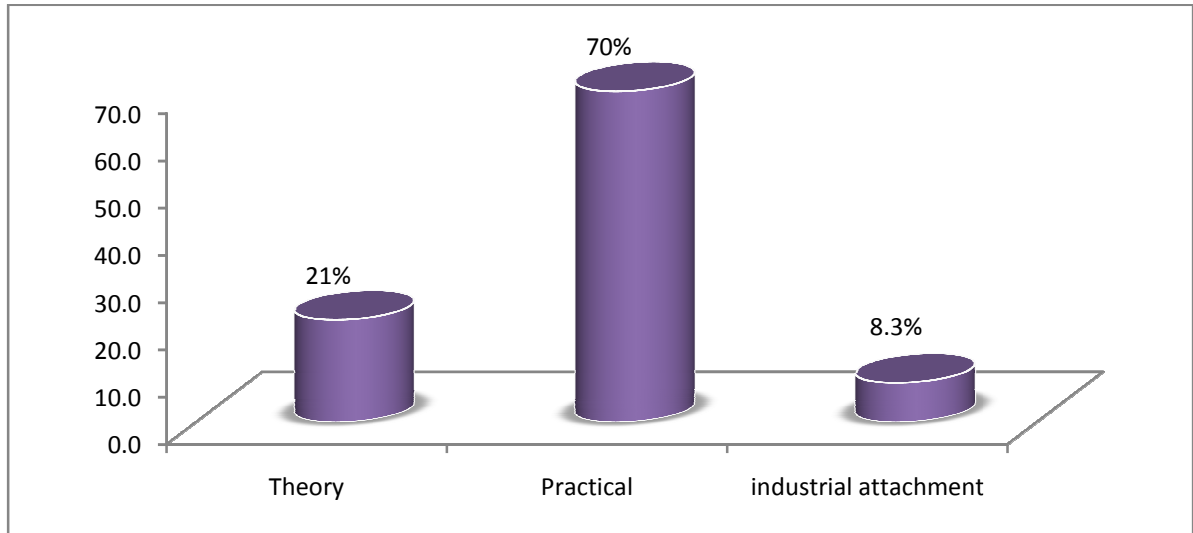


### 4.3 Vocational Skills and Entrepreneurship Development

#### 4.3.1 Aspects of the course undertaken in the polytechnic and day today life

The study asked the respondents to indicate the aspects of the course undertaken in the polytechnic and what they were doing on day today life. The findings are as stipulated in figure 4.4.

**Figure 4.4 Aspects of the course undertaken in the polytechnic**



From the study findings, majority of the respondents (70%) indicated that the aspects of the course undertaken in the polytechnic was practical in their day to day life, 21% indicated that it was theoretical while 8.3% indicated that the aspects of the course undertaken in the polytechnic helped the respondents in their industrial attachment. This meant that the respondents were able to acquire practical skills that they used when they got out from the polytechnic and were able to use it to develop their entrepreneurship skills. This shows that the graduates were able to get the right practical skills that enabled them to be competent, effective and efficient in the operations of the day to day life.

#### 4.3.2 Outcome of vocational skills acquired in the polytechnic

The study also sought to establish the outcome of vocational skills acquired in the polytechnic among the respondents. The findings are as stipulated in table 4.3.

**Table 4.3 Outcome of vocational skills acquired in the polytechnic**

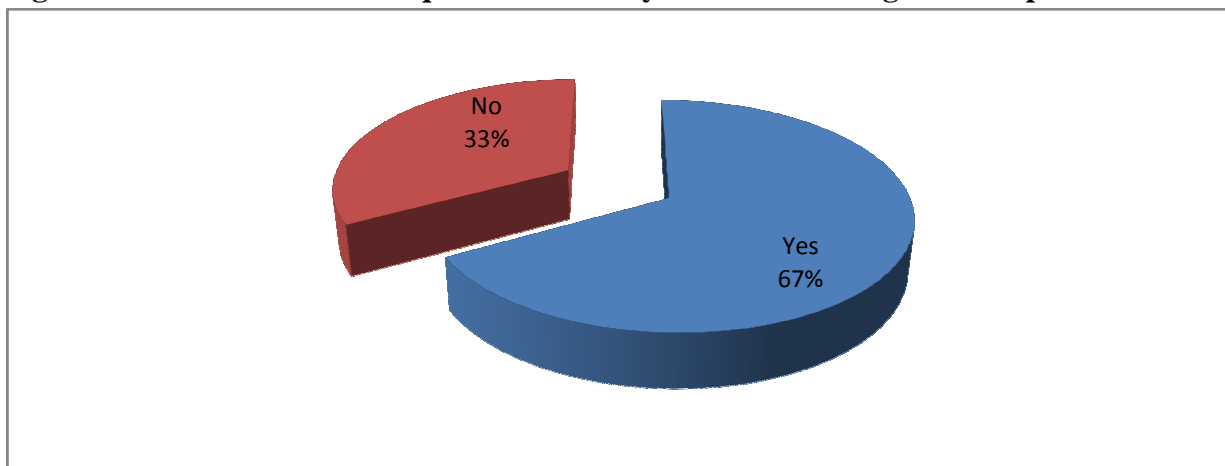
	Frequency	Percentage
Entrepreneur	23	38.3
Trainer	11	18.3
Self-employed	18	30.0
Employed	8	13.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents, 38.3% indicated that the vocational skills acquired in the polytechnic helped them to be entrepreneurs, 30% indicated self-employed while 18.3% and 13.3% indicated that the vocational skills acquired in the polytechnic helped them to be trainers and employed respectively. This implies that the vocational skills acquired in the polytechnic helped majority of the graduates from Karurumo Youth Polytechnic to be entrepreneurs. It also shows that Karurumo Youth Polytechnic graduates were doing well in life because of the vocational skills they acquired during their training. This was in line with expectation as they joined the polytechnic.

#### **4.3.3 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

The study asked the respondents to indicate whether the Vocational skills acquired in the Polytechnic helped them become an Entrepreneur. The findings are as stipulated in figure 4.5.

**Figure 4.5 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

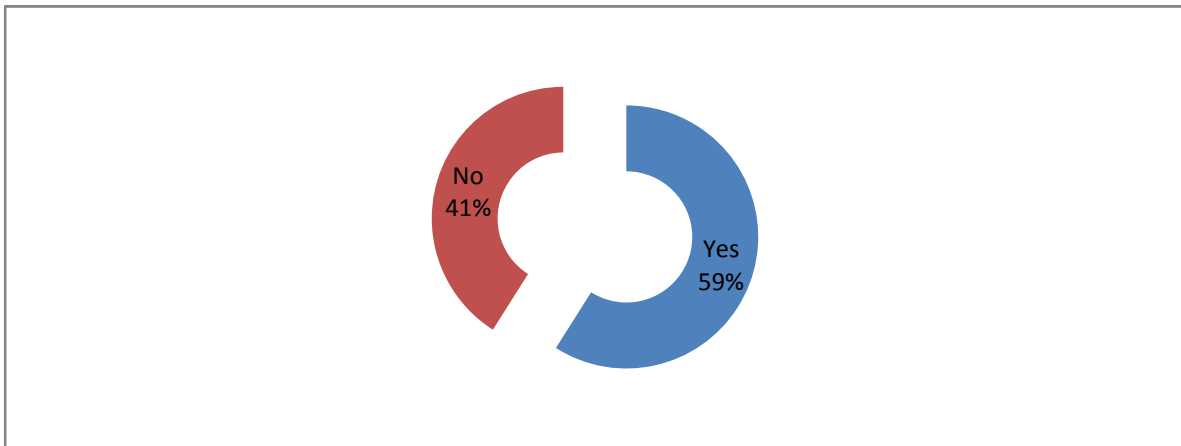


From the study findings, majority (67%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them become an entrepreneur while 33% were of a contrary opinion. This implies that vocational skills acquired in the Polytechnic help graduates become Entrepreneurs.

#### 4.3.4 Vocational skills acquired in the Polytechnic

The study further asked the respondents to indicate whether the vocational skills acquired in the polytechnic helped them improving entrepreneurship skills. The findings are as stipulated in figure 4.6.

**Figure 4.6 Vocational skills acquired in the Polytechnic**



From the study findings in the figure above, majority (59%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them improve their entrepreneurship skills while 41% were of a contrary opinion. This is in line with Waithaka, (1989) who observed that young school graduates with relevant skills and attitudes would lead the young people to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities.

#### 4.3.5 Vocational skills and Entrepreneurship development

The study sought to establish the role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. The findings are as stipulated in table 4.4.

**Table 4.4 Vocational skills and Entrepreneurship development**

	<b>Frequency</b>	<b>Percentage</b>
Promotion of new business	33	55.0
Promotion of innovations	44	73.3
Provision of new technologies	49	81.7
Creation of new products	51	85.0
Acquiring of new skills	56	93.3
Creation of new markets	39	65.0

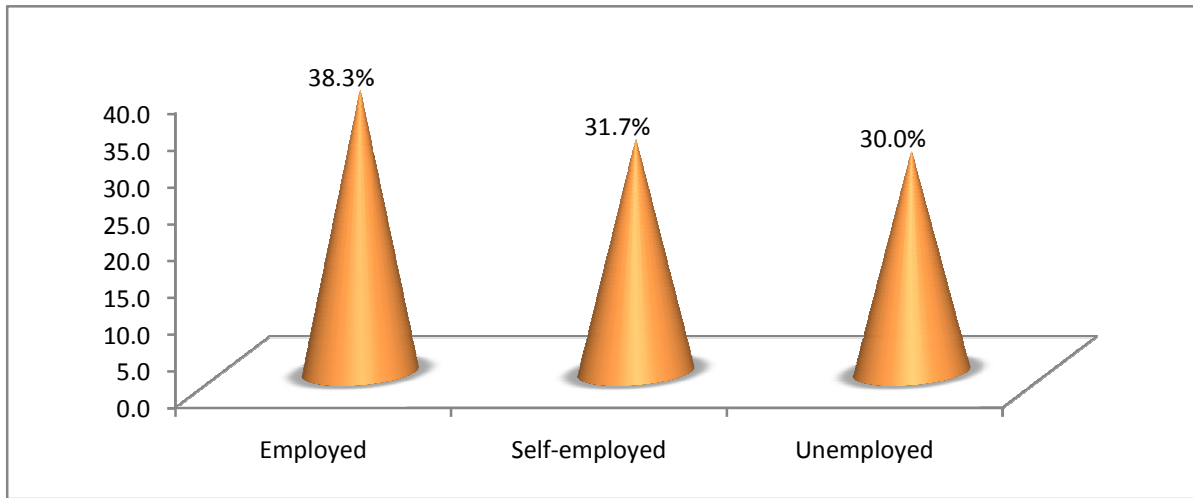
From the study findings, majority of the respondents (93.3%) indicated acquiring of new skills as the role of promotion of entrepreneurship development, 85% indicated creation of new products, 81.7% indicated provision of new technologies and 76.7% indicated new production methods while 73.3% indicated Promotion of innovations. On the other hand, 65% indicated creation of new markets and 55% indicated promotion of new business. This implies that acquiring of new skills was the main role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. This agrees with Schumpeter (1934) who indicated that entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before.

#### **4.4 What graduates do and Entrepreneurship Development**

##### **4.4.1 Employment status**

The study sought to establish the employment status of the graduates from Karurumo youth polytechnic. The findings are as stipulated in figure 4.7.

**Figure 4.7 Employment status**

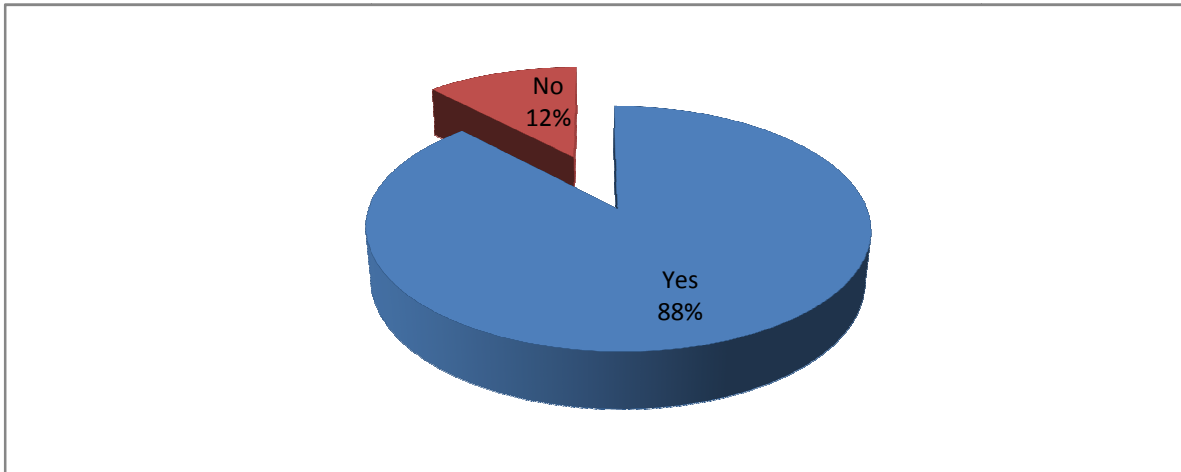


From the study findings, most (38.3%) of the graduates from Karurumo youth polytechnic indicated that they were employed, 31.7% were self-employed while 30% were unemployed. This implies majority of the graduates from Karurumo youth polytechnic were employed. This finding concur with the findings of Achieng (2012) on the study of factors affecting acquisition of vocational skills among learners in Maranda division of Siaya district that found that vocational education main aim is to offer skills to learners that can help them to be self-employed. Vocational skills create greater impact on human resource development and economic growth.

#### **4.4.2 Certificate from Youth Polytechnic and chances of employment**

The study asked the respondents to indicate whether skill training certificate from youth polytechnic enhanced their chances of employment. The findings are as stipulated in figure 4.8.

**Figure 4.8 Certificate from Youth Polytechnic and chances of employment**

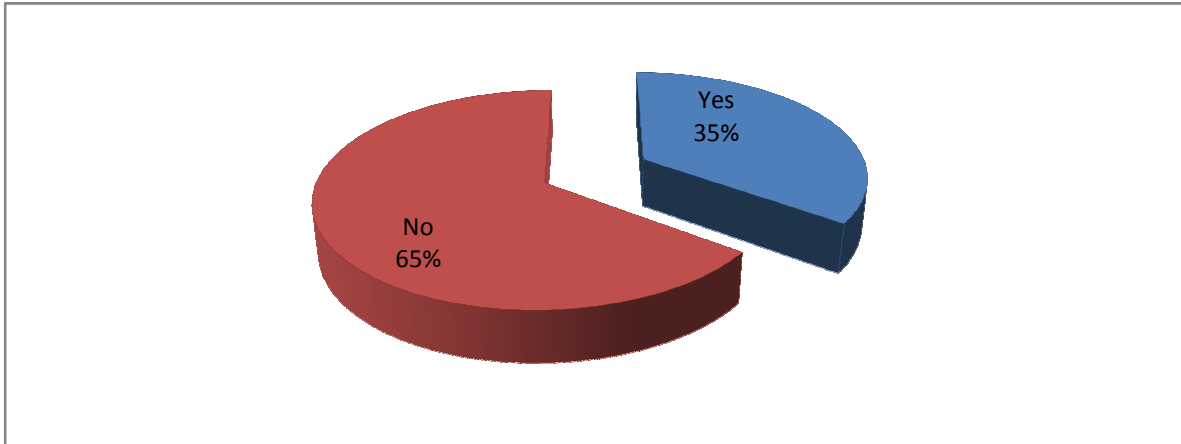


From the figure above, majority (88%) of the graduates from Karurumo youth polytechnic agreed that skill training certificate from youth polytechnic enhanced their chances of employment while 12% disagreed. This implies that skill training certificate from youth polytechnic enhanced graduates chances of employment. This concurred with the findings of Ibuathu (2013) on the study of the impact of vocational training for rural development in Nyambene district in Kenya that found out that 60% of the respondents said youth polytechnic graduates were marketable were learning their own business that included tailoring, carpentry and welding shops.

#### **4.4.3 Offering of Training by the former Polytechnic Graduates**

The study sought to establish whether the graduates from Karurumo youth polytechnic offered any training. The findings are as stipulated in figure 4.9.

**Figure 4.9 Offering of Training by the former Polytechnic Graduates**

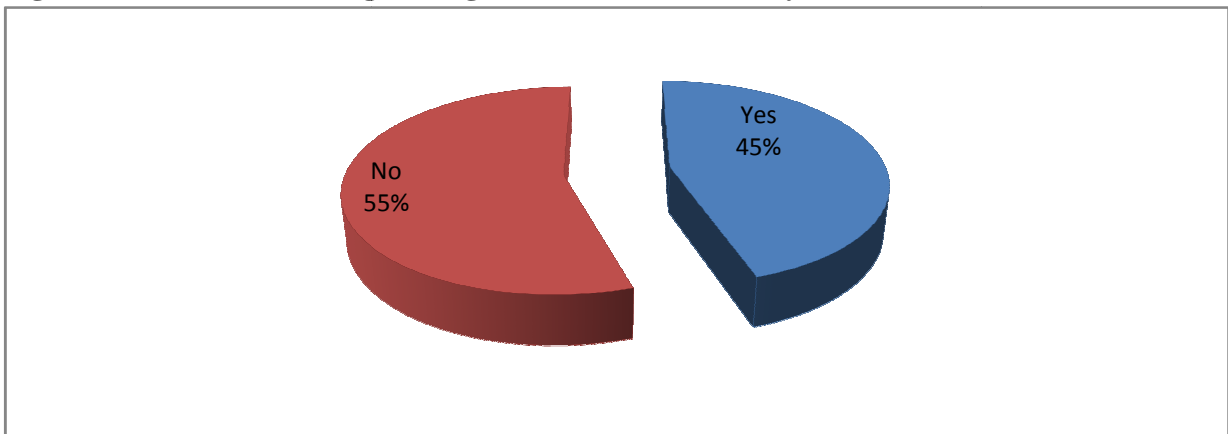


From the findings of the study, majority (65%) of the graduates from Karurumo youth polytechnic disagreed that they offered trainings with 35% agreeing that they offered trainings. This implies that graduates from Karurumo youth polytechnic did not offer trainings. This is in line with Kinyanjui (2007) the youth polytechnic employees enter the labour market as employees, Self-employment and only 22.2% of the graduates were unemployed.

**4.4.4 Use of Training skills gained in the Youth Polytechnic to train**

The study further sought to establish whether the graduates from Karurumo Youth Polytechnic used the training skills gained in the Youth Polytechnic to train. The findings are as stipulated in figure 4.10.

**Figure 4.10 Use of Training skills gained in the Youth Polytechnic to train**



From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic disagreed that they used the training skills gained in the Youth Polytechnic to train with 45% who used the training skills gained in the Youth Polytechnic to train. This implies that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train.

#### 4.4.5 Role of training in entrepreneurship development

The study asked the respondents to indicate the role of training in entrepreneurship development in the County. The findings are as stipulated in table 4.5.

**Table 4.5 Role of training in entrepreneurship development**

	Frequency	Percentage
started new business	33	55.0
Created new products in the market	35	58.3
Value addition to products	49	81.7
New technology	32	53.3
Opening new markets	53	88.3
Providing new services	41	68.3
Providing training services	58	96.7

From the table above, majority (96.7%) of the graduates from Karurumo youth polytechnic indicated provision of training services as the role of training in entrepreneurship development in Embu County, 88.3% indicated opening of new markets, 81.7% indicated value addition to products and 68.3% indicated provision of new services while 58.3%, 55% and 53.3% indicated creation of new products in the market, starting of new businesses and new technology as the role of training in entrepreneurship development in Embu County. McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence.

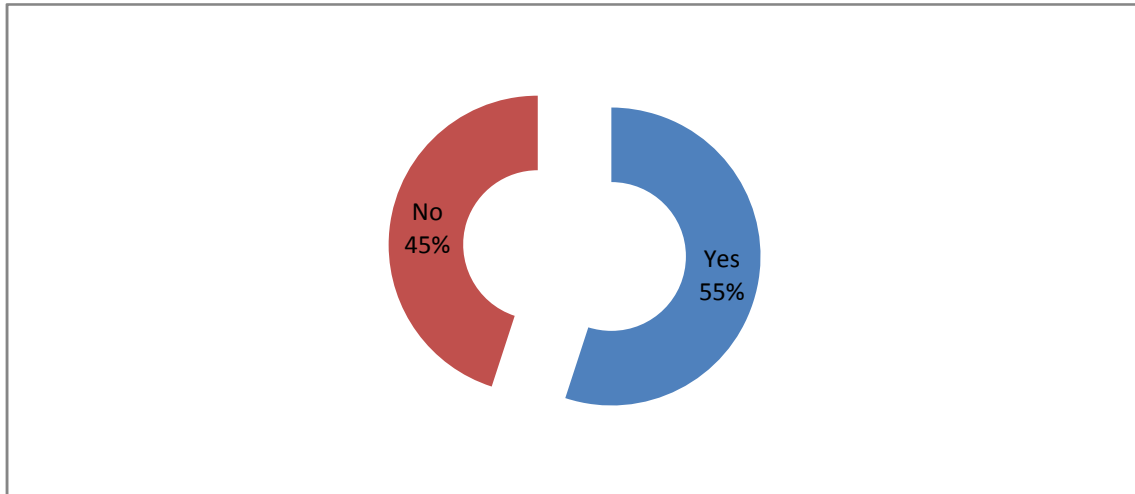


## 4.5 Business started and their role in entrepreneurship

### 4.5.1 Business enterprise after graduation

The study asked the respondents to indicate whether they had started any business enterprise after graduation. The findings are as stipulated in figure 4.11.

**Figure 4.11 Business enterprise after graduation**

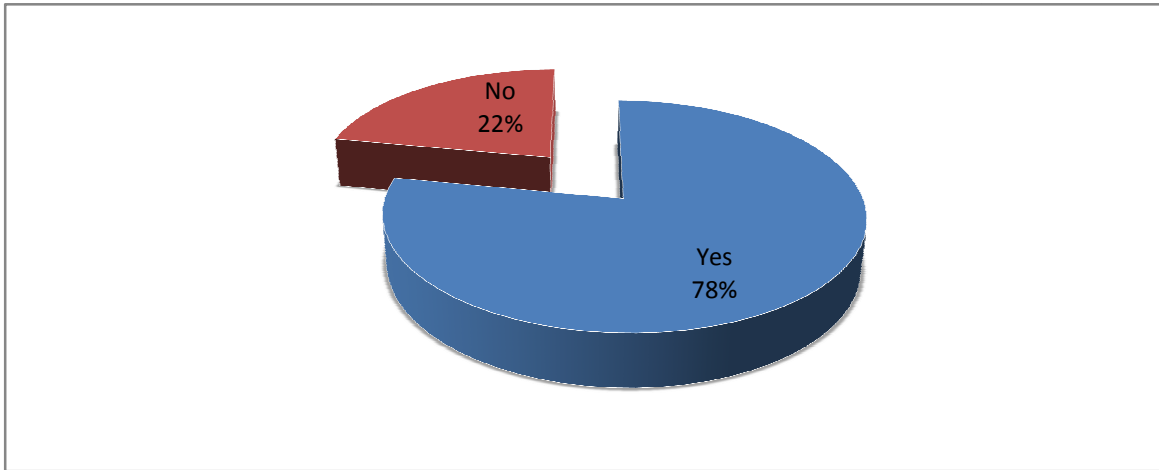


From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic agreed that they had started business enterprise after graduation while 45% had not. This implies that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation.

### 4.5.2 Business started and course taken at polytechnic

The study also sought to find out whether the businesses started were related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.12.

**Figure 4.12 Business started and course taken at polytechnic**

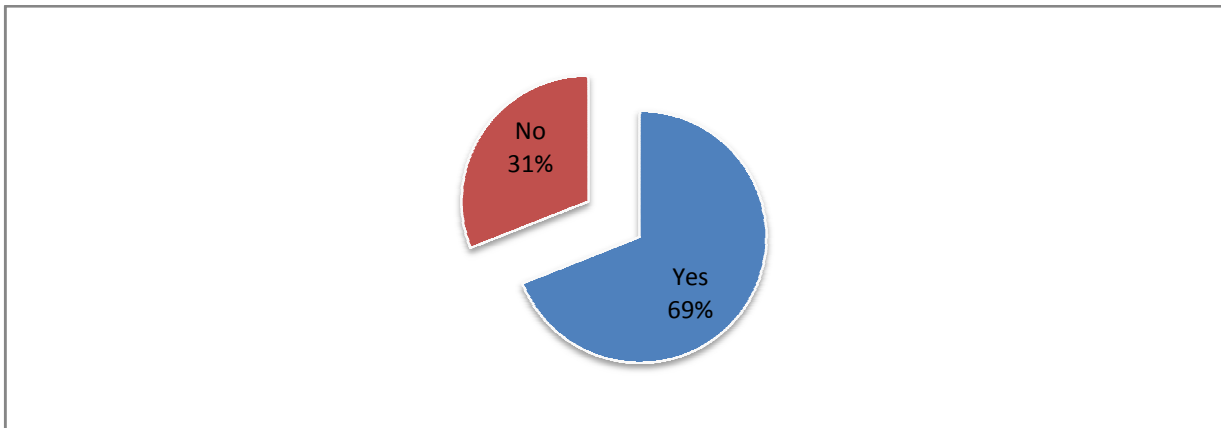


From the findings of the study, majority (78%) of the graduates from Karurumo youth polytechnic agreed that the businesses they had were related to the course undertaken at the polytechnic. This implies that majority of the graduates from Karurumo youth polytechnic had started businesses related to the course undertaken at the polytechnic.

#### **4.5.3 Business enterprise and improvement of entrepreneurship skills**

The study further sought to find out whether the business enterprise stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.13.

**Figure 4.13 Business enterprise and improvement of entrepreneurship skills**



From the figure above, majority (69%) of the graduates from Karurumo youth polytechnic agreed that the business enterprise stated assisted them to improve their entrepreneurship skills. This findings agrees with the findings of Kivu (2013) on the study of influence of leadership on the growth of enterprises in Machakos county that found innovation influenced growth of entrepreneurs in Machakos and that emotional intelligence plays a key role in product and process innovation.

#### **4.5.4 Role of business in improving economic development in the county**

The study asked the respondents to indicate the role of business in improving economic development in the County. The findings are as stipulated in table 4.6.

**Table 4.6 Role of business in improving economic development in the county**

	<b>Frequency</b>	<b>Percentage</b>
Training others	33	55
Doing things better, faster and at less cost	57	95
Opening new markets	51	85
Use of newly found material	32	53
Brought new technologies	53	88

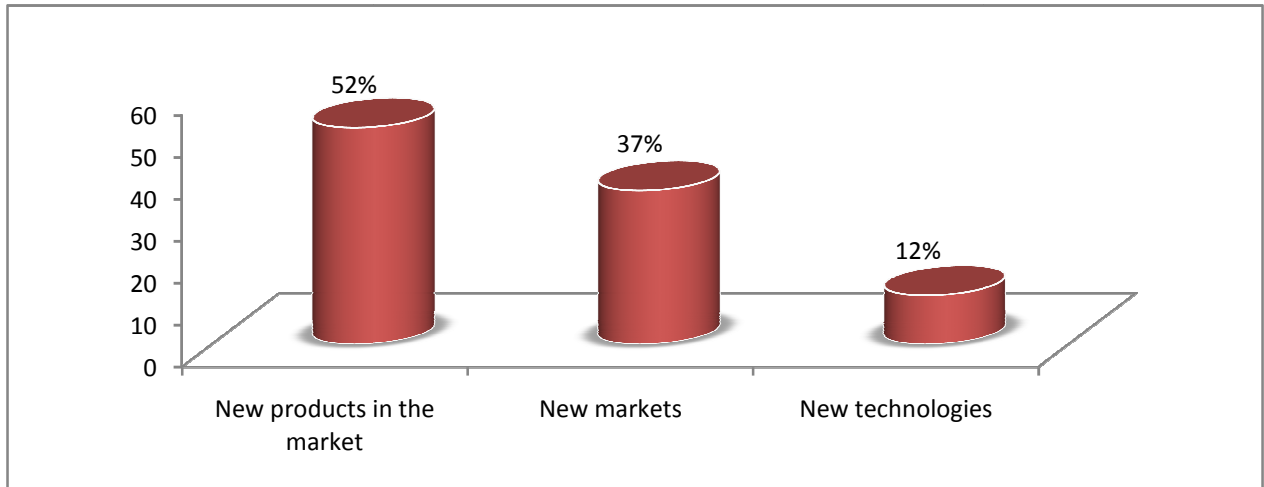
From the table above, majority (95%) of the graduates from Karurumo Youth Polytechnic indicated that the role of business in improving economic development in the County was through doing things better, faster and at less cost, 88% indicated that it brought new technologies, 85% cited that it opened new markets and 55% said that they trained others while 53% indicated that it was through use of newly found materials. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing.

## 4.6 Innovations started and entrepreneurship development

### 4.6.1 Innovations started since leaving polytechnic

The study sought to find out the innovations started by the graduates since they left polytechnic. The findings are as stipulated in figure 4.14.

**Figure 4.14 Innovations started since leaving polytechnic**

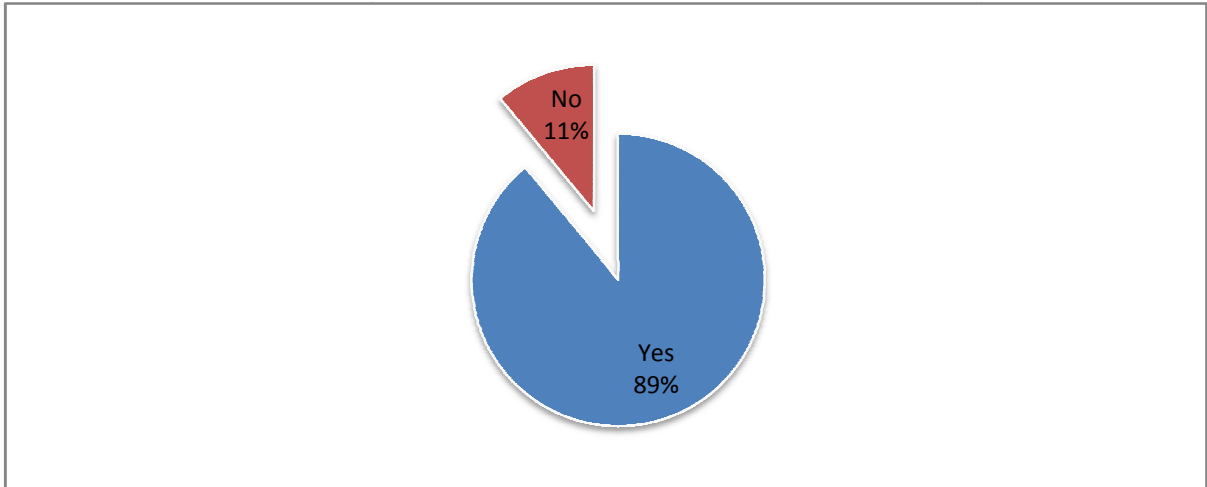


From the study findings, majority (52%) of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic, 37% had introduced new markets while 12% had introduced new technologies since they left polytechnic. This agrees with Yambo (1986) who observed that youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education.

### 4.6.2 Innovations started and course taken at polytechnic

The study also sought to find out whether the innovations stated was related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.15.

**Figure 4.15 Innovations started and course taken at polytechnic**

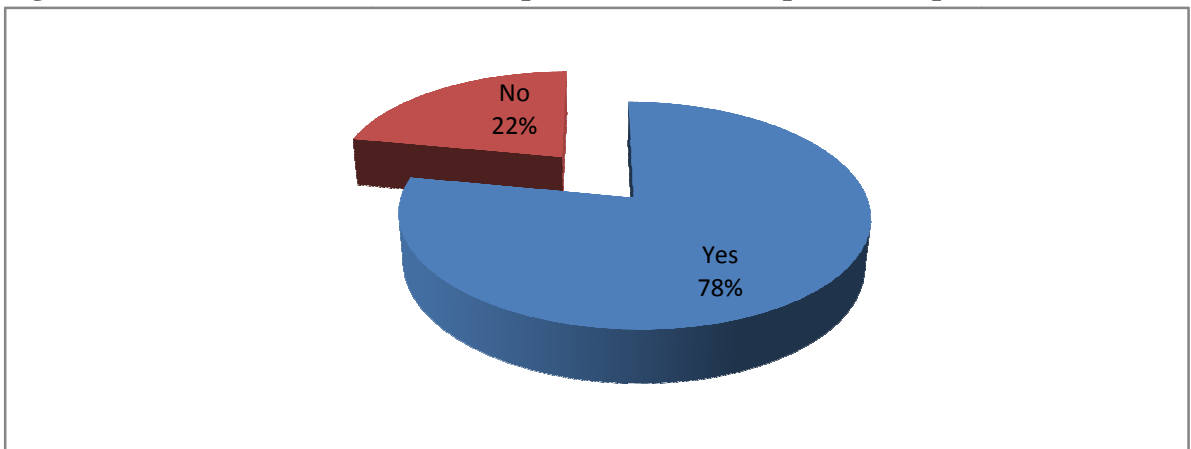


From the figure above, majority (89%) of the graduates from Karurumo youth polytechnic agreed that the innovations stated were related to the course undertaken at the polytechnic.

#### **4.6.3 Innovation started and improvement of entrepreneurship skills**

The study further sought to find out whether the innovation stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.16.

**Figure 4.16 Innovation started and improvement of entrepreneurship skills**

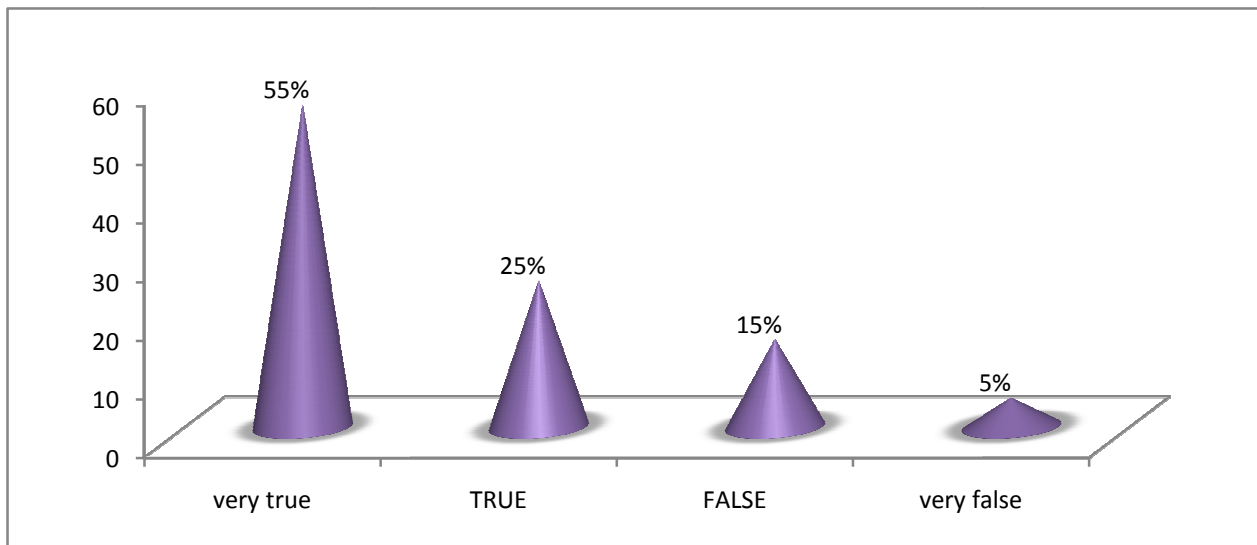


From the figure above, majority (78%) of the graduates from Karurumo youth polytechnic agreed that innovation stated assisted them to improve their entrepreneurship skills.

#### 4.6.4 Innovation started and graduate's role in economic services

The study further sought to find out whether the innovation stated assisted the respondents to enhance their role in providing economic services to the people. The findings are as stipulated in figure 4.17.

**Figure 4.17 Innovation started and graduate's role in economic services**



From the study findings, majority (55%) of the graduates from Karurumo youth polytechnic indicated that it was very true that the innovation stated assisted them to enhance their role in providing economic services to the people while 25% indicated that it was true and 15% indicated that it was false. This implies that the innovation stated assisted the graduates to enhance their role in providing economic services to the people. These findings concur with the findings of Wanyoko (2013) on his study on the influences of business incubation services on growth of small and medium enterprises in Kenya that found out that majority of the respondents in the study (83%) stated that innovation influenced the growth of business and entrepreneurship development and affects business to a greater extent.

#### 4.6.5 Extent to which innovations played role in entrepreneurship development

The study sought to establish the extent to which innovations started by graduates of the polytechnics play in entrepreneurship development. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly

disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

**Table 4.7 Extent to which innovations played role in entrepreneurship development**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>Mean</b>	<b>STDev</b>
Innovations make one risk money and fortunes and combine resources to start new products and services.	46	7	4	3	4.65	0.482
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people	41	12	5	2	4.44	0.524
New technologies assist in provision of efficient and effective services to ones customers	48	6	2	4	4.53	0.621

From the study findings in Table 4.7, majority of the respondents strongly agreed that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people as shown by the mean scores of 4.65, 4.53 and 4.44 respectively and the standard deviation of 0.482, 0621 and 0.524 respectively. This shows that most of respondents either agreed or strongly agreed to the statement.

It also shows the graduates used innovations to satisfy human needs in a more convenient and pleasant way and were able to grow their businesses. They were also able to discern new sources of materials to improve their entrepreneurship. This is in line with Kelemba (2010) who found out that every year graduate of Youth Polytechnic were able to start new technologies, new materials, new products and used their skills to improve their enterprises.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of the study findings, conclusion and recommendations drawn from the study findings. The chapter is based on the study objectives, which were to determine whether the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 have contributed to entrepreneurship development in Embu county; to find out whether what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu county; to establish whether innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county and whether types of business started by the graduates of Karurumo villages polytechnic have contributed to entrepreneur development in Embu county.

### **5.2 Summary of findings**

The study established that the aspects of the course undertaken by the graduates from Karurumo Youth Polytechnic was practical in their day to day life since majority of the graduates ended up being entrepreneurs. Further, the study established that the vocational skills acquired in the polytechnic helped graduates from Karurumo Youth Polytechnic become Entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills by the graduates of Karurumo village polytechnic promoted entrepreneurship development in the County.

The study also established that skill training certificate from youth polytechnic enhanced graduates chances of employment thus majority of the graduates from Karurumo youth polytechnic were employed. Further, majority of the graduates did not offer trainings, however, the study established that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu county.

The study also found out that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation and the businesses were related to the



course undertaken at the polytechnic while business enterprise stated assisted them to improve their entrepreneurship skills. The study further established that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets.

The study found out that majority of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic; the innovations stated were related to the course undertaken at the polytechnic and the innovation stated assisted them to improve their entrepreneurship skills. Further, the study established that the innovation stated assisted the graduates to enhance their role in providing economic services to the people of Embu county. Lastly, the study found out that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assisted in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

### **5.3 Conclusion**

The study concludes that there was gender disparity as majority of the graduates from Karurumo Youth Polytechnic were male who joined the institution at the age of 15-20 years and had spent 2-3 years in the institution. The study also concluded that majority of the graduates had enrolled in the youth polytechnic to acquire of skills and failure to score good grades in KCPE. The study also concludes that many youth polytechnics graduates find self-employment or start new business as a means of making a living. This creates growth and wealth.

The analysis reveals that graduates are making significant contributions in the labour market either as workers in business or in self-employment. In order to cater for the unemployed polytechnic graduates, the economy in the counties needs to be diversified while polytechnics should be upgraded and reconstituted in such a way that they are able to meet demands for market based knowledge and skill acquisition. The other issue that emerged in the analysis is that polytechnics are institutions whose goal is to ensure that trainees acquire

skills that assists' them in personal development as well as for the economic development of the counties and the country at large. Polytechnic education should aim at imparting creativity, innovation, independent thought and precision in polytechnic graduates.

The study concludes that the vocational skills acquired in the polytechnic helped graduates from Karurumo youth polytechnic become entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills was the main role of vocational skills acquired in the polytechnic which promoted entrepreneurship development. The study also concluded that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu County.

The study further conclude that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets. Lastly, the study concluded that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

#### **5.4 Recommendations of the study**

The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. The graduates are making significant contribution in the labour market either in business or self –employment. Youth polytechnics are grassroots institutions that serve the needs of poor youth who are hopeless and helpless. Acquisition of skills and failure to perform well in the examinations are the key factors that drive the youth to enroll in polytechnics. The above perception must be done away with and a deliberate effort to position the youth polytechnics as centers of excellence for all.

The study also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. A deliberate effort to diversify the choice of courses for girls in the youth polytechnics be put in place. Some of the courses that might improve the choice of courses for girls are: secretarial, catering and housekeeping. More effort should also be put in order to encourage girls to enroll in male trades such as mechanic, electrical installations and welding. Communities need to be sensitized to ensure they also take girls to the polytechnics.

The study further recommends the vocational skills offered in the YPs be made more practical and entrepreneurial oriented to prepare the trainees for the world of work both in formal or self-employment. This will reduce the challenges of poverty in the counties and rural areas. There is also need to encourage the formation of right frameworks, networks and facilities that could encourage polytechnic graduates to enter into self-employment. The relationship between policy consumers, facilitators and implementers need to be defined.

Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya.

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**APPENDICES**

**APPENDIX I : DATA COLLECTION QUESTIONNAIRE FOR YP GRADUATES**

This is a self- administered questionnaire to collect data for purely academic purposes. The study seeks to analyze the “**Role of Youth Polytechnics in Entrepreneurship Development in Embu County**” All information will be treated with strict confidence. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

**SECTION A: GENERAL INFORMATION**

1. Gender.....Male  Female

2 Highest Academic Qualifications

*KCPE*

*KCSE*

*Certificate*

*Diploma*

*Bachelors Degree*

*Masters*

3. Age at which you joined the Polytechnic

1. Under 13 years

2. between 13-15 years

3. 15-20 years

4. Over 20 years

5. Year you enrolled in the Polytechnic-----

6. Number of Years you spent in the Polytechnic.....

**SECTION B: ON WETHER, VOCATIONAL SKILLS ACQUIRED BY GRADUATES  
PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMEMT.**

1. What aspects of the course undertaken in the polytechnic are relevant to what you are doing in your day today life?.....  
.....

2. In what way has the vocational skills acquired in the polytechnic prepared you in what you are doing now?.....

3. Has the vocational skills acquired in YP assisted you in being an entrepreneur?

Yes

No

If Yes, Specify.....

If No, specify.....

4. Is the Vocational skills started above assisting to improve your entrepreneurship skills?

1. Yes

2. No

3. If Yes, Specify.....

4. If No, specify.....

5. Do you have suggestion on courses taken in the polytechnic that could help improving entrepreneurship skills in the county.....  
.....

6. What role does vocational skills acquired in YPs play in promotion of entrepreneurship development?

1. ....

2. ....

3. ....

**SECTION C: ON WHETHER WHAT GRADUATES FROM KARURUMO VILLAGE POLYTECHNIC DO AFTER GRADUATION CONTRIBUTE TO ENTERPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Are you employed or in self-employment or unemployed?

Yes  No

(ii) If employed, specify type of job.....

(iii) If Self –employed, specify type of business.....

(iv) If unemployed, specify for how long.....

2. In what way did the Youth Polytechnic skills training prepare you for employment or self-employment?

1. Self-employment aspect.....

2. Employment aspect.....

3. What factors did you consider when choosing where to seek employment or locate business?

1. Self-employment .....

2. Locate business.....

4. How long did you take to find employment or to start business?

1. Find employment .....

2. Self-employment .....

5. Did skills training certificate from youth polytechnic enhance your chances of employment?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

6. Do you offer any training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

7. Do you use training skills learnt at the polytechnic in your training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

8. What role as your training played in entrepreneurship development in Embu County?

1. Started new business

2. Created new product in the market

3. Value additions to products

4. New technology

5. Opening new markets

6. Providing new services

7. Providing Training services

Other(specify).....

**SECTION D:ON WHETHER TYPES OF BUSINESS ENTERPRISESSTARTED BY GRADUATES FROM KARURUMO POLYTECHNIC PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Have you started any business enterprise after graduation?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

2. Is the business related to what you did at the polytechnic?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

3. Has your business enterprise assisted in improving your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, specify.....
- 4. If No, specify.....

4. What role does your business play in improving economic development in the County?

- 1. Training others
- 2. Doing things better, faster and at less cost
- 3. Opening up new markets
- 4. Use of newly found material
- 5. Brought new technologies
- 6. Other (Specify).....

**SECTION E: ON WETHER INNOVATIONS STARTED BY GRADUATES PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT?**

1. What innovations have you started since leaving the polytechnic?

- 1. Started new product in the market
- 2. Started New markets
- 3. Started New technologies
- 4. Other (specify).....

(ii) If, Yes above, specify-----

2. Is the innovation started above related to the course you did in the polytechnic?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

3. Is the innovation started above assisting to improve your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

4. Does the innovation started above enhance your role in providing economic services to people?

- 1. Very True
- 2. True
- 1. False
- 2. Very false

5. What role do the graduates play in promotion of innovation?

- 1. ....
- 2. ....
- 3. ....
- 4. ....

6. State your level of agreement to the following statement as regards whether innovations started by graduates of the polytechnics play a role in entrepreneurship development on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree.

Statement	SA	A	N	D	SD
Innovations make one risk money and fortunes and combine resources to start new products and services.					
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people					
New technologies assist in provision of efficient and effective services to ones customers					

7. What would be your advice to Youth Polytechnic trainees in enhancing entrepreneurship development in the County?

- 1.....
- 2.....
- 3.....

**APPENDIX II : NUMBER OF TRAINEES AT KARURUMO YOUTH POLYTECHNIC FROM 2003 TO 2012**

Cou	District	YP	Name of Course	Youth Polytechnic Graduates since 2003																														
				2003			2014			2005			2006			2007			2008			2009			2010			2011			2012			GT
Em				M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
Cou	Embu	Karurumo	MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10	
			Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11	
			Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10	
			Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15	
			Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17	
<b>Grand Total</b>						<b>20</b>			<b>26</b>			<b>19</b>			<b>25</b>			<b>31</b>			<b>36</b>			<b>18</b>			<b>34</b>			<b>53</b>			<b>63</b>	<b>325</b>





**UNIVERSITY OF NAIROBI**  
**DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK**

**THE ROLE OF VILLAGE POLYTECHNICS IN ENTREPRENEURSHIP  
DEVELOPMENT: A TRACER STUDY OF GRADUATES OF KARURUMO  
VILLAGE POLYTECHNIC, EMBUCOUNTY**

**BY**  
**NJERU ZAVERIO NDUGUTUSON**  
**C50/67801/2011**

**A RESEARCH PROJECTSUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS  
IN SOCIOLOGY (ENTREPRENEURSHIP DEVELOPMENT) OF THE  
UNIVERSITY OF NAIROBI**

**NOVEMBER 2014**

## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signed .....

Date.....

**NJERU ZAVERIO NDUGUTUSON**  
**C50/67801/2011**

This research project has been submitted for examination with my approval as a university supervisor.

Signed .....

Date.....

**PROF. EDWARD MBURUGU**  
**DEPARTMENT OF SOCIOLOGY**  
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## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to individuals that assisted me in one way or another in the course of writing this project.

Special thanks go to my supervisors, Mr. Geoffrey Njeru and Professor Edward Mburugu, who tirelessly guided me and provided professional advice as well as encouragement during the study period.

I am greatly indebted to Madam Emily Nkoroi, the Embu county director of youth training who providing the relevant information, documents and generally facilitated the study.

Further gratitude goes to Mr. Graham Kangethe of curriculum, instruction and examinations division, of the department of youth training in the ministry of youth affairs and sports at the headquarters for providing me with relevant information on youth polytechnics nationally.

I cannot forget the Karurumo youth polytechnic manager and the instructors for their cooperation in giving me the preliminary information and the former trainees who will targets in the study.

Finally, I wish to thank everybody I may not have mentioned here but made this work possible.

Thank you all.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>KCSE</b>	-	Kenya Certificate of Secondary Education
<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>KIE</b>	-	Kenya Institute of Education
<b>MDGs</b>	-	Millennium Development Goals
<b>MOYAS</b>	-	Ministry of Youth Affairs and Sports
<b>NVCET</b>	-	National Vocational Certificate in Education and Training
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>SYPT</b>	-	Subsidied Youth Polytechnic Tuition
<b>TVET</b>	-	Technical and Vocational Education and Training
<b>TIQET</b>	-	Total Integrated Quality Education and Training
<b>UNDP</b>	-	United Nations Development Program
<b>UNESCO</b>	-	United Nations Education and Scientific and Cultural Organization
<b>YPs</b>	-	Youth Polytechnics

## **ABSTRACT**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and analyze their contribution to entrepreneurship development in Kenya. The study used descriptive survey design. The target population was 325 former graduates from Karurumo youth polytechnic who graduated between 2003 and 2012 with a sample size of 20% of the target population leading to 65 respondents. The data collected was analyzed using correlation matrix and multi regression analysis to establish the relationships between independent and dependent variable. The results revealed that vocational skills acquired, business enterprises started, innovations started and what graduates do after graduation separately contributed significantly to entrepreneurship development. The analysis further revealed that polytechnic graduates are making significant contributions in the labour market either as workers in business or in self-employment. The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. It also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The census report also document that over 62% of Kenyans are not in any form of employment and that only 25% of the secondary and university leavers are absorbed in regular employment. It is therefore important to boost vocational, technical, and entrepreneurial skills in youth polytechnic to cover the shortfall. Kenya needs a vibrant youth polytechnic training programs that can support the enhancement of the productivity of small and medium enterprises sector that currently account for 76% of the total employment but only contributes 18% of the natural gross domestic product.

Youth polytechnic education provides youth with technical and vocational skills for jobs in industry. The village polytechnics are an adoption of tailor made strategy to suit the village and rural labour markets (Kinyanjui,2007). The sectors of the rural labour market namely construction, furniture, garments and currently electrification is targeted. It is hoped that after graduating, the youth polytechnic graduates would be gainfully employed and contribute to the entrepreneur development in Kenya.

The UNDP,2012 in report entitled “ Skills gap analysis for graduates of youth polytechnic, vocational training centers and out- of- school youth” revealed that most of the graduates of the youth polytechnics lack competency in modern technology and have no practical skills required to exploit untapped opportunities in our country. They also have weakness in work attitude, communication, customer care and social skills and hence affecting their contribution to entrepreneurship development and their employability in the job market after graduating from the youth polytechnics. It is therefore against this background that the research proposes to investigate the role of youth polytechnic graduates to entrepreneurship development in Kenya through a tracer study of youth polytechnic graduates from Karurumo village polytechnic in Embu county in the last 10 years from 2003 to 2012 with a view of

coming up with interventions that will ensure the right kind and quality of skills training is given to them to enhance their contribution to entrepreneurship development.

## **1.2 Statement of the Problem**

Every year, graduates from Karurumo Village Polytechnic enter the labour market equipped with either grade II or grade III certificate. The whereabouts of these graduates was not visible in surveys of micro and small enterprises in Kenya. In a micro and small enterprise survey carried out in the Ziwani enterprise cluster in Nairobi, there was only one motor vehicle repair entrepreneur who had acquired skills in a village polytechnic (Kinyanjui, 2007). It was also reported that technical training, which is an important aspect of entrepreneurship development, was lacking in baseline surveys of micro and small enterprises (CBS, 1999), yet every year, trained youth graduate from village polytechnics enter the labor market. However, Wanyonyi (2009), Kelemba (2010) and UNDP (2012) reported that graduates from youth polytechnics had difficulties in using modern equipment and lacked the necessary and required skills that employment demands of them. They lacked work attitude, communication, customer care and social skills that are important for them to venture into business enterprises and use innovations that enable them to effectively contribute to entrepreneurship development in the country. Kinyanjui (2007) in a tracer and policy study of youth polytechnics graduates from Kwale, Kitui, Makueni and Taita Taveta also recommended a study on factors influencing technical training to be carried out in other areas to guide on youth polytechnics training policy . A study by Ministry of Youth Affairs and Sports (2012) on national evaluation of NVCET curriculum found out that Embu district had the highest percentage 52% of trainees who were incompetent and unable to fix a prescribed job process that was expected of them during the evaluation period. The purpose of this project was therefore to investigate the contribution of youth polytechnic graduates in entrepreneurship development through a tracer study of youth polytechnic graduates from Karurumo village youth polytechnic in Embu Country. The study specifically looked at whether what youth polytechnic graduates do after graduation, types of business enterprises started by graduates, innovations started by the graduates and vocational skills acquired by the graduates of village polytechnic contributed to entrepreneurship development in Embu county and Kenya as whole.

### **1.3. Overall Research Question**

What role do graduates from village polytechnics play in enhancing entrepreneurship development in the country?

#### **1.3.1 Specific Research Questions**

1. Does vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County?
2. Does what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu County?
3. Do types of businesses enterprises started by graduates of Karurumo village polytechnic started in the last ten years contribute to entrepreneurship development in Embu County?
4. Do innovations started by graduates of Karurumo village polytechnic in the last ten years contribute to entrepreneurship development?

#### **1.3.2 Overall Objective of the Study**

The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and investigate their contribution to entrepreneurship development in Kenya.

#### **1.3.3 Specific Objectives**

The following specific objectives were addressed:-

1. To determine how the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 to 2012 contributed to entrepreneurship development in Embu county.
2. To find out whether what graduates of Karurumo village polytechnic do after graduation contributed to entrepreneurship development in Embu county
3. To determine how types of business started by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County.
4. To establish how innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county

#### **1.4 Significance of the Study**

The study sought to identify and document the role of village polytechnic graduates in enhancing entrepreneurship development in Embu County. The data generated would assist in the provision of appropriate entrepreneurship development services that can address the concerns of village youth polytechnic graduates before entry into the labor market. The study would help to increase the knowledge of the relevant stakeholders and the community about the fate of village polytechnics trainees after graduating and their role in entrepreneurship development. It would also add to the existing knowledge of the impact of youth Polytechnic education on entrepreneurship development.

#### **1.5 Scope and Limitations of the Study**

This study focused on graduates of Karurumo Village Polytechnic, Embu County. The reason Karurumo Village Polytechnic was chosen was because the researcher was from that area and so it offered an ideal setting that could be replicated with lesser complexities in other Karurumo Village Polytechnic in Kenya. This is a case study focusing only on the role of village polytechnics in entrepreneurship development: a tracer study of graduate's of Karurumo Village Polytechnic, Embu County. The study only focused in one village polytechnic of which may not be the same aspect in other village polytechnics, which was not a good representation of all types of village polytechnic. The questionnaire's data was based on the graduate's response, which could be untrue. In order to ensure the response was real and met the expectation of the result, respondent were given more time to read and understand the information that the study required.

Finally, the graduates sampled were fewer hence affecting the sampling size. In order to ensure sampled size was met, research assistance visited the respondents frequently till they met at least 80% of the sample size which was adequate for analysis.

## **1.6 Assumption of the Study**

The study assumed that all the sampled respondents from Karurumo village polytechnic were traceable and able to express themselves freely without hiding information. The other assumption is that this project will assist the policy makers in planning of technical and vocational educational and training of the youth in the country.

## **1.7 Definition of Significant Terms**

**Entrepreneurship:** Is the process of starting a business or other organization. The entrepreneur develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure.

**Entrepreneurship Development** This is success in producing desired or successful enterprises by graduates

**Innovations:** This referred to the introduction of new products or services, use of new methods of production, opening up new markets or use of new products.

**Self Employed:** 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.

**Tracer Study:** Is an approach which widely being used in most organization especially in the educational institutions to track and to keep record of their students once they have graduated from the institution. It is the follow up of graduates of higher education or institutes.

**Temporary Employment:**

Is a situation where the employee is expected to leave the employer within a certain period of time.

**Unemployed:**

Is a situation where someone of working age is not able to get a job but would like to be in full time employment.

**Vocational Skills:**

Are those skills which allow a person to master a particular subject or procedure that is applicable to a career.

**Youth Polytechnic:**

This refers to low cost based post-primary training institutions that prepare trainees on vocation and technical training.



## **1.8 Organization of the Study**

This study is organized in five chapters. Chapter one deals with background on the role of village polytechnics in entrepreneurial development in Kenya. It explores four key components that are involved in entrepreneurship development in youth polytechnics (Vocational skills acquired by the graduates, work done by the graduates after graduation, Business enterprises started by the graduates and innovations started by the graduates) can be used to improve the role the polytechnic play in entrepreneurship development in Country. Chapter two discusses the overview and development of youth polytechnics in Kenya. It looks at how the youth polytechnics can be used to equip young with relevant skills and attitudes that would lead the young people so trained into gainful self-employment in order for them to contribute in the entrepreneurship development of their communities by building up the economic strength of those communities. Chapter three deals with research methodology and expounds on the descriptive survey research design used and research instruments used questionnaires to collect both qualitative and quantitative data from the former Karurumo Youth Polytechnics graduates.

Chapter four deals with data analysis while Chapter five deals with recommendations, It looks at how graduates of Karurumo village polytechnic are making significant contribution in the labour market as workers in business or self-employment. It also looks at how vocational skills acquired have helped the graduates become entrepreneurs hence promoting entrepreneurship development in the country. It further examines how innovations make one risk money and fortunes and combine resources to start new products and services and also establish small and micro enterprises and create employment opportunities for other people.

## **CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

The purpose of the project was to investigate the role of village polytechnics in entrepreneurship development in Kenya. The present chapter reviews related literature and the theoretical and empirical literature on the subject investigated. It details overview of the Kenya education system after independence in 1963 with regard to vocational and technical education and training systems, the establishment of youth polytechnics in Kenya, theoretical literature on vocational training and entrepreneurship development in Kenya, conceptual framework of the study and empirical literature of previous studies and findings about youth polytechnics in Kenya.

### **2.2 Overview of Kenya Vocational and Technical Education Systems since Independence**

Kenya sought ways to make changes in the inherited educational system on achieving independence. The aim was to make educational system supportive and responsive to the newly developed national goals (Merrifield 1986). In the years following independence, two major commissions (Ominde Commission, 1964 and the Gacathi Commission in 1976) were appointed to review the education system (Republic of Kenya, 1964; Republic of Kenya, 1976) and to plan for its future. This resulted to increased schooling. The provision of increased primary education was achieved as a result of Ominde commission. The 1976 commission addressed unemployment among product of formal education at all levels of education. Manpower issues were also addressed and a programme of action was formulated to further develop Vocational and technical education and training.

Attempts to alleviate the problem of unemployment among the youth, particularly the primary school graduates were directed towards the establishment of non-formal vocational education and training institutions such as youth polytechnics (Sifuna 1984). These programs were to absorb youth polytechnics graduates for a few years and give them marketable skills (Hoppers, 1985). Vocational training was also a way of developing attitudes for self reliance as well as imparting workable skills (Bacchus, 1988, Simiyu, 1990).

UNESCO (1984) defined vocational and technical education as: “A comprehensive term refers to education processes where it involves, in addition to general education, the study of technologies and related sciences and acquisitions of practical skills and knowledge relating to occupations in various economic and social life”. The report of the presidential working party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988) also stipulated the need to expand and streamline vocational and technical training institutions and their training to cater for training demands of the 8-4-4 system of education, provide greater opportunities for training primary and secondary school graduates and provide more trained manpower for the economy. The courses offered in youth polytechnics included masonry, carpentry, metal work, tailoring, dressmaking, and motor mechanics among others.

### **2.3 The Establishment of Youth Polytechnics in Kenya**

A youth polytechnic is a low cost community based post primary training institutions (Yambo,1986). Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics were to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). Youth polytechnics were established in Kenya in 1966 after a conference held at Kericho on Education employment and rural development. The conference observed that only a small portion of primary school graduates received places in secondary schools (Sheffield 1967) and youth polytechnics were seen as part of alleviating the primary school graduate unemployment problem. The youth polytechnics were closely related to the local needs and absorption capacities of the rural villages (Thompson, 1981). Between 1966 and 1977, more than 53 youth polytechnics were established and the demand for them was expanding. Currently, there are over 700 youth polytechnics with enrolment of over 100,000 trainees (Republic of Kenya, 2012). The structure of youth polytechnic program at the national level includes a director of youth

training with four major divisions (Curriculum, Institutions and Examinations, Research Division, quality Assurance and Standards and Infrastructure Division). At the County level, there is county director of youth training and the district youth training officer at the district level. The principal (project manager) is the executive officer at the institutional level and serves as the link between staff, trainees, the board of governors and the district youth training Officer. A number of commission reports, sessional papers and studies have made various recommendations on vocation and technical education in Kenya. The education sector reforms in Kenya dates back to the independence period, with commissions, committees, working parties and task forces generating reports, with recommendations, some of which have been implemented in part while others have never been implemented completely. In 1964, there was the Ominde Commission; In 1976, there was the National Committee on Educational Objectives and Policies led by Gachathi; In 1981 there was the Presidential Working Party on the Second University in Kenya led by Mackay; In 1988 there was the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond led by Kamunge; In 1999, there was the Commission of Inquiry into the Education System of Kenya led by Koech. To date, no government documentation is available to the public with chronological details on what recommendations from these reports were adopted and implemented.

The Ominde Commission outlined what education was and had to be during and after independence. The blueprint laid the foundation of post-independence education. It was mandated to survey existing educational resources and to advise the government on the formation and implementation of the required national policies for education (Republic of Kenya, 1964; It is important to note that despite its noble objectives the Ominde Commission recommendations were not implemented in full, a blunder that has had significant effects on education .The Gacathi Report reiterated objectives of the Ominde Commission and sought to enhance the use of the Kenyan educational goals to shape its national character and development. It recommended development of vocational, technical, and practical education. In 1979, the government realized that education was not doing much to achieve its stated objectives. Education curriculum was viewed as being too academic, narrow and examination centered (Republic of Kenya, 1979).

Rate of unemployment grew as school leavers went to urban centers to seek for white-collar jobs. In the 1980s the government changed its policy on education. This was because of the difficulties, which were faced by graduates of its education system at both primary and secondary levels. Most graduates who were matriculating from these levels could not be absorbed into the shrinking labor market. This made the government to reconsider changing its education system and to set up a Presidential Working Party in 1981 (Republic of Kenya, 1981). The report sought to investigate ways in which education could make graduates from these levels self-sufficient, productive in agriculture, industries, and commerce. Education system was expected to ensure that students acquired technical, scientific, and practical knowledge vital for self and salaried employment, lifelong skills, and nation building. The commission was also mandated to investigate the feasibility of establishing a second university that was development centered. It advocated for a practical curriculum that would offer a wide range of employment opportunities and equitable distribution of educational resources. It gave rise to the current education system, the 8::4:4. System.

Kamunge Report of (1988) noted that the youth polytechnics (YPs) were provided with basic facilities and equipments to enable them give quality training at artisan level. It recommended that vocational education and training instructors be trained in pedagogy and their terms and condition of service be improved. The youth polytechnics management be strengthened and local authorities be given full support. It further stressed those facilities of youth polytechnics to be improved. The country's training institutions were not only inadequate but also lacked the essential facilities and technology to prepare students for the challenging labour market.

The Government of Kenya appointed the Commission of Inquiry into the Education system of Kenya (Koech Commission) in 1999. The commission made recommendations on ways that could be used to provide quality education (Republic of Kenya, 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQET) to reflect the vision of Kenyan education. TIQET, as a concept embraced the values and substance that was to characterize the education system. It was to be total because it was expected to be inclusive, accommodative, and life-long. It focused on

quality of delivery and outcome of the education and training process. The report reiterated that, the proposed education system was to become a ticket to a better life, and future for the individual, community and the nation. As a departure from the 8-4-4 system of education, TIQET had some basic innovations, namely: the expansion of access to basic education; elimination of disparities in education based on geographical, social and gender factors; introduction of manageable curriculum content; introduction of modular learning approach and credit accumulation. Specifically, the report called for legal educational reforms, for instance: reviewing of the education act, political will and commitment by making public policy pronouncements on the required changes, enhancing of efficiency and effectiveness in educational administration and management, ensuring there is prudent governance and management of resources, building and strengthening genuine partnership and collaboration among educational stakeholders. In addition, the report also called for cutting-edge reforms including totally integrated quality education training, abolition of the 8-4-4 and replacement with a system not very distinct from the pre-8-4-4 system of 7-4-2-3, and universities maintenance of 1:10 ratio of graduate/undergraduate student; (Republic of Kenya, 1999). The reported also pointed out that one of the hindrances to the development of a technological culture was found in some cultural beliefs and practices among a number of Kenyan communities towards technically related work. Many of them design vocational education for other people's children instead of designing a universal system that is suited for all children who decide to join that career including their own children. In his recommendations, Koech Commission strongly pointed out that vocational training centers be encouraged to offer courses according to the needs of their localities such as short tailoring courses for upgrading courses as well as Jua – kali operators and health workers for the surrounding community. Despite its candid professional research, assessments and honesty on the challenges that were facing Kenyan education system, Koech Report was never implemented by the government. It was perceived as being expensive and complex.

Kenya Vision 2030 is the new long-term development blueprint for the country. It is motivated by a collective aspiration for a better society by the year 2030. The aim of Kenya Vision 2030 is to create “a globally competitive and prosperous country with a high quality of life by 2030”. It aims to transform Kenya into “a newly-industrializing, middle-income

country providing a high quality of life to all its citizens in a clean and secure environment. Simultaneously, the Vision aspires to meet the Millennium Development Goals for Kenyans by 2015. It proposes intensified application of science, technology, and innovation to raise productivity and efficiency levels across the three pillars. It recognizes the critical role played by research and development in accelerating economic development in all the newly industrializing countries of the world. More resources will be devoted to scientific research, technical capabilities of the workforce, and in raising the quality of teaching mathematics, science and technology in schools, polytechnics and universities.

#### **2.4 Vocational Skills acquired by YP Graduates and Entrepreneurship Development**

Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics are to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). The vocational education and training in polytechnics include masonry, tailoring, carpentry, driving, dressmaking, metalwork and many others. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing. However, Ndua suggested that research was required on the dropout rate of the trainees. Every year a number of these graduates get out to the field and therefore the project investigated whether this graduate are able to use the skills acquired in contributing to entrepreneurship development in Embu county.

#### **2.5 Work Done by YP Graduates after graduation and Entrepreneurship Development**

On what graduates of youth polytechnics do after graduation ( Nzioka 1986, Kinyanjui 2007, Yambo (1986) found that graduates who had been trained in carpentry and masonry

where somewhat more rural oriented than those trained in welding and plumbing. Yambo contended that many courses had economic value and predicted that new courses be eventually introduced in Youth Polytechnics. For a long time in Kenya, graduation from any level of education was associated with employment either in the private or public sector. The quality of an institution was based on how many of its graduates were employed after graduation. The reality is now different. The labour market has become very competitive and open joblessness is being experienced among graduates in all education levels. According to Kinyanjui, 2007, the youth polytechnic employees enter the labour market as employees (30%), Self-employment (42.2%) and only 22.2% of the graduates were unemployed. The key jobs for YP graduates were casual, contracts, carpentry, mechanics, welding and dress making among others. Polytechnic graduates were also employed in polytechnics as instructors, machine operators and electrical repairs. Some few graduates were employed in jobs such as hotel attendants, vegetable vending, and hairdressing. The studies revealed that polytechnic education is a holding ground for youth in village as they wait for their dream careers. The current project investigated whether these graduates played a role in entrepreneurship development in the County.

## **2.6 Creation of New Business Enterprises by YP Graduates**

The business perspective views entrepreneurship as the process of creating new business organization with intention of making profit. The entrepreneurs are organizers and coordinators of the major factors of production such as capital, labour and land. They properly mix these factors of production to start business enterprises. Entrepreneurs have initiative and self-confidence in accumulating and mobilizing capital resources for new business. Many youth polytechnics graduates find self-employment or starting new business as a means of making profitable career. This creates growth and wealth. Kinyanjui (2007) in a Trace and policy study of youth polytechnic graduates from Kwale, Kitui, Makueni and Taita Taveta found out that youth polytechnic staffing is one of the policy issues that need urgent attention. There was a clear need for policy to address staffing especially for instructors in the youth polytechnics. It also found out that there are no technicians to assist the instructions in handling the practicals. The study recommended polytechnic staffing will require restoring confidence and enhanced motivation and the beginning point being the



development of scheme of service for the youth polytechnic instructors. The study also recommended that equipments in youth polytechnic are inadequate and old.

UNDP (2012) in a study titled, Skills gap analysis for graduates of youth polytechnic, vocational training Centers and out-of-school youth found out that existing infrastructure and equipment in public youth polytechnics are dilapidated, inadequate and require renovation and modernizing if they are to produce high quality graduates. Most of the instructors are not competent enough to deliver quality skills training to the youth polytechnic trainees. Formalized partnership particularly between youth polytechnics and the industry was found to be lacking thereby making it difficult to align the youth polytechnic training with the demands of the industry and therefore reducing the contribution of Youth Polytechnic graduates in entrepreneurship development. The project investigated whether graduates from the youth polytechnics are involved in starting business enterprises and stimulating investment interests. Were the graduates able to generate income, provide training ground for other people, convene and utilizes local resources and start new business?

### **2.7 Innovations Started by YP Graduates and Entrepreneurship Development**

Schumpeter (1934) said entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before. Apart from being innovators, entrepreneurs are risk-takers and take advantage of business opportunities and transform these into products. This spirit has greatly contributed to the modernization of economics and new technologies. The project investigated whether the polytechnic graduates are able to start new products and create employment. Were the graduates able to use their innovations to satisfy human needs in a more convenient and pleasant way. Application of new technology is necessary for the future growth of business. A technical entrepreneur is as good as a craftsman. Because of the craftsmanship they develop quality goods. They also develop alternative marketing and distribution strategies in order to promote business. Entrepreneurs are creative. They can create customers and buyers. Due to their innovative nature they persist on discerning new sources of materials to improve their enterprises and transform these into profits.

Entrepreneurs like starting something new or different. Kelemba (2010) in a survey of initiatives in current use of integrating of education for sustainable development in centre's of excellence carried out in six TVET institutions in Kenya found out that there was an approach to inspire trainees to think about what they can achieve through their own lives and future careers, however, the major barriers to enacting sustainable development include overcrowding in some part of the curriculum, the perceived relevance by the staff, limited internal accreditation including institutional commitment and validation systems, financial obligation and confusion over what and how to teach sustainable development in youth polytechnics. Every year there are new technologies, new markets, and new products and therefore the project investigated whether the youth polytechnics graduates are able to utilize the opportunities and develop their entrepreneurship skills.

## **2.8. Theoretical Framework**

The theoretical framework on technical training and entrepreneurship development advanced in the project is-

### **2.8.1 The Goal Theory by Latham and Lockie**

According to Goal theory as developed by Latham and Lockie, (1979) there are four main mechanisms that connect goals to training outcomes. They direct attention to priorities , stimulate efforts, challenge people to bring their knowledge and skills to bear and increase their chances of success and the more challenging the goal, the more people will draw on their full repertoire of skills. The theory emphasizes on setting and agreeing on objectives against which performance is measured and managed. It also emphasizes on feedback and review aspects of performance management (Armstrong, 2010).It is against this framework that the project investigated whether graduates of youth polytechnics used the theory to succeed in what they do after graduating from the youth polytechnics. They combined their skills training and career progression by engaging in business, introducing new products, new methods of doing business, new marketing strategies and other income generating activities to enable them to succeed in life and develop their entrepreneurship skills.

### **2.8.2 Constructivism Theory of Training**

The theory advocates that we construct our own understanding of the world we live in. Each of us generates our own rules and mental models, which we use to make sense of our experiences. It advocates taking learning as a process of adjusting mental models to accommodate new experiences. Constructivists believe that learners construct their own reality or at least interpret it based upon their perception of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures, and beliefs that are used to interpret objects and events. What someone knows is grounded in perception of the physical and social experiences that are comprehended by the mind (Jonassen, 1991).

Constructivists call for elimination of standardized curriculum and instead promote use of curriculum that is customized to the student's prior knowledge and market based knowledge. It also emphasizes on hands on problem solving. They say education should focus on making connections between facts and fostering new understandings in students. Instructors should tailor their teaching strategies to student's response and encourage students to analyze, interpret, and predict information and use the knowledge to develop various skills that they can use in future after leaving school. It is against this framework that the project investigated whether graduates of youth polytechnics are using the theory to succeed in what they do after graduating from the youth polytechnics and whether their skills are market oriented and useful after graduation.

### **2.8.3 McClelland's Need for Achievement Theory**

McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence. Those people who have high need for achievement are more likely to succeed as entrepreneurs. Need for achievement refer to the desire to accomplish something with one's effort? It is the urge to excel or the will to do well. Need for power means the desire to dominate and influence others by controlling their actions and use of physical objects. Need for affiliation implies the desire to establish and maintain friendly and warm relation with others. The project investigated whether youth

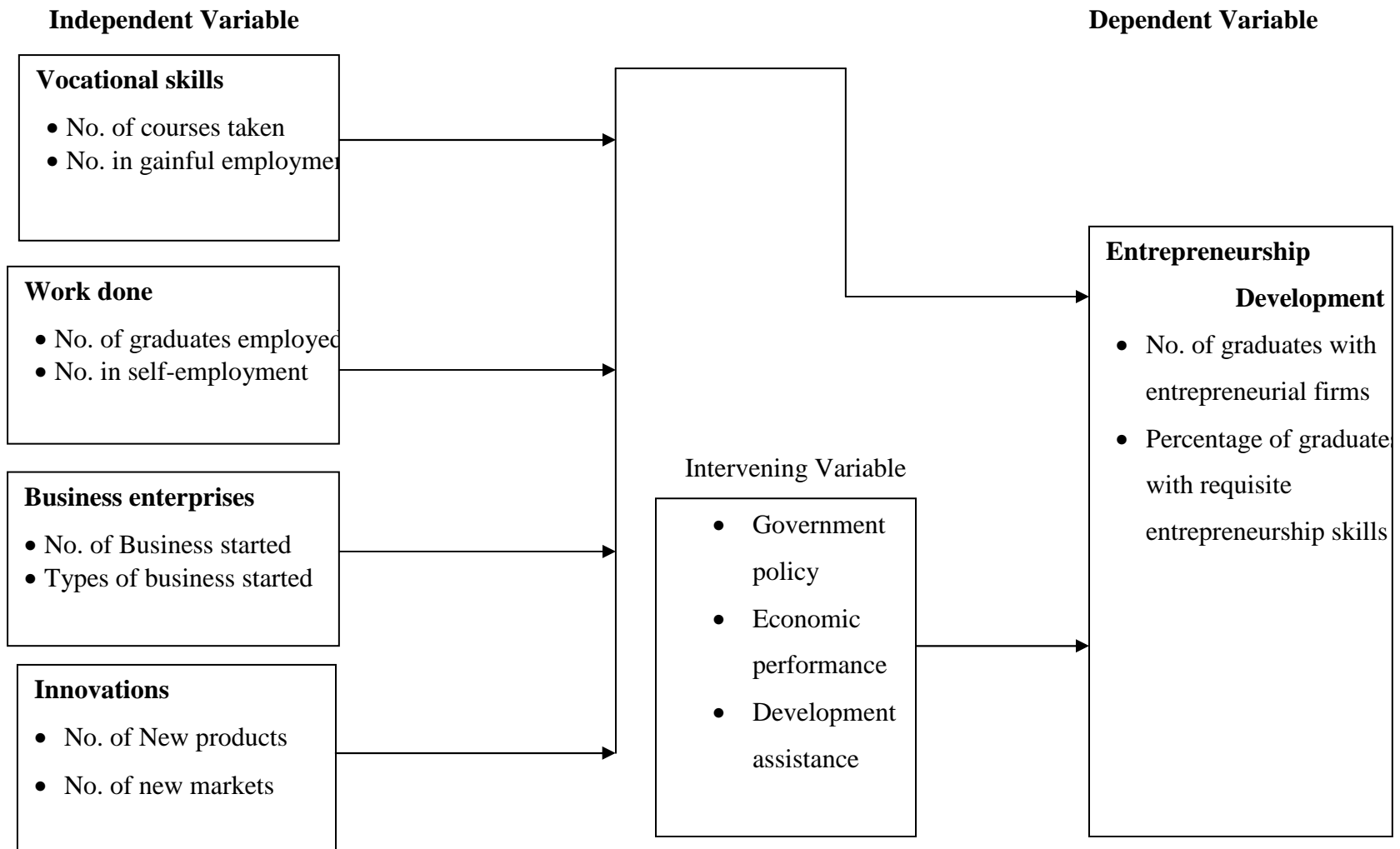
polytechnics graduates are able to use this framework to ensure that they develop their entrepreneurship skills.

## **2.9 Conceptual Framework of the Study**

A conceptual framework helps simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda & Mugenda, 2003). The conceptual framework of the study was based on four independent variables namely; vocational skills acquired by the graduates, work done by the graduates, new business started by graduates and innovations stated by graduates.

An entrepreneur and his/her enterprise have been described as the engine of development. Scholars such as Schumpeter and Cantillon, see entrepreneur as the main catalyst through which any country achieves development. It is in this light that entrepreneurship is seen as the ability to perceive of a business opportunity and exploit it for the purposes of generating a profit, which in turn is used as capital for further investment or as a livelihood means. Entrepreneurship brings innovation through such activities as creation of new products, acquiring of new skills, investing in new technologies, acquiring new sources of raw materials, new production methods, creation of new markets and even new managerial innovations for developments. Entrepreneurship plays a major role in economic development of any economy by promoting capital formation by mobilizing the idle savings of the public, encourages effective resources mobilization of capital and skill that might otherwise remain unutilized and idle. Entrepreneurism an innovator who introduces new combinations of means of production. Innovation involves making use of new things or doing of things that are already being done in a new way. Entrepreneurs are risk takers and insecurity bearers. If the venture succeeds, the entrepreneur profits, if it does not, loses occur. The entrepreneurs must make use of his/her initiatives to reduce risks or uncertainties. They also make business decision, once the entrepreneur is convinced that a particular line of production offers large prospects, he/she has to formulate action plan regarding the product and the quality of products to be produced. He /she has to find the best possible method of production which ensures he/she succeeds. Entrepreneurs arrange finances, purchases raw materials, supervises, sells and markets and assures the role of manager in the enterprise.

In line with this definition and function of entrepreneurship taken above, the project used the below conceptual framework to explain the role of village polytechnics graduates in entrepreneurship development in Kenya. The project looked at whether what graduates of youth polytechnics do after graduation , business enterprises started by the YP graduates, innovations started by the youth polytechnic graduates and vocational skills acquired by the graduates contributes to entrepreneurship development in Embu county and Kenya as a whole.



**Figure 2.1 Conceptual framework**

## 2.10 Knowledge Gaps

The gaps identified in the reviewed literature are as shown on table 2.1

**Table 2.1 Knowledge Gaps**

<b>Variable</b>	<b>Author and Year</b>	<b>Findings</b>	<b>Knowledge gap</b>
Vocational skills and entrepreneurial development by the graduates	Kelemba, (2012) Ndua,(1988) Moyas, (2012) Sifuna (1975) Waithaka, (1989)	Found out that their existed a strong relationship between vocational skills and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	There is need to explore this findings in the context of Kenyan youth polytechnics so as to clearly examine the exact relationship
Work done and entrepreneurial development by the graduates	Moyas (2012) Nzioka (1986) Kinyanjui (2007)	These studies found out that their existed a strong relationship between work done and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	These studies do not indicate clear methodologies that were used to reach this conclusion. On this basis, my study shall designed a clear methodology to verify this influence
Businesses and entrepreneurship development by the graduates	UNDP(2012) Kinyanjui (2007)	There seems to exist a strong relationship between business and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail.
Innovations and entrepreneurial development by the graduates	Schumpeter (2004) Kelemba (2010)	There seems to exist a strong relationship between innovations and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail

## **2.11 Summary of Literature Review**

This chapter highlights the review of the previous studies on youth polytechnics in Kenya and the three theories namely, the Goal theory, the Constructivism theory and McClelland need for achievement theory that have been advanced about training and entrepreneurship development. It further reviews the conceptual framework with the four independent variables under study (What graduates of youth polytechnic do after graduation, types of business enterprises started, vocational skills acquired and innovations started by graduates of the polytechnic has the dependent variables).

This is due to the fact that various development plans and policies associate human development with economic development (Kamunge, 1998). It has been argued that there are many countries with trained and educated populations yet they lag behind in development (Prichet, 1996). Those of contrary opinion such as Ngware (2002), Alam (2007), see investments in education and training as being beneficial. They argue that education and training improves one's creativity, enhances individual's participation in economic development, and enhances one's competitiveness in the job market as well as future earnings. Therefore there is need for further research to ascertain the impact of investment in training on enhancing individual's competitiveness in labour market especially for the youth polytechnics graduates.

The review showed research studies that has been done on the role of vocational and technical skills on entrepreneurship development However, no such studies has been done in Embu County particularly targeting the Karurumo youth polytechnic graduates. This study hopes to fill in the gap.



## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter explained the research design, target population, sampling techniques, research instruments, data collection and analysis procedures and the operation definition of variables used.

### **3.2 Research Design**

The research design used in this study was descriptive survey design. The project aimed at investigating role of village polytechnic graduates to entrepreneurship development in respondent's opinion in relation to their role in entrepreneurship development in the country. This enabled the researcher to bring out the elements of the findings in a more clear and comprehensive manner. According to Creswell (2002) descriptive survey design is used when data is collected to describe person, organization, settings, and phenomena. A survey reports the way things which include behavior, attitude, values and characteristics are formed (Mugenda and Mugenda, 2003). The above design was therefore used to investigate the role of village polytechnic graduates to entrepreneurship development in Embu County. A self-administered questionnaire was used to collect the required quantitative and qualitative data from former trainees of Karurumo Youth Polytechnic. The Questionnaire comprised of two sections. The first part was designed to determine the demographic characteristics of the respondents, while the second part consisted of questions focusing on the four independent variables to be studied (Work done by graduates after graduation, business enterprises started by graduates, new innovations started by the YP graduates and Vocational skills acquired by YP graduates) had a role to play in entrepreneurship development in Embu county and Kenya as whole.

The questionnaire was designed in line with the objective of the study. To enhance quality of data obtained, Likert types of questions were included whereby respondents indicated the extent to which the variables were practiced in a five part Likert scale (Gamer, 2010). Structured and un-structured questions were also used to facilitate analysis and encourage the responses to give an in-depth response about the variables

without feeling held back in revealing any information. Secondary data was collected from the ministry of youth affairs and sports at the headquarters and from the county director of youth training in the county. This included annual reports and other related returns.

### 3.3 Target Population

The target population according to Cox (2010) is the entire set of units for which the survey data are used to make references. The target population constitutes the entire or totality of the items under study (Kothari, 2004). The target population for this study was 325 former graduates from Karurumo village polytechnic who graduated between 2003 and 2012 (10 years).

**Table 3.1 Target Population**

	<b>population</b>
YP Graduates from 2003 to 2012	325
<b>Total</b>	<b>325</b>

### 3.4 Sampling Procedure and Sample Size

Mugenda and Mugenda (2003) defined sampling as the selection of a portion of a population such that the selected portion represents the population adequately. Mugenda and Mugenda (2003) suggest that for descriptive studies 10% or above of the accessible population is enough for the study. This study targeted 20% of the target population of 325 making a total sample size of  $(0.20 \times 325) = 65$  as indicated in the below table:-

**Table 3.2 Sample Size**

	<b>Sample size</b>
YP Graduates (20% of 325)	65
<b>Total</b>	<b>65</b>

The former graduates of Karurumo youth polytechnic were traced in the whole county by the four research assistants under my guidance as the principal researcher. The research assistants were briefed on the research problem and what was expected from the questionnaire. The research assistants were encouraged to work as a team where necessary. In order to identify the respondents, the researchers were advised to visit the YP manager, instructors and chiefs to help them in tracing the graduates.

### **3.5 Data Collection Methods and Instruments**

The study used questionnaires in collecting data from graduates. The questionnaire combined both open-ended and close-ended questions which were administered to the graduates. Questionnaires were considered ideal for collecting quick data from the graduates.

The data collection procedure entailed the researcher obtaining an introduction letter from the University. The researcher then sampled graduates to inform them about the study and made arrangements for issuing questionnaires. The respondents were given instructions and assured of confidentiality and were given enough time to fill in the questionnaires, after which the researcher collected the filled-in questionnaires.

The researcher therefore sourced data from both primary and secondary sources. Primary data was gathered directly from respondents through questionnaires. Secondary data was used because there were some data from published materials and information e.g. journals and the internet.

#### **3.5.1 Pilot Testing of the Questionnaires**

Pilot testing of the questionnaires before embarking on real research was important in order for it to reveal deficiencies (Mugenda and Mugenda (2003). Eleven questionnaires were used for pilot testing to ensure reliability and validity in the adjacent Tharaka Nithi County. Former graduates of Muthambi YP were traced and interviewed. The pilot data was not included in the study. The recommendations of the supervisor enhanced the validity of the instruments. This established the reliability and the validity of the instruments.

### **3.5.2 Reliability of the Research Instruments**

In order to ensure reliability of instruments, questions in the questionnaires were constructed and first pre-tested to ensure consistency in measurement. The test-retest technique of assessing reliability of a research involved in administering the same instruments twice to the same group of subjects. This was after a lapse of two weeks. Spearman rank order correlation was employed to compute the correlation coefficient in order to establish the extent to which the content of the questionnaires was consistent in eliciting the right responses every time the instrument was administered. A correlation coefficient ( $r$ ) of 0.85 was considered high enough in judging the reliability of the instruments.

### **3.5.3 Validity of the Research Instruments**

Just as it was observed by Patten (2004) and Wallen & Fraenkel (2001) that a study instrument is only valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed, the current study put in place measures to ensure that the instruments used in the study provided accurate result. The content validity of the instruments was measured. The researcher's supervisors helped the researcher to assess the concept the instruments was measuring in order to determine whether the set of items were accurately representing items under study. The recommendations of the supervisor enhanced the validity of the instruments.

### **3.6 Data Analysis Techniques**

The data collected was coded, cleaned and entered into the computer and analyzed using the statistical package for social sciences (SPSS). Descriptive statistics was used to analyze the data. Descriptive statistics provided for meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution and was used to analyze and generalize the results of analysis to the population (Kothari, 2008). This is because the variables studied were measured at ratio or interval scales and were continuous (Patton, 2003). For analysis of quantitative data, the data was converted into numeric codes representing attributes or measurements of variables. Coding included as much information as possible because once the coded data was entered into the computer,

it was possible to recover any details, which were omitted ( Mugenda &Mugenda, 2003). Generalization was done from the themes about the phenomena in question and interpreted in the light of available literature (Kumar, 2005). Qualitative analysis was important since it supplemented the quantitative analysis that created a better framework for the interpretation of the findings (Kothari 2008). Data was then presented in pie charts and tables and explained

### **3.7 Operational Definition of Variables**

To operationalize the research variables, the matrix below defines how the variables was measured

### 3.8 Operational Definition of Variables

To operationalize the research variables, the matrix below defines how the variables was measured

**Table 3.3 Operational definition of variables**

Objectives	Variables	Indicators of Measurements	Measurements scale	Tools of Analysis	Type of Analysis
To determine how vocational skills acquired by graduates from Karurumo Village Polytechnic in the last 10 years contributed to entrepreneurship development in Embu county	Independent: vocational skills acquired by graduates	<ul style="list-style-type: none"> <li>No. of graduates in gainful employment</li> <li>No. of courses taken by graduates</li> </ul>	Nominal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To find out whether what graduates from Karurumo village polytechnic do after graduation contributed to entrepreneur development in Embu county	Independent: what graduates from Karurumo village polytechnic do after graduation	<ul style="list-style-type: none"> <li>No. of graduates employment</li> <li>No. of graduates self- employment</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneur development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Nominal		
To determine whether types of business started by graduates from Karurumo Village Polytechnic in the last 10 years contribute to entrepreneurship development in Embu County	Independent: types of business started by graduates	<ul style="list-style-type: none"> <li>No. of business started</li> <li>Types of business started</li> </ul>		Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To establish whether innovations started by graduates of Karurumo Village Polytechnic in the last ten years contribute to entrepreneurship development in Embu County	Independent: Innovations started by graduates	<ul style="list-style-type: none"> <li>No. of new products started</li> <li>No. of new technologies started</li> <li>New markets started</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		

**Table 3. 4 The number of Trainees enrolled at Karurumo Youth Polytechnic since 2003 to December 2012**

Dist.	YP	Name of Course	Youth Polytechnic Graduates since 2003 to December, 2012																													
			2003			2014			2005			2006			2007			2008			2010			2011			2012					
			M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
Emb		MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10
		Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11
		Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10
		Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15
		Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17
<b>Grand Total</b>												25						36					18			34			53			63

### **3.9 Ethical Considerations**

To avoid biases in this study, the researcher took into consideration the qualitative research that uses a case study approach which tends to skew data in certain ways (Mason, 2002). All ethical procedures were considered. Multiple methods were used and acknowledgement of researchers' role assisted in mitigating all the biases in the study.



## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

### 4.1 Introduction

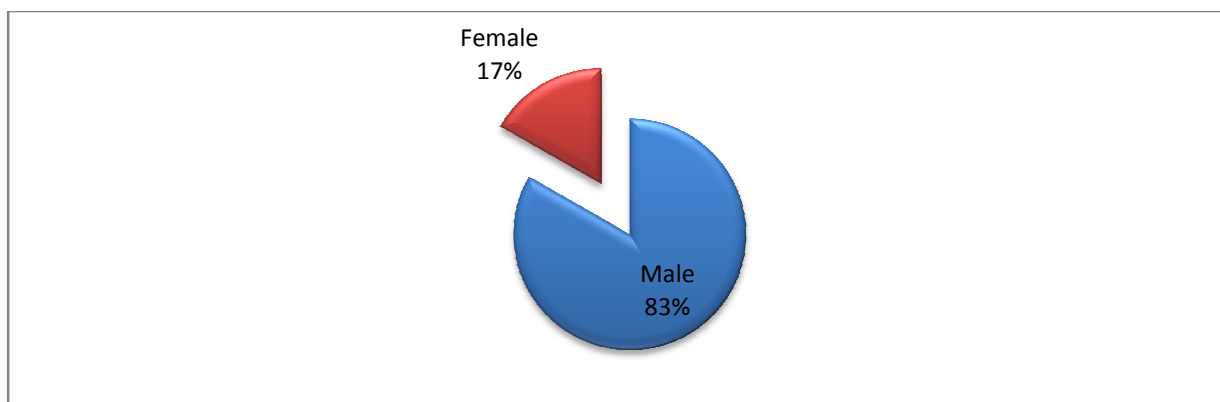
This chapter presents analysis and findings of the study as set out in the research methodology. The results were presented on the role of village polytechnics in entrepreneurship development. The study targeted 65 respondents out of which 60 responded and returned their questionnaires contributing to the response rate of 92.3%. This response rates were sufficient and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was due to extra efforts that were made via personal calls and visits to remind the respondent to fill-in and return the questionnaires. The chapter covers the demographic information, and the findings were based on the objectives.

### 4.2 Demographic Information

#### 4.2.1 Gender distribution of the respondents

The study sought to establish the respondent's gender distribution. The findings are as stipulated in figure 4.1.

**Figure 4.1 Gender of the respondents**



From the findings illustrated in figure 4.1 the majority of the respondents (83%) were males while 17% were females. This illustrates that there was gender disparity as majority of the respondents were males.

### 4.2.2 Highest level of Education

The research sought to establish respondents' highest level of Education. The findings are as stipulated in figure 4.2.

**Figure 4.2 Highest level of Education**

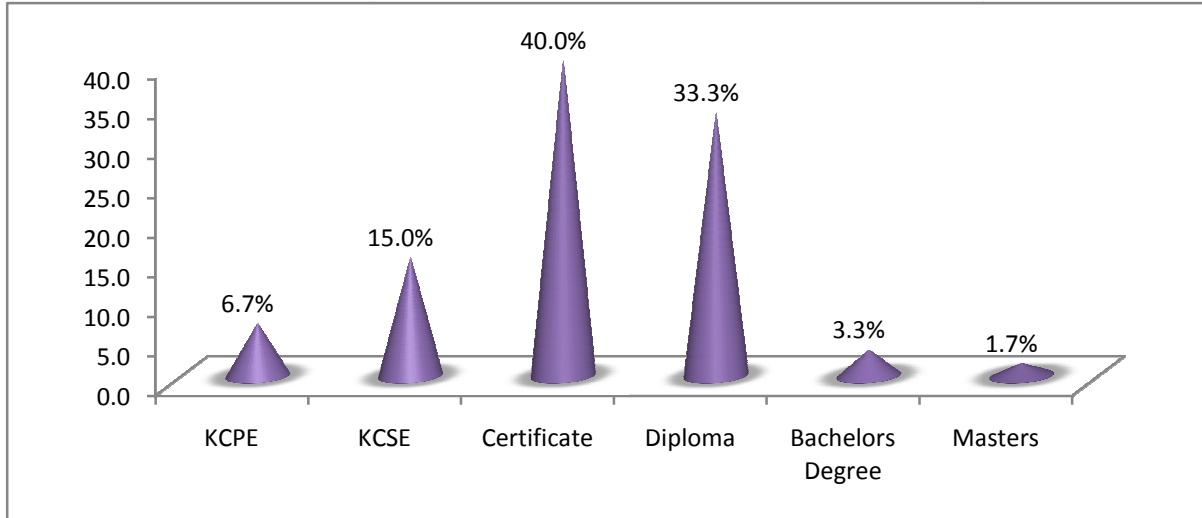
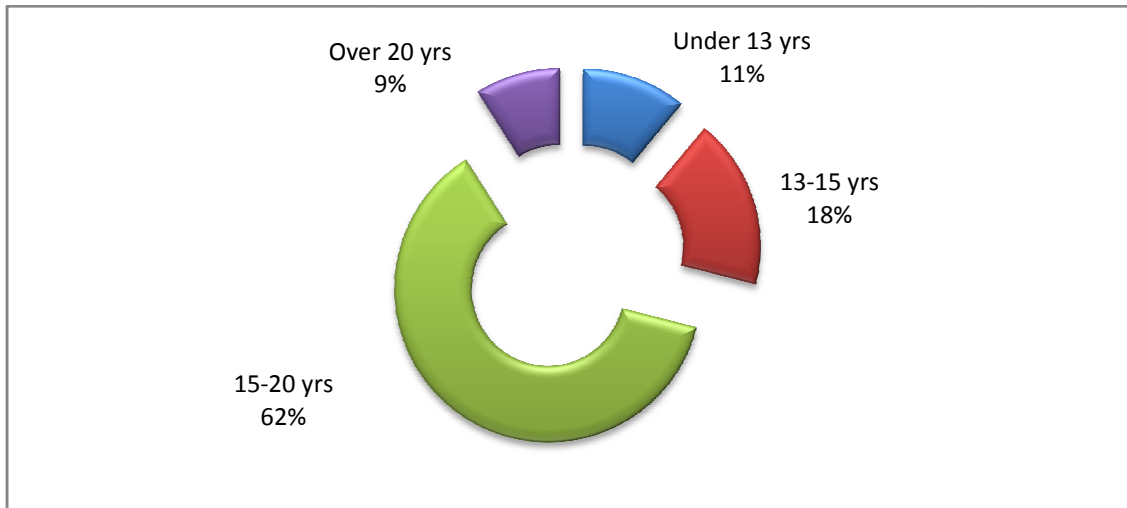


Figure 4.2 indicates that most of the former graduates from Karurumo youth polytechnic (40%) had college certificates level of education, 33.3% had college diplomas and 15% had Kenya certificate of secondary education while 6.7%, 3.3% and 1.7% had Kenya certificate of primary education, bachelor's degree and Masters degree respectively. This illustrates that majority of the graduates from Karurumo Youth Polytechnic had college certificates and diplomas respectively. This shows that most of the graduates were able to carry out entrepreneurship development without many problems owing to their level of education.

### 4.2.3 Age the trainees joined the Polytechnic

The study also sought to establish the age at which the respondents joined the Polytechnic. The findings are as stipulated in figure 4.3.

**Figure 4.3 Age trainees joined Polytechnic**



From the study findings, majority of the respondents (62%) joined the Polytechnic at the age of 15-20 years, 18% at the age of 13-15 years while 11% and 9% joined the polytechnic at the age of less than 13 years and over 20 years respectively. This implies that majority of the graduates from Karurumo youth polytechnic had joined the institution at the age of 15-20 years. This was the normal age at which students/trainees are enrolled in the polytechnics and therefore they were suitable to join the training.

**4.2.4 Number of Years trainees spent in the Polytechnic**

The study further sought to establish the number of years that the respondents spent in the polytechnic. The findings are as stipulated in table 4.1.

**Table 4.1 Number of Years trainees spent in the Polytechnic**

	Frequency	Percentage
< 1 yr	3	5.0
1 & < 2 yr	14	23.3
2 & <3 yrs	23	38.3
3 & < 4 yrs	11	18.3
> 4 years	9	15.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents (38.3%) had spent 2-3 years at Karurumo youth polytechnic, 23% had spent 1-2 years and 18.3% had spent 3-4 years while 15% had spent over four years at Karurumo Youth Polytechnic. This implies that majority of the graduates from Karurumo Youth Polytechnic had spent 2-3 years in the institution that was relatively enough to acquire the desired skills. This is the normal duration that the trainees take in the polytechnics.

#### 4.2.5 Reasons for enrolling in the Youth Polytechnic

The study sought to establish the reasons why the respondents enrolled in the youth polytechnic. The findings are as stipulated in table 4.2.

**Table 4.2 Reasons for enrolling in the Youth Polytechnic**

	Frequency	Percentage
Acquiring of skills	53	88.3
Interested or liked courses offered in the YPs	44	73.3
Forced by circumstances	49	81.7
Lack of school fees for secondary education	51	85.0
Failure to score good grades in KCPE	53	88.3
To be self employed	39	65.0
Polytechnic education is affordable	46	76.7

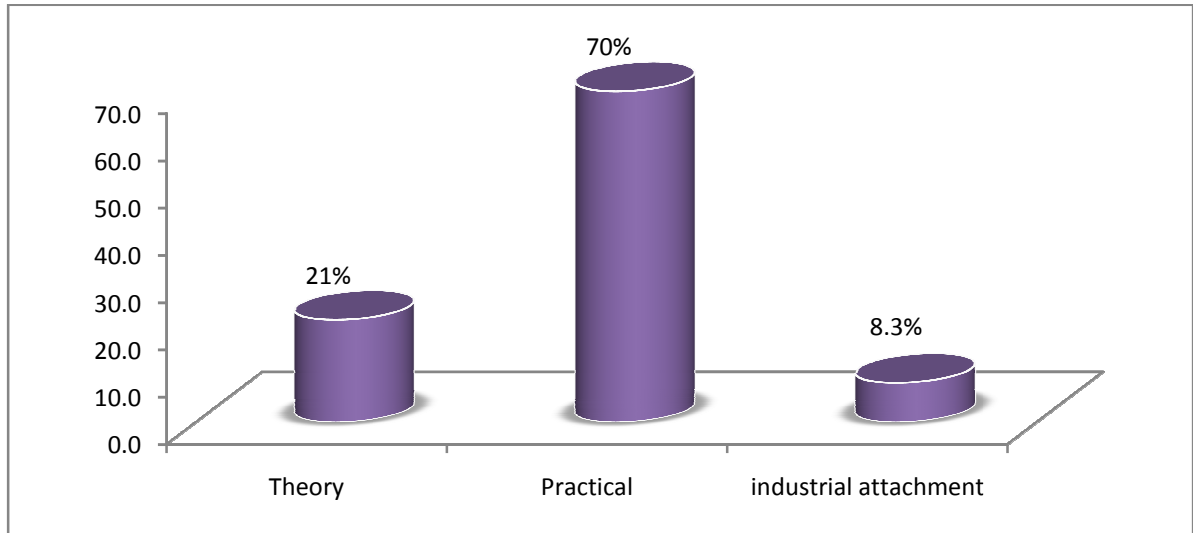
From the study findings, majority of the respondents (88.3%) indicated acquiring of skills and failure to score good grades in KCPE as the reasons why they enrolled in the youth polytechnic, 85% cited lack of school fees for secondary education and 81.7% indicated that they were forced by circumstances to enroll in the youth polytechnic. On the other hand, 76.7% indicated that polytechnic education was affordable and 73.3% cited that they were interested or liked courses offered in the YPs while 65% indicated that they enrolled in the youth polytechnic due to failure to score good grades in KCPE. Majority of the trainees had divergent reasons why they joined the polytechnics but acquiring of skills and failure to score good grades in KCPE stood out.

### 4.3 Vocational Skills and Entrepreneurship Development

#### 4.3.1 Aspects of the course undertaken in the polytechnic and day today life

The study asked the respondents to indicate the aspects of the course undertaken in the polytechnic and what they were doing on day today life. The findings are as stipulated in figure 4.4.

**Figure 4.4 Aspects of the course undertaken in the polytechnic**



From the study findings, majority of the respondents (70%) indicated that the aspects of the course undertaken in the polytechnic was practical in their day to day life, 21% indicated that it was theoretical while 8.3% indicated that the aspects of the course undertaken in the polytechnic helped the respondents in their industrial attachment. This meant that the respondents were able to acquire practical skills that they used when they got out from the polytechnic and were able to use it to develop their entrepreneurship skills. This shows that the graduates were able to get the right practical skills that enabled them to be competent, effective and efficient in the operations of the day to day life.

#### 4.3.2 Outcome of vocational skills acquired in the polytechnic

The study also sought to establish the outcome of vocational skills acquired in the polytechnic among the respondents. The findings are as stipulated in table 4.3.

**Table 4.3 Outcome of vocational skills acquired in the polytechnic**

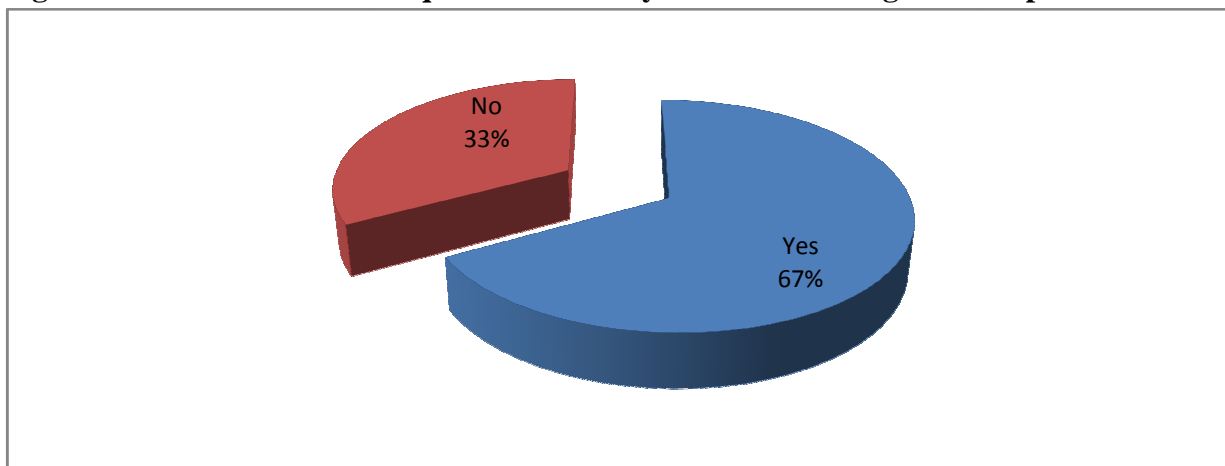
	Frequency	Percentage
Entrepreneur	23	38.3
Trainer	11	18.3
Self-employed	18	30.0
Employed	8	13.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents, 38.3% indicated that the vocational skills acquired in the polytechnic helped them to be entrepreneurs, 30% indicated self-employed while 18.3% and 13.3% indicated that the vocational skills acquired in the polytechnic helped them to be trainers and employed respectively. This implies that the vocational skills acquired in the polytechnic helped majority of the graduates from Karurumo Youth Polytechnic to be entrepreneurs. It also shows that Karurumo Youth Polytechnic graduates were doing well in life because of the vocational skills they acquired during their training. This was in line with expectation as they joined the polytechnic.

#### **4.3.3 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

The study asked the respondents to indicate whether the Vocational skills acquired in the Polytechnic helped them become an Entrepreneur. The findings are as stipulated in figure 4.5.

**Figure 4.5 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

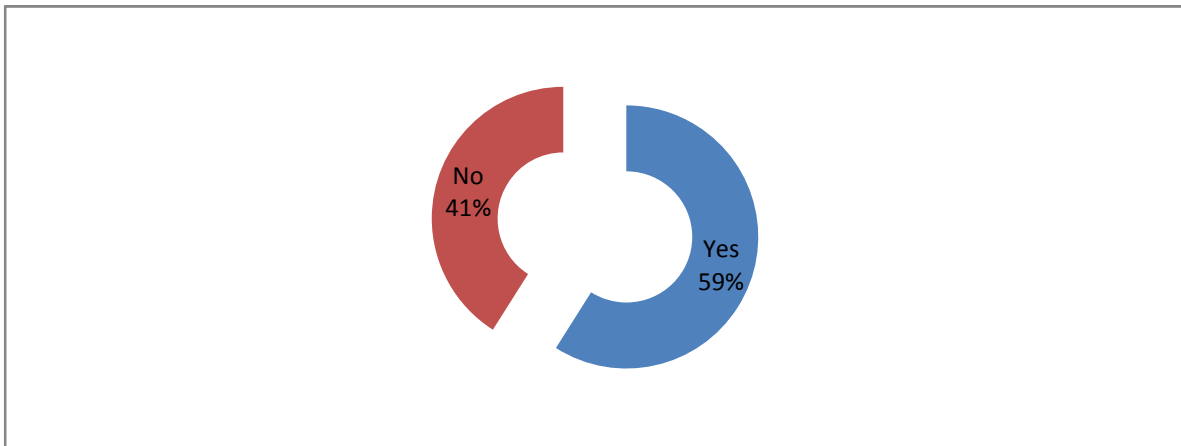


From the study findings, majority (67%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them become an entrepreneur while 33% were of a contrary opinion. This implies that vocational skills acquired in the Polytechnic help graduates become Entrepreneurs.

#### 4.3.4 Vocational skills acquired in the Polytechnic

The study further asked the respondents to indicate whether the vocational skills acquired in the polytechnic helped them improving entrepreneurship skills. The findings are as stipulated in figure 4.6.

**Figure 4.6 Vocational skills acquired in the Polytechnic**



From the study findings in the figure above, majority (59%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them improve their entrepreneurship skills while 41% were of a contrary opinion. This is in line with Waithaka, (1989) who observed that young school graduates with relevant skills and attitudes would lead the young people to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities.

#### 4.3.5 Vocational skills and Entrepreneurship development

The study sought to establish the role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. The findings are as stipulated in table 4.4.

**Table 4.4 Vocational skills and Entrepreneurship development**

	<b>Frequency</b>	<b>Percentage</b>
Promotion of new business	33	55.0
Promotion of innovations	44	73.3
Provision of new technologies	49	81.7
Creation of new products	51	85.0
Acquiring of new skills	56	93.3
Creation of new markets	39	65.0

From the study findings, majority of the respondents (93.3%) indicated acquiring of new skills as the role of promotion of entrepreneurship development, 85% indicated creation of new products, 81.7% indicated provision of new technologies and 76.7% indicated new production methods while 73.3% indicated Promotion of innovations. On the other hand, 65% indicated creation of new markets and 55% indicated promotion of new business. This implies that acquiring of new skills was the main role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. This agrees with Schumpeter (1934) who indicated that entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before.

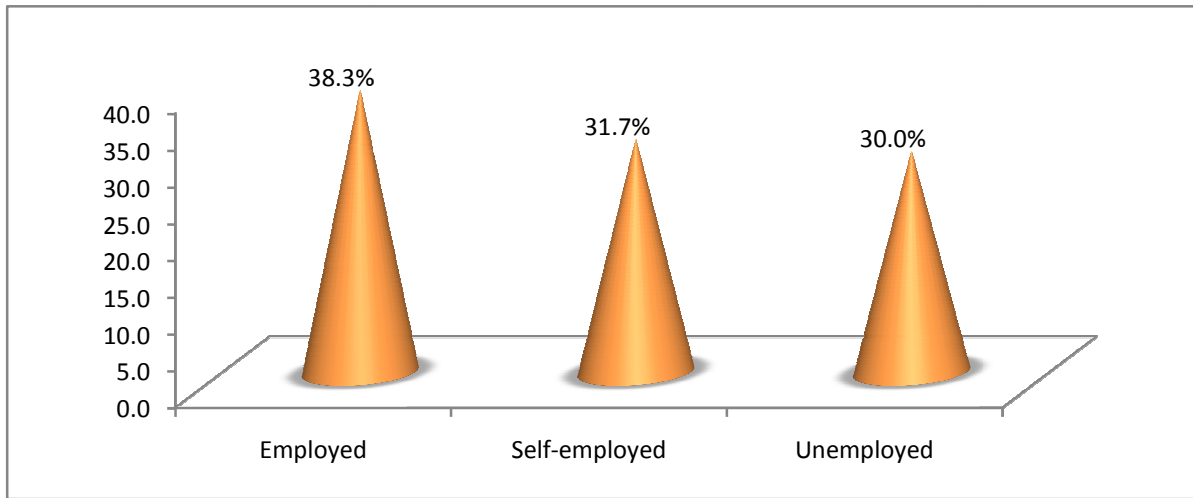
#### **4.4 What graduates do and Entrepreneurship Development**

##### **4.4.1 Employment status**

The study sought to establish the employment status of the graduates from Karurumo youth polytechnic. The findings are as stipulated in figure 4.7.



**Figure 4.7 Employment status**

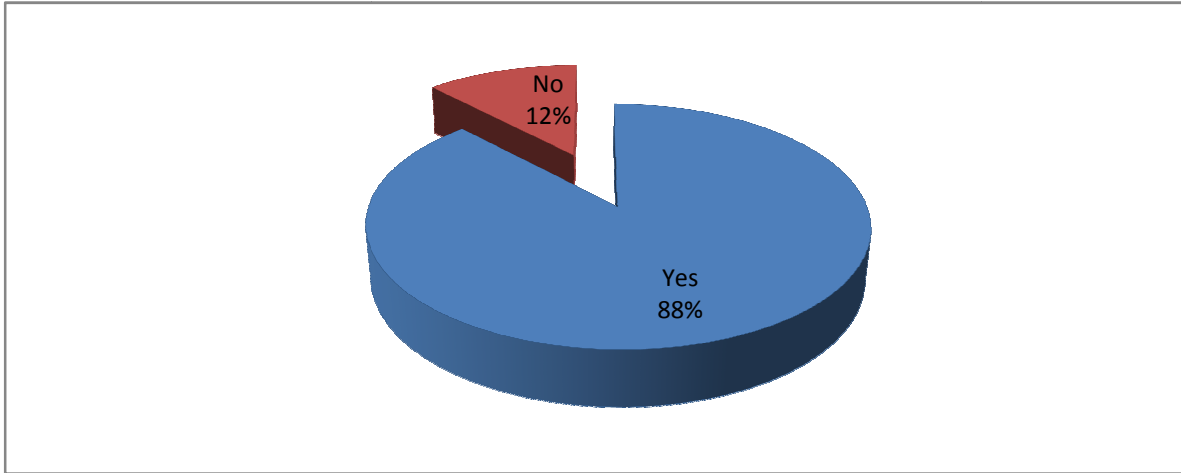


From the study findings, most (38.3%) of the graduates from Karurumo youth polytechnic indicated that they were employed, 31.7% were self-employed while 30% were unemployed. This implies majority of the graduates from Karurumo youth polytechnic were employed. This finding concur with the findings of Achieng (2012) on the study of factors affecting acquisition of vocational skills among learners in Maranda division of Siaya district that found that vocational education main aim is to offer skills to learners that can help them to be self-employed. Vocational skills create greater impact on human resource development and economic growth.

#### **4.4.2 Certificate from Youth Polytechnic and chances of employment**

The study asked the respondents to indicate whether skill training certificate from youth polytechnic enhanced their chances of employment. The findings are as stipulated in figure 4.8.

**Figure 4.8 Certificate from Youth Polytechnic and chances of employment**

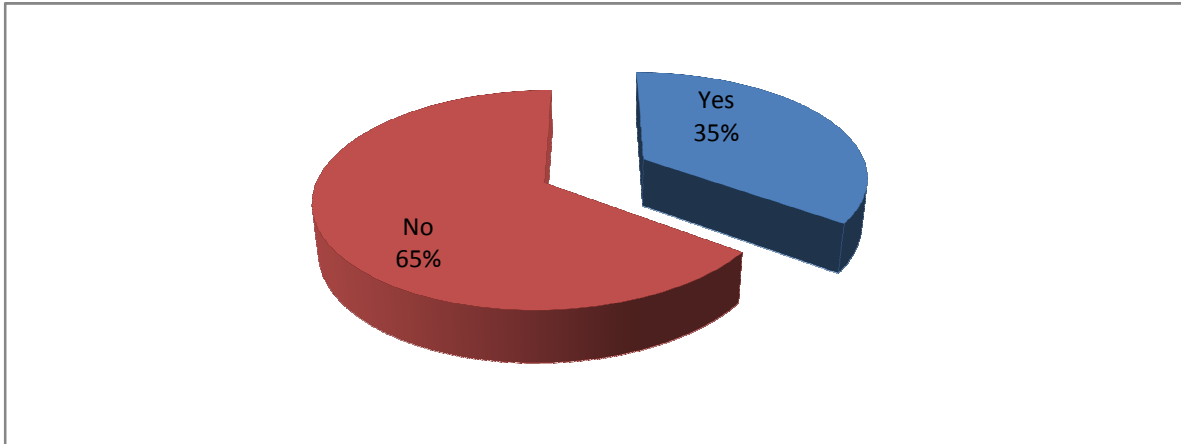


From the figure above, majority (88%) of the graduates from Karurumo youth polytechnic agreed that skill training certificate from youth polytechnic enhanced their chances of employment while 12% disagreed. This implies that skill training certificate from youth polytechnic enhanced graduates chances of employment. This concurred with the findings of Ibuathu (2013) on the study of the impact of vocational training for rural development in Nyambene district in Kenya that found out that 60% of the respondents said youth polytechnic graduates were marketable were learning their own business that included tailoring, carpentry and welding shops.

#### **4.4.3 Offering of Training by the former Polytechnic Graduates**

The study sought to establish whether the graduates from Karurumo youth polytechnic offered any training. The findings are as stipulated in figure 4.9.

**Figure 4.9 Offering of Training by the former Polytechnic Graduates**

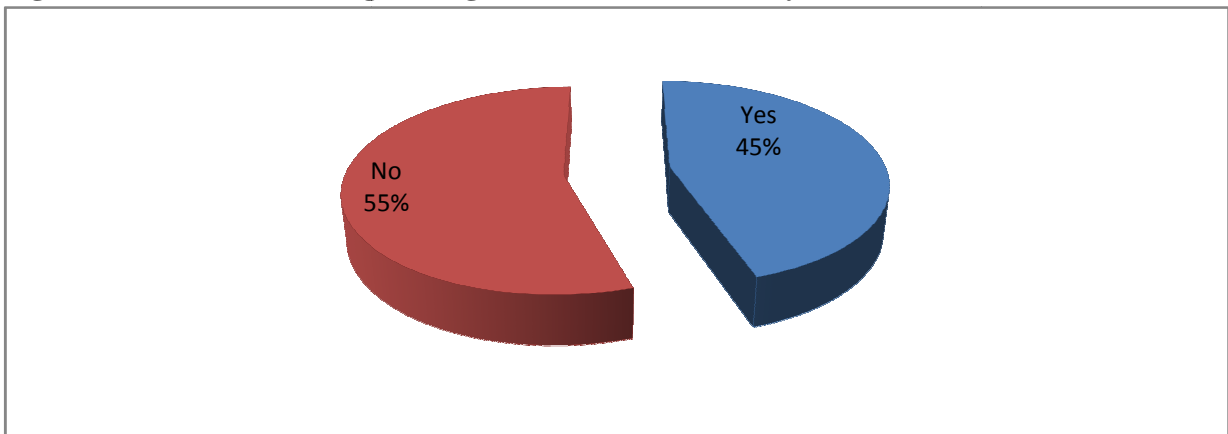


From the findings of the study, majority (65%) of the graduates from Karurumo youth polytechnic disagreed that they offered trainings with 35% agreeing that they offered trainings. This implies that graduates from Karurumo youth polytechnic did not offer trainings. This is in line with Kinyanjui (2007) the youth polytechnic employees enter the labour market as employees, Self-employment and only 22.2% of the graduates were unemployed.

**4.4.4 Use of Training skills gained in the Youth Polytechnic to train**

The study further sought to establish whether the graduates from Karurumo Youth Polytechnic used the training skills gained in the Youth Polytechnic to train. The findings are as stipulated in figure 4.10.

**Figure 4.10 Use of Training skills gained in the Youth Polytechnic to train**



From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic disagreed that they used the training skills gained in the Youth Polytechnic to train with 45% who used the training skills gained in the Youth Polytechnic to train. This implies that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train.

#### 4.4.5 Role of training in entrepreneurship development

The study asked the respondents to indicate the role of training in entrepreneurship development in the County. The findings are as stipulated in table 4.5.

**Table 4.5 Role of training in entrepreneurship development**

	Frequency	Percentage
started new business	33	55.0
Created new products in the market	35	58.3
Value addition to products	49	81.7
New technology	32	53.3
Opening new markets	53	88.3
Providing new services	41	68.3
Providing training services	58	96.7

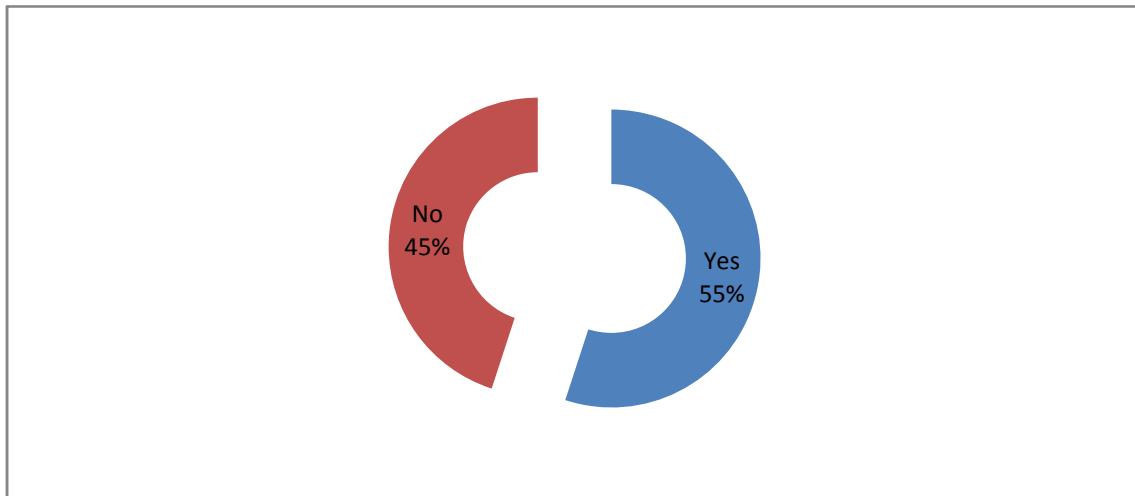
From the table above, majority (96.7%) of the graduates from Karurumo youth polytechnic indicated provision of training services as the role of training in entrepreneurship development in Embu County, 88.3% indicated opening of new markets, 81.7% indicated value addition to products and 68.3% indicated provision of new services while 58.3%, 55% and 53.3% indicated creation of new products in the market, starting of new businesses and new technology as the role of training in entrepreneurship development in Embu County. McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence.

## 4.5 Business started and their role in entrepreneurship

### 4.5.1 Business enterprise after graduation

The study asked the respondents to indicate whether they had started any business enterprise after graduation. The findings are as stipulated in figure 4.11.

**Figure 4.11 Business enterprise after graduation**

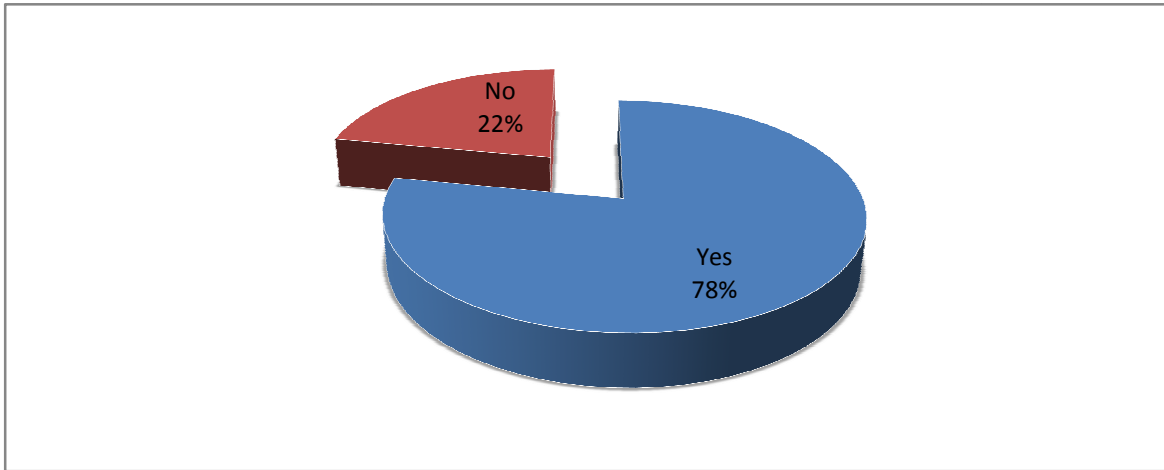


From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic agreed that they had started business enterprise after graduation while 45% had not. This implies that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation.

### 4.5.2 Business started and course taken at polytechnic

The study also sought to find out whether the businesses started were related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.12.

**Figure 4.12 Business started and course taken at polytechnic**

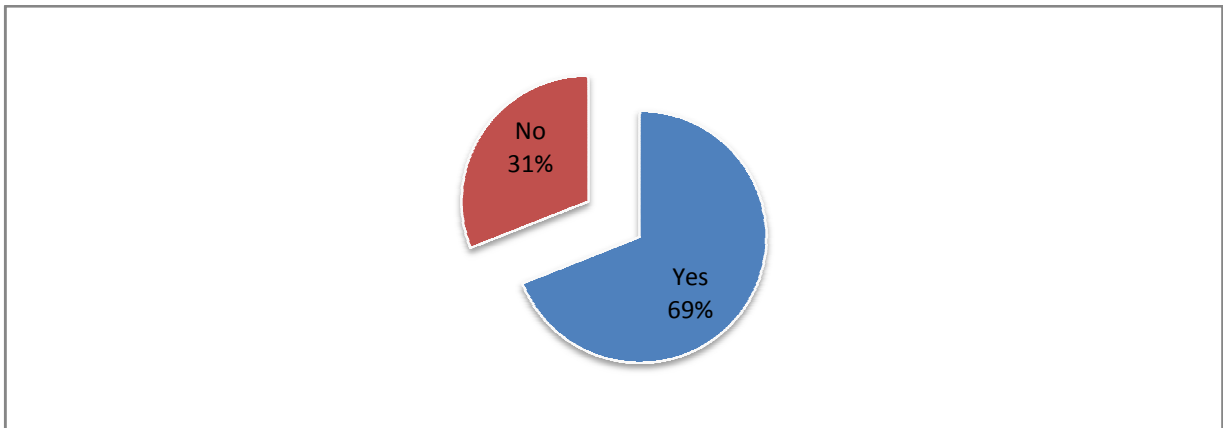


From the findings of the study, majority (78%) of the graduates from Karurumo youth polytechnic agreed that the businesses they had were related to the course undertaken at the polytechnic. This implies that majority of the graduates from Karurumo youth polytechnic had started businesses related to the course undertaken at the polytechnic.

#### **4.5.3 Business enterprise and improvement of entrepreneurship skills**

The study further sought to find out whether the business enterprise stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.13.

**Figure 4.13 Business enterprise and improvement of entrepreneurship skills**



From the figure above, majority (69%) of the graduates from Karurumo youth polytechnic agreed that the business enterprise stated assisted them to improve their entrepreneurship skills. This findings agrees with the findings of Kivu (2013) on the study of influence of leadership on the growth of enterprises in Machakos county that found innovation influenced growth of entrepreneurs in Machakos and that emotional intelligence plays a key role in product and process innovation.

#### **4.5.4 Role of business in improving economic development in the county**

The study asked the respondents to indicate the role of business in improving economic development in the County. The findings are as stipulated in table 4.6.

**Table 4.6 Role of business in improving economic development in the county**

	<b>Frequency</b>	<b>Percentage</b>
Training others	33	55
Doing things better, faster and at less cost	57	95
Opening new markets	51	85
Use of newly found material	32	53
Brought new technologies	53	88

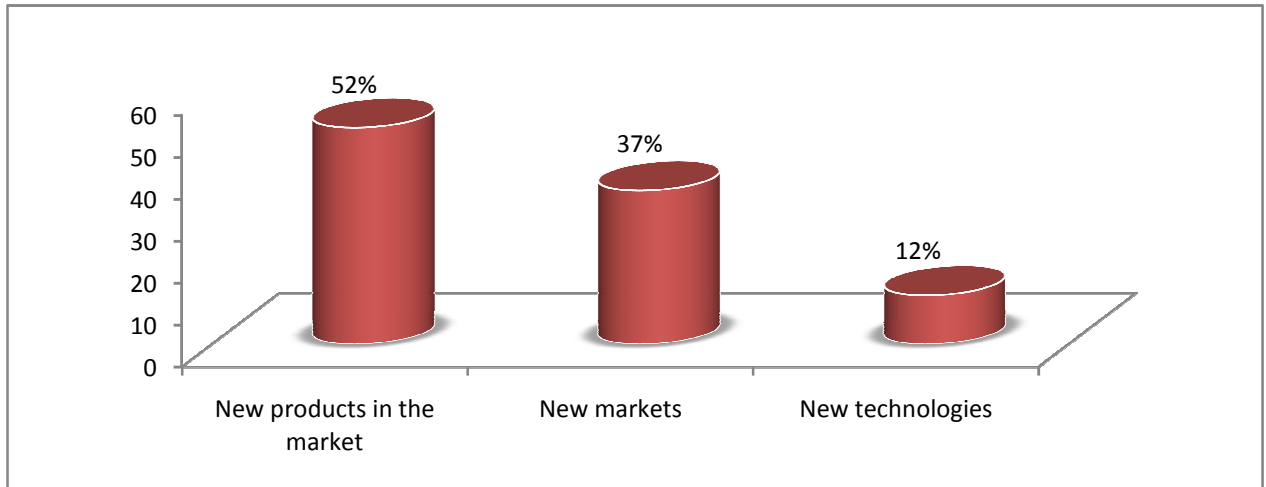
From the table above, majority (95%) of the graduates from Karurumo Youth Polytechnic indicated that the role of business in improving economic development in the County was through doing things better, faster and at less cost, 88% indicated that it brought new technologies, 85% cited that it opened new markets and 55% said that they trained others while 53% indicated that it was through use of newly found materials. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing.

## 4.6 Innovations started and entrepreneurship development

### 4.6.1 Innovations started since leaving polytechnic

The study sought to find out the innovations started by the graduates since they left polytechnic. The findings are as stipulated in figure 4.14.

**Figure 4.14 Innovations started since leaving polytechnic**



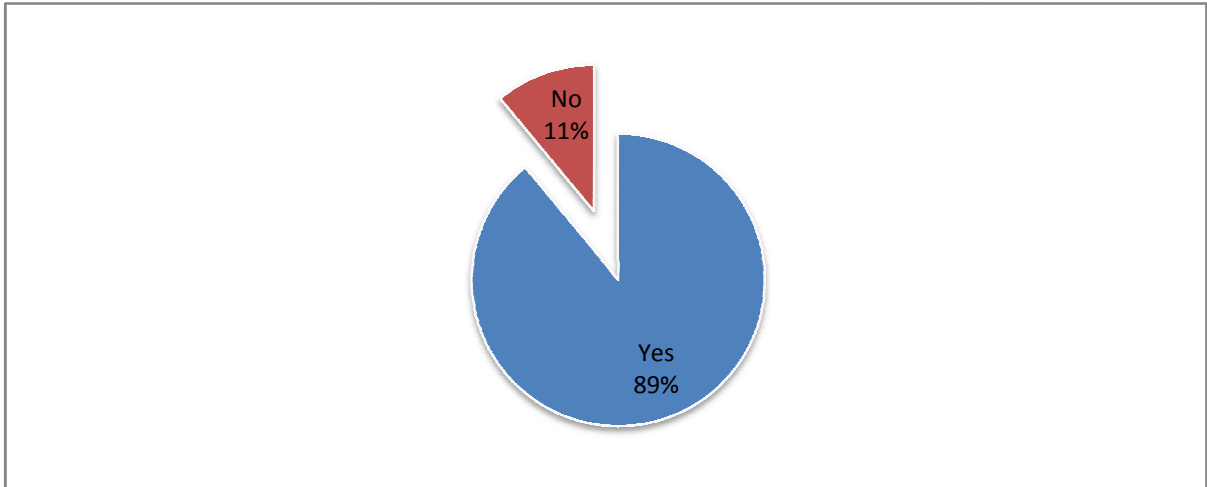
From the study findings, majority (52%) of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic, 37% had introduced new markets while 12% had introduced new technologies since they left polytechnic. This agrees with Yambo (1986) who observed that youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education.

### 4.6.2 Innovations started and course taken at polytechnic

The study also sought to find out whether the innovations stated was related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.15.



**Figure 4.15 Innovations started and course taken at polytechnic**

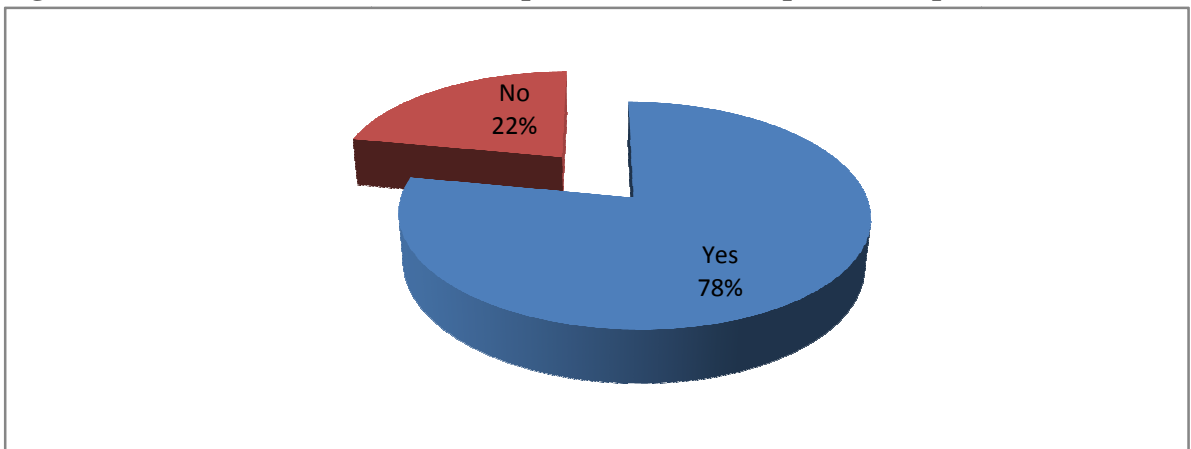


From the figure above, majority (89%) of the graduates from Karurumo youth polytechnic agreed that the innovations stated were related to the course undertaken at the polytechnic.

#### **4.6.3 Innovation started and improvement of entrepreneurship skills**

The study further sought to find out whether the innovation stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.16.

**Figure 4.16 Innovation started and improvement of entrepreneurship skills**

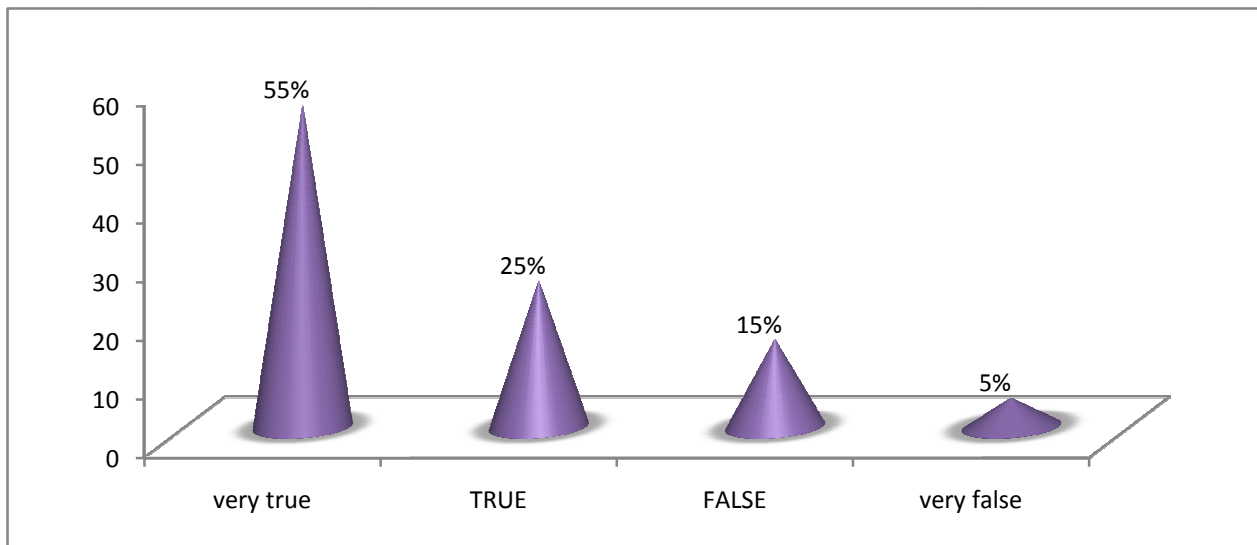


From the figure above, majority (78%) of the graduates from Karurumo youth polytechnic agreed that innovation stated assisted them to improve their entrepreneurship skills.

#### 4.6.4 Innovation started and graduate's role in economic services

The study further sought to find out whether the innovation stated assisted the respondents to enhance their role in providing economic services to the people. The findings are as stipulated in figure 4.17.

**Figure 4.17 Innovation started and graduate's role in economic services**



From the study findings, majority (55%) of the graduates from Karurumo youth polytechnic indicated that it was very true that the innovation stated assisted them to enhance their role in providing economic services to the people while 25% indicated that it was true and 15% indicated that it was false. This implies that the innovation stated assisted the graduates to enhance their role in providing economic services to the people. These findings concur with the findings of Wanyoko (2013) on his study on the influences of business incubation services on growth of small and medium enterprises in Kenya that found out that majority of the respondents in the study (83%) stated that innovation influenced the growth of business and entrepreneurship development and affects business to a greater extent.

#### 4.6.5 Extent to which innovations played role in entrepreneurship development

The study sought to establish the extent to which innovations started by graduates of the polytechnics play in entrepreneurship development. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly

disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

**Table 4.7 Extent to which innovations played role in entrepreneurship development**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>Mean</b>	<b>STDev</b>
Innovations make one risk money and fortunes and combine resources to start new products and services.	46	7	4	3	4.65	0.482
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people	41	12	5	2	4.44	0.524
New technologies assist in provision of efficient and effective services to ones customers	48	6	2	4	4.53	0.621

From the study findings in Table 4.7, majority of the respondents strongly agreed that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people as shown by the mean scores of 4.65, 4.53 and 4.44 respectively and the standard deviation of 0.482, 0621 and 0.524 respectively. This shows that most of respondents either agreed or strongly agreed to the statement.

It also shows the graduates used innovations to satisfy human needs in a more convenient and pleasant way and were able to grow their businesses. They were also able to discern new sources of materials to improve their entrepreneurship. This is in line with Kelemba (2010) who found out that every year graduate of Youth Polytechnic were able to start new technologies, new materials, new products and used their skills to improve their enterprises.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of the study findings, conclusion and recommendations drawn from the study findings. The chapter is based on the study objectives, which were to determine whether the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 have contributed to entrepreneurship development in Embu county; to find out whether what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu county; to establish whether innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county and whether types of business started by the graduates of Karurumo villages polytechnic have contributed to entrepreneur development in Embu county.

### **5.2 Summary of findings**

The study established that the aspects of the course undertaken by the graduates from Karurumo Youth Polytechnic was practical in their day to day life since majority of the graduates ended up being entrepreneurs. Further, the study established that the vocational skills acquired in the polytechnic helped graduates from Karurumo Youth Polytechnic become Entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills by the graduates of Karurumo village polytechnic promoted entrepreneurship development in the County.

The study also established that skill training certificate from youth polytechnic enhanced graduates chances of employment thus majority of the graduates from Karurumo youth polytechnic were employed. Further, majority of the graduates did not offer trainings, however, the study established that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu county.

The study also found out that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation and the businesses were related to the

course undertaken at the polytechnic while business enterprise stated assisted them to improve their entrepreneurship skills. The study further established that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets.

The study found out that majority of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic; the innovations stated were related to the course undertaken at the polytechnic and the innovation stated assisted them to improve their entrepreneurship skills. Further, the study established that the innovation stated assisted the graduates to enhance their role in providing economic services to the people of Embu county. Lastly, the study found out that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assisted in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

### **5.3 Conclusion**

The study concludes that there was gender disparity as majority of the graduates from Karurumo Youth Polytechnic were male who joined the institution at the age of 15-20 years and had spent 2-3 years in the institution. The study also concluded that majority of the graduates had enrolled in the youth polytechnic to acquire of skills and failure to score good grades in KCPE. The study also concludes that many youth polytechnics graduates find self-employment or start new business as a means of making a living. This creates growth and wealth.

The analysis reveals that graduates are making significant contributions in the labour market either as workers in business or in self-employment. In order to cater for the unemployed polytechnic graduates, the economy in the counties needs to be diversified while polytechnics should be upgraded and reconstituted in such a way that they are able to meet demands for market based knowledge and skill acquisition. The other issue that emerged in the analysis is that polytechnics are institutions whose goal is to ensure that trainees acquire

skills that assists' them in personal development as well as for the economic development of the counties and the country at large. Polytechnic education should aim at imparting creativity, innovation, independent thought and precision in polytechnic graduates.

The study concludes that the vocational skills acquired in the polytechnic helped graduates from Karurumo youth polytechnic become entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills was the main role of vocational skills acquired in the polytechnic which promoted entrepreneurship development. The study also concluded that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu County.

The study further conclude that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets. Lastly, the study concluded that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

#### **5.4 Recommendations of the study**

The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. The graduates are making significant contribution in the labour market either in business or self –employment. Youth polytechnics are grassroots institutions that serve the needs of poor youth who are hopeless and helpless. Acquisition of skills and failure to perform well in the examinations are the key factors that drive the youth to enroll in polytechnics. The above perception must be done away with and a deliberate effort to position the youth polytechnics as centers of excellence for all.

The study also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. A deliberate effort to diversify the choice of courses for girls in the youth polytechnics be put in place. Some of the courses that might improve the choice of courses for girls are: secretarial, catering and housekeeping. More effort should also be put in order to encourage girls to enroll in male trades such as mechanic, electrical installations and welding. Communities need to be sensitized to ensure they also take girls to the polytechnics.

The study further recommends the vocational skills offered in the YPs be made more practical and entrepreneurial oriented to prepare the trainees for the world of work both in formal or self-employment. This will reduce the challenges of poverty in the counties and rural areas. There is also need to encourage the formation of right frameworks, networks and facilities that could encourage polytechnic graduates to enter into self-employment. The relationship between policy consumers, facilitators and implementers need to be defined.

Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya.

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**APPENDICES**

**APPENDIX I : DATA COLLECTION QUESTIONNAIRE FOR YP GRADUATES**

This is a self- administered questionnaire to collect data for purely academic purposes. The study seeks to analyze the **“Role of Youth Polytechnics in Entrepreneurship Development in Embu County”** All information will be treated with strict confidence. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

**SECTION A: GENERAL INFORMATION**

1. Gender.....Male  Female

2 Highest Academic Qualifications

*KCPE*

*KCSE*

*Certificate*

*Diploma*

*Bachelors Degree*

*Masters*

3. Age at which you joined the Polytechnic

1. Under 13 years

2. between 13-15 years

3. 15-20 years

4. Over 20 years

5. Year you enrolled in the Polytechnic-----

6. Number of Years you spent in the Polytechnic.....

**SECTION B: ON WETHER, VOCATIONAL SKILLS ACQUIRED BY GRADUATES  
PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMEMT.**

1. What aspects of the course undertaken in the polytechnic are relevant to what you are doing in your day today life?.....  
.....

2. In what way has the vocational skills acquired in the polytechnic prepared you in what you are doing now?.....

3. Has the vocational skills acquired in YP assisted you in being an entrepreneur?

Yes

No

If Yes, Specify.....

If No, specify.....

4. Is the Vocational skills started above assisting to improve your entrepreneurship skills?

1. Yes

2. No

3. If Yes, Specify.....

4. If No, specify.....

5. Do you have suggestion on courses taken in the polytechnic that could help improving entrepreneurship skills in the county.....  
.....

6. What role does vocational skills acquired in YPs play in promotion of entrepreneurship development?

1. ....

2. ....

3. ....

**SECTION C: ON WHETHER WHAT GRADUATES FROM KARURUMO VILLAGE POLYTECHNIC DO AFTER GRADUATION CONTRIBUTE TO ENTERPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Are you employed or in self-employment or unemployed?

Yes  No

(ii) If employed, specify type of job.....

(iii) If Self –employed, specify type of business.....

(iv) If unemployed, specify for how long.....

2. In what way did the Youth Polytechnic skills training prepare you for employment or self-employment?

1. Self-employment aspect.....

2. Employment aspect.....

3. What factors did you consider when choosing where to seek employment or locate business?

1. Self-employment .....

2. Locate business.....

4. How long did you take to find employment or to start business?

1. Find employment .....

2. Self-employment .....

5. Did skills training certificate from youth polytechnic enhance your chances of employment?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

6. Do you offer any training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

7. Do you use training skills learnt at the polytechnic in your training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

8. What role as your training played in entrepreneurship development in Embu County?

1. Started new business

2. Created new product in the market

3. Value additions to products

4. New technology

5. Opening new markets

6. Providing new services

7. Providing Training services

Other(specify).....

**SECTION D:ON WHETHER TYPES OF BUSINESS ENTERPRISESSTARTED BY GRADUATES FROM KARURUMO POLYTECHNIC PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Have you started any business enterprise after graduation?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

2. Is the business related to what you did at the polytechnic?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....



3. Has your business enterprise assisted in improving your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, specify.....
- 4. If No, specify.....

4. What role does your business play in improving economic development in the County?

- 1. Training others
- 2. Doing things better, faster and at less cost
- 3. Opening up new markets
- 4. Use of newly found material
- 5. Brought new technologies
- 6. Other (Specify).....

**SECTION E: ON WETHER INNOVATIONS STARTED BY GRADUATES PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT?**

1. What innovations have you started since leaving the polytechnic?

- 1. Started new product in the market
- 2. Started New markets
- 3. Started New technologies
- 4. Other (specify).....

(ii) If, Yes above, specify-----

2. Is the innovation started above related to the course you did in the polytechnic?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

3. Is the innovation started above assisting to improve your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

4. Does the innovation started above enhance your role in providing economic services to people?

- 1. Very True
- 2. True
- 1. False
- 2. Very false

5. What role do the graduates play in promotion of innovation?

- 1. ....
- 2. ....
- 3. ....
- 4. ....

6. State your level of agreement to the following statement as regards whether innovations started by graduates of the polytechnics play a role in entrepreneurship development on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree.

Statement	SA	A	N	D	SD
Innovations make one risk money and fortunes and combine resources to start new products and services.					
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people					
New technologies assist in provision of efficient and effective services to ones customers					

7. What would be your advice to Youth Polytechnic trainees in enhancing entrepreneurship development in the County?

- 1.....
- 2.....
- 3.....

## APPENDIX II : NUMBER OF TRAINEES AT KARURUMO YOUTH POLYTECHNIC FROM 2003 TO 2012

Cou	District	YP	Name of Course	Youth Polytechnic Graduates since 2003																														
				2003			2014			2005			2006			2007			2008			2009			2010			2011			2012			GT
Em				M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
Cou	Embu	Karurumo	MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10	
			Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11	
			Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10	
			Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15	
			Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17	
<b>Grand Total</b>						<b>20</b>			<b>26</b>			<b>19</b>			<b>25</b>			<b>31</b>			<b>36</b>			<b>18</b>			<b>34</b>			<b>53</b>			<b>63</b>	<b>325</b>



**UNIVERSITY OF NAIROBI**  
**DEPARTMENT OF SOCIOLOGY AND SOCIAL WORK**

**THE ROLE OF VILLAGE POLYTECHNICS IN ENTREPRENEURSHIP  
DEVELOPMENT: A TRACER STUDY OF GRADUATES OF KARURUMO  
VILLAGE POLYTECHNIC, EMBUCOUNTY**

**BY**  
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**C50/67801/2011**

**A RESEARCH PROJECT SUBMITTED IN PARTIAL FULFILMENT OF THE  
REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF ARTS  
IN SOCIOLOGY (ENTREPRENEURSHIP DEVELOPMENT) OF THE  
UNIVERSITY OF NAIROBI**

**NOVEMBER 2014**

## DECLARATION

This research project is my original work and has not been presented for a degree in any other university.

Signed .....

Date.....

**NJERU ZAVERIO NDUGUTUSON**  
**C50/67801/2011**

This research project has been submitted for examination with my approval as a university supervisor.

Signed .....

Date.....

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## ACKNOWLEDGEMENTS

I wish to express my sincere gratitude to individuals that assisted me in one way or another in the course of writing this project.

Special thanks go to my supervisors, Mr. Geoffrey Njeru and Professor Edward Mburugu, who tirelessly guided me and provided professional advice as well as encouragement during the study period.

I am greatly indebted to Madam Emily Nkoroi, the Embu county director of youth training who providing the relevant information, documents and generally facilitated the study.

Further gratitude goes to Mr. Graham Kangethe of curriculum, instruction and examinations division, of the department of youth training in the ministry of youth affairs and sports at the headquarters for providing me with relevant information on youth polytechnics nationally.

I cannot forget the Karurumo youth polytechnic manager and the instructors for their cooperation in giving me the preliminary information and the former trainees who will targets in the study.

Finally, I wish to thank everybody I may not have mentioned here but made this work possible.

Thank you all.

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## **LIST OF ABBREVIATIONS AND ACRONYMS**

<b>KCSE</b>	-	Kenya Certificate of Secondary Education
<b>KCPE</b>	-	Kenya Certificate of Primary Education
<b>KIE</b>	-	Kenya Institute of Education
<b>MDGs</b>	-	Millennium Development Goals
<b>MOYAS</b>	-	Ministry of Youth Affairs and Sports
<b>NVCET</b>	-	National Vocational Certificate in Education and Training
<b>SPSS</b>	-	Statistical Package for Social Sciences
<b>SYPT</b>	-	Subsidised Youth Polytechnic Tuition
<b>TVET</b>	-	Technical and Vocational Education and Training
<b>TIQET</b>	-	Total Integrated Quality Education and Training
<b>UNDP</b>	-	United Nations Development Program
<b>UNESCO</b>	-	United Nations Education and Scientific and Cultural Organization
<b>YPs</b>	-	Youth Polytechnics

## **ABSTRACT**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and analyze their contribution to entrepreneurship development in Kenya. The study used descriptive survey design. The target population was 325 former graduates from Karurumo youth polytechnic who graduated between 2003 and 2012 with a sample size of 20% of the target population leading to 65 respondents. The data collected was analyzed using correlation matrix and multi regression analysis to establish the relationships between independent and dependent variable. The results revealed that vocational skills acquired, business enterprises started, innovations started and what graduates do after graduation separately contributed significantly to entrepreneurship development. The analysis further revealed that polytechnic graduates are making significant contributions in the labour market either as workers in business or in self-employment. The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. It also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya

## **CHAPTER ONE: INTRODUCTION**

### **1.1 Background to the Study**

It is estimated that over 61% (6,710,000) youths aged between 15-35 years are jobless and living below poverty line (Census report, 2009). About 92% of these youth lack vocational or professional skills training demanded by our agricultural based economy. The census report also document that over 62% of Kenyans are not in any form of employment and that only 25% of the secondary and university leavers are absorbed in regular employment. It is therefore important to boost vocational, technical, and entrepreneurial skills in youth polytechnic to cover the shortfall. Kenya needs a vibrant youth polytechnic training programs that can support the enhancement of the productivity of small and medium enterprises sector that currently account for 76% of the total employment but only contributes 18% of the natural gross domestic product.

Youth polytechnic education provides youth with technical and vocational skills for jobs in industry. The village polytechnics are an adoption of tailor made strategy to suit the village and rural labour markets (Kinyanjui,2007). The sectors of the rural labour market namely construction, furniture, garments and currently electrification is targeted. It is hoped that after graduating, the youth polytechnic graduates would be gainfully employed and contribute to the entrepreneur development in Kenya.

The UNDP,2012 in report entitled “ Skills gap analysis for graduates of youth polytechnic, vocational training centers and out- of- school youth” revealed that most of the graduates of the youth polytechnics lack competency in modern technology and have no practical skills required to exploit untapped opportunities in our country. They also have weakness in work attitude, communication, customer care and social skills and hence affecting their contribution to entrepreneurship development and their employability in the job market after graduating from the youth polytechnics. It is therefore against this background that the research proposes to investigate the role of youth polytechnic graduates to entrepreneurship development in Kenya through a tracer study of youth polytechnic graduates from Karurumo village polytechnic in Embu county in the last 10 years from 2003 to 2012 with a view of

coming up with interventions that will ensure the right kind and quality of skills training is given to them to enhance their contribution to entrepreneurship development.

## **1.2 Statement of the Problem**

Every year, graduates from Karurumo Village Polytechnic enter the labour market equipped with either grade II or grade III certificate. The whereabouts of these graduates was not visible in surveys of micro and small enterprises in Kenya. In a micro and small enterprise survey carried out in the Ziwani enterprise cluster in Nairobi, there was only one motor vehicle repair entrepreneur who had acquired skills in a village polytechnic (Kinyanjui, 2007). It was also reported that technical training, which is an important aspect of entrepreneurship development, was lacking in baseline surveys of micro and small enterprises (CBS, 1999), yet every year, trained youth graduate from village polytechnics enter the labor market. However, Wanyonyi (2009), Kelemba (2010) and UNDP (2012) reported that graduates from youth polytechnics had difficulties in using modern equipment and lacked the necessary and required skills that employment demands of them. They lacked work attitude, communication, customer care and social skills that are important for them to venture into business enterprises and use innovations that enable them to effectively contribute to entrepreneurship development in the country. Kinyanjui (2007) in a tracer and policy study of youth polytechnics graduates from Kwale, Kitui, Makueni and Taita Taveta also recommended a study on factors influencing technical training to be carried out in other areas to guide on youth polytechnics training policy . A study by Ministry of Youth Affairs and Sports (2012) on national evaluation of NVCET curriculum found out that Embu district had the highest percentage 52% of trainees who were incompetent and unable to fix a prescribed job process that was expected of them during the evaluation period. The purpose of this project was therefore to investigate the contribution of youth polytechnic graduates in entrepreneurship development through a tracer study of youth polytechnic graduates from Karurumo village youth polytechnic in Embu Country. The study specifically looked at whether what youth polytechnic graduates do after graduation, types of business enterprises started by graduates, innovations started by the graduates and vocational skills acquired by the graduates of village polytechnic contributed to entrepreneurship development in Embu county and Kenya as whole.



### **1.3. Overall Research Question**

What role do graduates from village polytechnics play in enhancing entrepreneurship development in the country?

#### **1.3.1 Specific Research Questions**

1. Does vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County?
2. Does what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu County?
3. Do types of businesses enterprises started by graduates of Karurumo village polytechnic started in the last ten years contribute to entrepreneurship development in Embu County?
4. Do innovations started by graduates of Karurumo village polytechnic in the last ten years contribute to entrepreneurship development?

#### **1.3.2 Overall Objective of the Study**

The general objective of the study was to trace the graduates of Karurumo village polytechnic in the labor market and investigate their contribution to entrepreneurship development in Kenya.

#### **1.3.3 Specific Objectives**

The following specific objectives were addressed:-

1. To determine how the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 to 2012 contributed to entrepreneurship development in Embu county.
2. To find out whether what graduates of Karurumo village polytechnic do after graduation contributed to entrepreneurship development in Embu county
3. To determine how types of business started by graduates of Karurumo village polytechnic in the last 10 years contributed to entrepreneurship development in Embu County.
4. To establish how innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county

#### **1.4 Significance of the Study**

The study sought to identify and document the role of village polytechnic graduates in enhancing entrepreneurship development in Embu County. The data generated would assist in the provision of appropriate entrepreneurship development services that can address the concerns of village youth polytechnic graduates before entry into the labor market. The study would help to increase the knowledge of the relevant stakeholders and the community about the fate of village polytechnics trainees after graduating and their role in entrepreneurship development. It would also add to the existing knowledge of the impact of youth Polytechnic education on entrepreneurship development.

#### **1.5 Scope and Limitations of the Study**

This study focused on graduates of Karurumo Village Polytechnic, Embu County. The reason Karurumo Village Polytechnic was chosen was because the researcher was from that area and so it offered an ideal setting that could be replicated with lesser complexities in other Karurumo Village Polytechnic in Kenya. This is a case study focusing only on the role of village polytechnics in entrepreneurship development: a tracer study of graduate's of Karurumo Village Polytechnic, Embu County. The study only focused in one village polytechnic of which may not be the same aspect in other village polytechnics, which was not a good representation of all types of village polytechnic. The questionnaire's data was based on the graduate's response, which could be untrue. In order to ensure the response was real and met the expectation of the result, respondent were given more time to read and understand the information that the study required.

Finally, the graduates sampled were fewer hence affecting the sampling size. In order to ensure sampled size was met, research assistance visited the respondents frequently till they met at least 80% of the sample size which was adequate for analysis.

## **1.6 Assumption of the Study**

The study assumed that all the sampled respondents from Karurumo village polytechnic were traceable and able to express themselves freely without hiding information. The other assumption is that this project will assist the policy makers in planning of technical and vocational educational and training of the youth in the country.

## **1.7 Definition of Significant Terms**

<b>Entrepreneurship:</b>	Is the process of starting a business or other organization. The entrepreneur develops a business model, acquires the human and other required resources, and is fully responsible for its success or failure.
<b>Entrepreneurship Development</b>	This is success in producing desired or successful enterprises by graduates
<b>Innovations:</b>	This referred to the introduction of new products or services, use of new methods of production, opening up new markets or use of new products.
<b>Self Employed:</b>	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.
<b>Tracer Study:</b>	Is an approach which widely being used in most organization especially in the educational institutions to track and to keep record of their students once they have graduated from the institution. It is the follow up of graduates of higher education or institutes.

**Temporary Employment:**

Is a situation where the employee is expected to leave the employer within a certain period of time.

**Unemployed:**

Is a situation where someone of working age is not able to get a job but would like to be in full time employment.

**Vocational Skills:**

Are those skills which allow a person to master a particular subject or procedure that is applicable to a career.

**Youth Polytechnic:**

This refers to low cost based post-primary training institutions that prepare trainees on vocation and technical training.

## **1.8 Organization of the Study**

This study is organized in five chapters. Chapter one deals with background on the role of village polytechnics in entrepreneurial development in Kenya. It explores four key components that are involved in entrepreneurship development in youth polytechnics (Vocational skills acquired by the graduates, work done by the graduates after graduation, Business enterprises started by the graduates and innovations started by the graduates) can be used to improve the role the polytechnic play in entrepreneurship development in Country. Chapter two discusses the overview and development of youth polytechnics in Kenya. It looks at how the youth polytechnics can be used to equip young with relevant skills and attitudes that would lead the young people so trained into gainful self-employment in order for them to contribute in the entrepreneurship development of their communities by building up the economic strength of those communities. Chapter three deals with research methodology and expounds on the descriptive survey research design used and research instruments used questionnaires to collect both qualitative and quantitative data from the former Karurumo Youth Polytechnics graduates.

Chapter four deals with data analysis while Chapter five deals with recommendations, It looks at how graduates of Karurumo village polytechnic are making significant contribution in the labour market as workers in business or self-employment. It also looks at how vocational skills acquired have helped the graduates become entrepreneurs hence promoting entrepreneurship development in the country. It further examines how innovations make one risk money and fortunes and combine resources to start new products and services and also establish small and micro enterprises and create employment opportunities for other people.

## **CHAPTER TWO: LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK**

### **2.1 Introduction**

The purpose of the project was to investigate the role of village polytechnics in entrepreneurship development in Kenya. The present chapter reviews related literature and the theoretical and empirical literature on the subject investigated. It details overview of the Kenya education system after independence in 1963 with regard to vocational and technical education and training systems, the establishment of youth polytechnics in Kenya, theoretical literature on vocational training and entrepreneurship development in Kenya, conceptual framework of the study and empirical literature of previous studies and findings about youth polytechnics in Kenya.

### **2.2 Overview of Kenya Vocational and Technical Education Systems since Independence**

Kenya sought ways to make changes in the inherited educational system on achieving independence. The aim was to make educational system supportive and responsive to the newly developed national goals (Merrifield 1986). In the years following independence, two major commissions (Ominde Commission, 1964 and the Gacathi Commission in 1976) were appointed to review the education system (Republic of Kenya, 1964; Republic of Kenya, 1976) and to plan for its future. This resulted to increased schooling. The provision of increased primary education was achieved as a result of Ominde commission. The 1976 commission addressed unemployment among product of formal education at all levels of education. Manpower issues were also addressed and a programme of action was formulated to further develop Vocational and technical education and training.

Attempts to alleviate the problem of unemployment among the youth, particularly the primary school graduates were directed towards the establishment of non-formal vocational education and training institutions such as youth polytechnics (Sifuna 1984). These programs were to absorb youth polytechnics graduates for a few years and give them marketable skills (Hoppers, 1985). Vocational training was also a way of developing attitudes for self reliance as well as imparting workable skills (Bacchus, 1988, Simiyu, 1990).

UNESCO (1984) defined vocational and technical education as: “A comprehensive term refers to education processes where it involves, in addition to general education, the study of technologies and related sciences and acquisitions of practical skills and knowledge relating to occupations in various economic and social life”. The report of the presidential working party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988) also stipulated the need to expand and streamline vocational and technical training institutions and their training to cater for training demands of the 8-4-4 system of education, provide greater opportunities for training primary and secondary school graduates and provide more trained manpower for the economy. The courses offered in youth polytechnics included masonry, carpentry, metal work, tailoring, dressmaking, and motor mechanics among others.

### **2.3 The Establishment of Youth Polytechnics in Kenya**

A youth polytechnic is a low cost community based post primary training institutions (Yambo,1986). Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics were to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). Youth polytechnics were established in Kenya in 1966 after a conference held at Kericho on Education employment and rural development. The conference observed that only a small portion of primary school graduates received places in secondary schools (Sheffield 1967) and youth polytechnics were seen as part of alleviating the primary school graduate unemployment problem. The youth polytechnics were closely related to the local needs and absorption capacities of the rural villages (Thompson, 1981). Between 1966 and 1977, more than 53 youth polytechnics were established and the demand for them was expanding. Currently, there are over 700 youth polytechnics with enrolment of over 100,000 trainees (Republic of Kenya, 2012). The structure of youth polytechnic program at the national level includes a director of youth

training with four major divisions (Curriculum, Institutions and Examinations, Research Division, quality Assurance and Standards and Infrastructure Division). At the County level, there is county director of youth training and the district youth training officer at the district level. The principal (project manager) is the executive officer at the institutional level and serves as the link between staff, trainees, the board of governors and the district youth training Officer. A number of commission reports, sessional papers and studies have made various recommendations on vocation and technical education in Kenya. The education sector reforms in Kenya dates back to the independence period, with commissions, committees, working parties and task forces generating reports, with recommendations, some of which have been implemented in part while others have never been implemented completely. In 1964, there was the Ominde Commission; In 1976, there was the National Committee on Educational Objectives and Policies led by Gachathi; In 1981 there was the Presidential Working Party on the Second University in Kenya led by Mackay; In 1988 there was the Presidential Working Party on Education and Manpower Training for the Next Decade and Beyond led by Kamunge; In 1999, there was the Commission of Inquiry into the Education System of Kenya led by Koech. To date, no government documentation is available to the public with chronological details on what recommendations from these reports were adopted and implemented.

The Ominde Commission outlined what education was and had to be during and after independence. The blueprint laid the foundation of post-independence education. It was mandated to survey existing educational resources and to advise the government on the formation and implementation of the required national policies for education (Republic of Kenya, 1964; It is important to note that despite its noble objectives the Ominde Commission recommendations were not implemented in full, a blunder that has had significant effects on education .The Gacathi Report reiterated objectives of the Ominde Commission and sought to enhance the use of the Kenyan educational goals to shape its national character and development. It recommended development of vocational, technical, and practical education. In 1979, the government realized that education was not doing much to achieve its stated objectives. Education curriculum was viewed as being too academic, narrow and examination centered (Republic of Kenya, 1979).



Rate of unemployment grew as school leavers went to urban centers to seek for white-collar jobs. In the 1980s the government changed its policy on education. This was because of the difficulties, which were faced by graduates of its education system at both primary and secondary levels. Most graduates who were matriculating from these levels could not be absorbed into the shrinking labor market. This made the government to reconsider changing its education system and to set up a Presidential Working Party in 1981 (Republic of Kenya, 1981). The report sought to investigate ways in which education could make graduates from these levels self-sufficient, productive in agriculture, industries, and commerce. Education system was expected to ensure that students acquired technical, scientific, and practical knowledge vital for self and salaried employment, lifelong skills, and nation building. The commission was also mandated to investigate the feasibility of establishing a second university that was development centered. It advocated for a practical curriculum that would offer a wide range of employment opportunities and equitable distribution of educational resources. It gave rise to the current education system, the 8::4:4. System.

Kamunge Report of (1988) noted that the youth polytechnics (YPs) were provided with basic facilities and equipments to enable them give quality training at artisan level. It recommended that vocational education and training instructors be trained in pedagogy and their terms and condition of service be improved. The youth polytechnics management be strengthened and local authorities be given full support. It further stressed those facilities of youth polytechnics to be improved. The country's training institutions were not only inadequate but also lacked the essential facilities and technology to prepare students for the challenging labour market.

The Government of Kenya appointed the Commission of Inquiry into the Education system of Kenya (Koech Commission) in 1999. The commission made recommendations on ways that could be used to provide quality education (Republic of Kenya, 1999). Based on the collected views the commission evolved the concept of Totally Integrated Quality Education and Training (TIQET) to reflect the vision of Kenyan education. TIQET, as a concept embraced the values and substance that was to characterize the education system. It was to be total because it was expected to be inclusive, accommodative, and life-long. It focused on

quality of delivery and outcome of the education and training process. The report reiterated that, the proposed education system was to become a ticket to a better life, and future for the individual, community and the nation. As a departure from the 8-4-4 system of education, TIQET had some basic innovations, namely: the expansion of access to basic education; elimination of disparities in education based on geographical, social and gender factors; introduction of manageable curriculum content; introduction of modular learning approach and credit accumulation. Specifically, the report called for legal educational reforms, for instance: reviewing of the education act, political will and commitment by making public policy pronouncements on the required changes, enhancing of efficiency and effectiveness in educational administration and management, ensuring there is prudent governance and management of resources, building and strengthening genuine partnership and collaboration among educational stakeholders. In addition, the report also called for cutting-edge reforms including totally integrated quality education training, abolition of the 8-4-4 and replacement with a system not very distinct from the pre-8-4-4 system of 7-4-2-3, and universities maintenance of 1:10 ratio of graduate/undergraduate student; (Republic of Kenya, 1999). The reported also pointed out that one of the hindrances to the development of a technological culture was found in some cultural beliefs and practices among a number of Kenyan communities towards technically related work. Many of them design vocational education for other people's children instead of designing a universal system that is suited for all children who decide to join that career including their own children. In his recommendations, Koech Commission strongly pointed out that vocational training centers be encouraged to offer courses according to the needs of their localities such as short tailoring courses for upgrading courses as well as Jua – kali operators and health workers for the surrounding community. Despite its candid professional research, assessments and honesty on the challenges that were facing Kenyan education system, Koech Report was never implemented by the government. It was perceived as being expensive and complex.

Kenya Vision 2030 is the new long-term development blueprint for the country. It is motivated by a collective aspiration for a better society by the year 2030. The aim of Kenya Vision 2030 is to create “a globally competitive and prosperous country with a high quality of life by 2030”. It aims to transform Kenya into “a newly-industrializing, middle-income

country providing a high quality of life to all its citizens in a clean and secure environment. Simultaneously, the Vision aspires to meet the Millennium Development Goals for Kenyans by 2015. It proposes intensified application of science, technology, and innovation to raise productivity and efficiency levels across the three pillars. It recognizes the critical role played by research and development in accelerating economic development in all the newly industrializing countries of the world. More resources will be devoted to scientific research, technical capabilities of the workforce, and in raising the quality of teaching mathematics, science and technology in schools, polytechnics and universities.

#### **2.4 Vocational Skills acquired by YP Graduates and Entrepreneurship Development**

Youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education (Wanjala 1973, Sifuna 1975). The major objectives of youth polytechnics are to equip young school graduates of post-primary age with relevant skills and attitudes that would lead the young people so trained into gainful self-employment and to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989). The vocational education and training in polytechnics include masonry, tailoring, carpentry, driving, dressmaking, metalwork and many others. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing. However, Ndua suggested that research was required on the dropout rate of the trainees. Every year a number of these graduates get out to the field and therefore the project investigated whether this graduate are able to use the skills acquired in contributing to entrepreneurship development in Embu county.

#### **2.5 Work Done by YP Graduates after graduation and Entrepreneurship Development**

On what graduates of youth polytechnics do after graduation ( Nzioka 1986, Kinyanjui 2007, Yambo (1986) found that graduates who had been trained in carpentry and masonry

where somewhat more rural oriented than those trained in welding and plumbing. Yambo contended that many courses had economic value and predicted that new courses be eventually introduced in Youth Polytechnics. For a long time in Kenya, graduation from any level of education was associated with employment either in the private or public sector. The quality of an institution was based on how many of its graduates were employed after graduation. The reality is now different. The labour market has become very competitive and open joblessness is being experienced among graduates in all education levels. According to Kinyanjui, 2007, the youth polytechnic employees enter the labour market as employees (30%), Self-employment (42.2%) and only 22.2% of the graduates were unemployed. The key jobs for YP graduates were casual, contracts, carpentry, mechanics, welding and dress making among others. Polytechnic graduates were also employed in polytechnics as instructors, machine operators and electrical repairs. Some few graduates were employed in jobs such as hotel attendants, vegetable vending, and hairdressing. The studies revealed that polytechnic education is a holding ground for youth in village as they wait for their dream careers. The current project investigated whether these graduates played a role in entrepreneurship development in the County.

## **2.6 Creation of New Business Enterprises by YP Graduates**

The business perspective views entrepreneurship as the process of creating new business organization with intention of making profit. The entrepreneurs are organizers and coordinators of the major factors of production such as capital, labour and land. They properly mix these factors of production to start business enterprises. Entrepreneurs have initiative and self-confidence in accumulating and mobilizing capital resources for new business. Many youth polytechnics graduates find self-employment or starting new business as a means of making profitable career. This creates growth and wealth. Kinyanjui (2007) in a Trace and policy study of youth polytechnic graduates from Kwale, Kitui, Makueni and Taita Taveta found out that youth polytechnic staffing is one of the policy issues that need urgent attention. There was a clear need for policy to address staffing especially for instructors in the youth polytechnics. It also found out that there are no technicians to assist the instructions in handling the practicals. The study recommended polytechnic staffing will require restoring confidence and enhanced motivation and the beginning point being the

development of scheme of service for the youth polytechnic instructors. The study also recommended that equipments in youth polytechnic are inadequate and old.

UNDP (2012) in a study titled, Skills gap analysis for graduates of youth polytechnic, vocational training Centers and out-of-school youth found out that existing infrastructure and equipment in public youth polytechnics are dilapidated, inadequate and require renovation and modernizing if they are to produce high quality graduates. Most of the instructors are not competent enough to deliver quality skills training to the youth polytechnic trainees. Formalized partnership particularly between youth polytechnics and the industry was found to be lacking thereby making it difficult to align the youth polytechnic training with the demands of the industry and therefore reducing the contribution of Youth Polytechnic graduates in entrepreneurship development. The project investigated whether graduates from the youth polytechnics are involved in starting business enterprises and stimulating investment interests. Were the graduates able to generate income, provide training ground for other people, convene and utilizes local resources and start new business?

### **2.7 Innovations Started by YP Graduates and Entrepreneurship Development**

Schumpeter (1934) said entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before. Apart from being innovators, entrepreneurs are risk-takers and take advantage of business opportunities and transform these into products. This spirit has greatly contributed to the modernization of economics and new technologies. The project investigated whether the polytechnic graduates are able to start new products and create employment. Were the graduates able to use their innovations to satisfy human needs in a more convenient and pleasant way. Application of new technology is necessary for the future growth of business. A technical entrepreneur is as good as a craftsman. Because of the craftsmanship they develop quality goods. They also develop alternative marketing and distribution strategies in order to promote business. Entrepreneurs are creative. They can create customers and buyers. Due to their innovative nature they persist on discerning new sources of materials to improve their enterprises and transform these into profits.

Entrepreneurs like starting something new or different. Kelemba (2010) in a survey of initiatives in current use of integrating of education for sustainable development in centre's of excellence carried out in six TVET institutions in Kenya found out that there was an approach to inspire trainees to think about what they can achieve through their own lives and future careers, however, the major barriers to enacting sustainable development include overcrowding in some part of the curriculum, the perceived relevance by the staff, limited internal accreditation including institutional commitment and validation systems, financial obligation and confusion over what and how to teach sustainable development in youth polytechnics. Every year there are new technologies, new markets, and new products and therefore the project investigated whether the youth polytechnics graduates are able to utilize the opportunities and develop their entrepreneurship skills.

## **2.8. Theoretical Framework**

The theoretical framework on technical training and entrepreneurship development advanced in the project is-

### **2.8.1 The Goal Theory by Latham and Lockie**

According to Goal theory as developed by Latham and Lockie, (1979) there are four main mechanisms that connect goals to training outcomes. They direct attention to priorities , stimulate efforts, challenge people to bring their knowledge and skills to bear and increase their chances of success and the more challenging the goal, the more people will draw on their full repertoire of skills. The theory emphasizes on setting and agreeing on objectives against which performance is measured and managed. It also emphasizes on feedback and review aspects of performance management (Armstrong, 2010).It is against this framework that the project investigated whether graduates of youth polytechnics used the theory to succeed in what they do after graduating from the youth polytechnics. They combined their skills training and career progression by engaging in business, introducing new products, new methods of doing business, new marketing strategies and other income generating activities to enable them to succeed in life and develop their entrepreneurship skills.

### **2.8.2 Constructivism Theory of Training**

The theory advocates that we construct our own understanding of the world we live in. Each of us generates our own rules and mental models, which we use to make sense of our experiences. It advocates taking learning as a process of adjusting mental models to accommodate new experiences. Constructivists believe that learners construct their own reality or at least interpret it based upon their perception of experiences, so an individual's knowledge is a function of one's prior experiences, mental structures, and beliefs that are used to interpret objects and events. What someone knows is grounded in perception of the physical and social experiences that are comprehended by the mind (Jonassen, 1991).

Constructivists call for elimination of standardized curriculum and instead promote use of curriculum that is customized to the student's prior knowledge and market based knowledge. It also emphasizes on hands on problem solving. They say education should focus on making connections between facts and fostering new understandings in students. Instructors should tailor their teaching strategies to student's response and encourage students to analyze, interpret, and predict information and use the knowledge to develop various skills that they can use in future after leaving school. It is against this framework that the project investigated whether graduates of youth polytechnics are using the theory to succeed in what they do after graduating from the youth polytechnics and whether their skills are market oriented and useful after graduation.

### **2.8.3 McClelland's Need for Achievement Theory**

McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence. Those people who have high need for achievement are more likely to succeed as entrepreneurs. Need for achievement refer to the desire to accomplish something with one's effort? It is the urge to excel or the will to do well. Need for power means the desire to dominate and influence others by controlling their actions and use of physical objects. Need for affiliation implies the desire to establish and maintain friendly and warm relation with others. The project investigated whether youth

polytechnics graduates are able to use this framework to ensure that they develop their entrepreneurship skills.

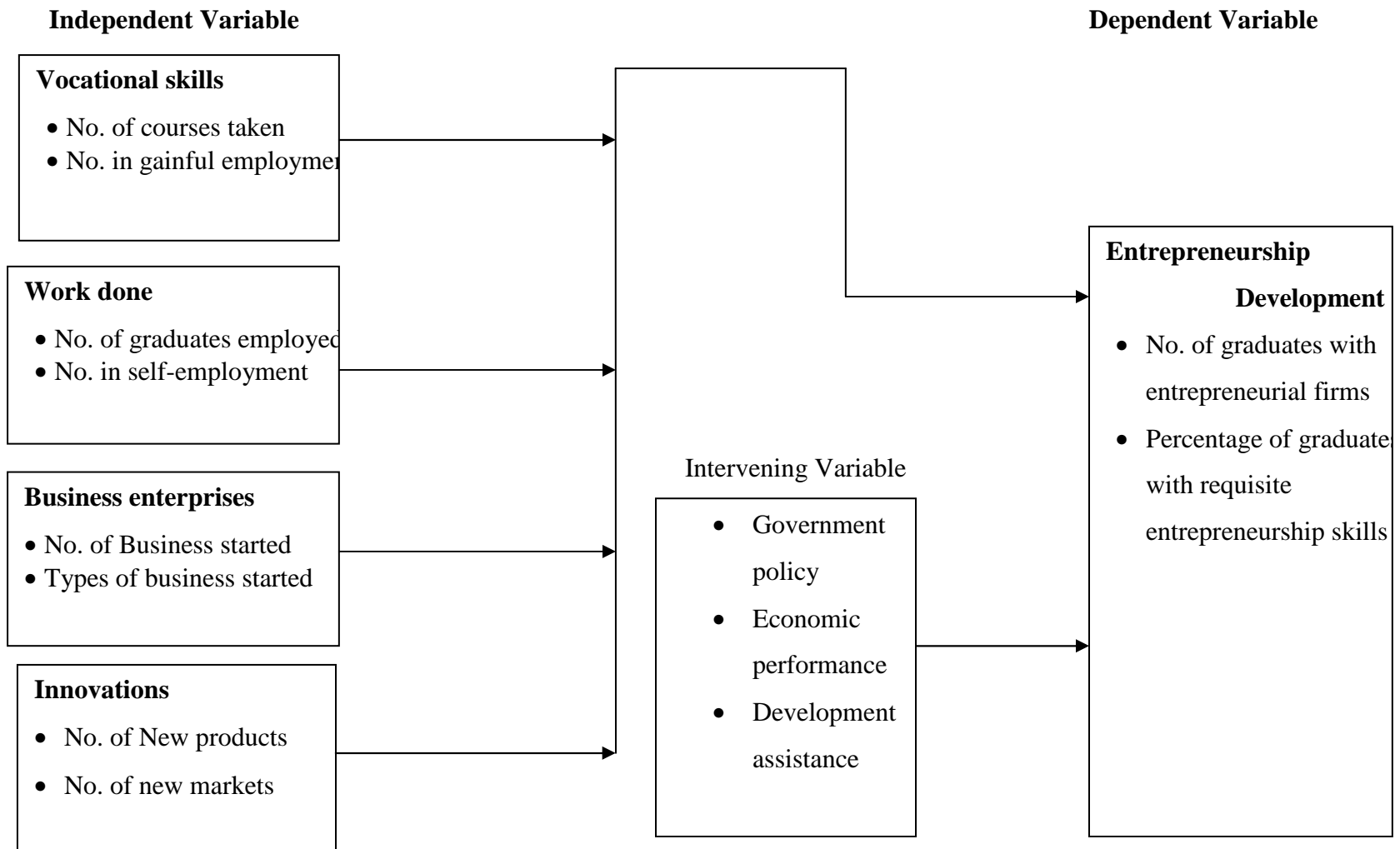
## **2.9 Conceptual Framework of the Study**

A conceptual framework helps simplify the proposed relationships between the variables in the study and show the same graphically or diagrammatically (Mugenda & Mugenda, 2003). The conceptual framework of the study was based on four independent variables namely; vocational skills acquired by the graduates, work done by the graduates, new business started by graduates and innovations stated by graduates.

An entrepreneur and his/her enterprise have been described as the engine of development. Scholars such as Schumpeter and Cantillon, see entrepreneur as the main catalyst through which any country achieves development. It is in this light that entrepreneurship is seen as the ability to perceive of a business opportunity and exploit it for the purposes of generating a profit, which in turn is used as capital for further investment or as a livelihood means. Entrepreneurship brings innovation through such activities as creation of new products, acquiring of new skills, investing in new technologies, acquiring new sources of raw materials, new production methods, creation of new markets and even new managerial innovations for developments. Entrepreneurship plays a major role in economic development of any economy by promoting capital formation by mobilizing the idle savings of the public, encourages effective resources mobilization of capital and skill that might otherwise remain unutilized and idle. Entrepreneurism an innovator who introduces new combinations of means of production. Innovation involves making use of new things or doing of things that are already being done in a new way. Entrepreneurs are risk takers and insecurity bearers. If the venture succeeds, the entrepreneur profits, if it does not, loses occur. The entrepreneurs must make use of his/her initiatives to reduce risks or uncertainties. They also make business decision, once the entrepreneur is convinced that a particular line of production offers large prospects, he/she has to formulate action plan regarding the product and the quality of products to be produced. He /she has to find the best possible method of production which ensures he/she succeeds. Entrepreneurs arrange finances, purchases raw materials, supervises, sells and markets and assures the role of manager in the enterprise.



In line with this definition and function of entrepreneurship taken above, the project used the below conceptual framework to explain the role of village polytechnics graduates in entrepreneurship development in Kenya. The project looked at whether what graduates of youth polytechnics do after graduation , business enterprises started by the YP graduates, innovations started by the youth polytechnic graduates and vocational skills acquired by the graduates contributes to entrepreneurship development in Embu county and Kenya as a whole.



**Figure 2.1 Conceptual framework**

## 2.10 Knowledge Gaps

The gaps identified in the reviewed literature are as shown on table 2.1

**Table 2.1 Knowledge Gaps**

<b>Variable</b>	<b>Author and Year</b>	<b>Findings</b>	<b>Knowledge gap</b>
Vocational skills and entrepreneurial development by the graduates	Kelemba, (2012) Ndua,(1988) Moyas, (2012) Sifuna (1975) Waithaka, (1989)	Found out that their existed a strong relationship between vocational skills and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	There is need to explore this findings in the context of Kenyan youth polytechnics so as to clearly examine the exact relationship
Work done and entrepreneurial development by the graduates	Moyas (2012) Nzioka (1986) Kinyanjui (2007)	These studies found out that their existed a strong relationship between work done and entrepreneurial development among graduates. However this relationship has not been studied in youth polytechnics in Kenya.	These studies do not indicate clear methodologies that were used to reach this conclusion. On this basis, my study shall designed a clear methodology to verify this influence
Businesses and entrepreneurship development by the graduates	UNDP(2012) Kinyanjui (2007)	There seems to exist a strong relationship between business and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail.
Innovations and entrepreneurial development by the graduates	Schumpeter (2004) Kelemba (2010)	There seems to exist a strong relationship between innovations and entrepreneurial development among graduates However this relationship has not been studied in youth polytechnics in Kenya	There is a need examine and emphasize this relationship in great detail

## **2.11 Summary of Literature Review**

This chapter highlights the review of the previous studies on youth polytechnics in Kenya and the three theories namely, the Goal theory, the Constructivism theory and McClelland need for achievement theory that have been advanced about training and entrepreneurship development. It further reviews the conceptual framework with the four independent variables under study (What graduates of youth polytechnic do after graduation, types of business enterprises started, vocational skills acquired and innovations started by graduates of the polytechnic has the dependent variables).

This is due to the fact that various development plans and policies associate human development with economic development (Kamunge, 1998). It has been argued that there are many countries with trained and educated populations yet they lag behind in development (Prichet, 1996). Those of contrary opinion such as Ngware (2002), Alam (2007), see investments in education and training as being beneficial. They argue that education and training improves one's creativity, enhances individual's participation in economic development, and enhances one's competitiveness in the job market as well as future earnings. Therefore there is need for further research to ascertain the impact of investment in training on enhancing individual's competitiveness in labour market especially for the youth polytechnics graduates.

The review showed research studies that has been done on the role of vocational and technical skills on entrepreneurship development However, no such studies has been done in Embu County particularly targeting the Karurumo youth polytechnic graduates. This study hopes to fill in the gap.

## **CHAPTER THREE: RESEARCH METHODOLOGY**

### **3.1 Introduction**

This chapter explained the research design, target population, sampling techniques, research instruments, data collection and analysis procedures and the operation definition of variables used.

### **3.2 Research Design**

The research design used in this study was descriptive survey design. The project aimed at investigating role of village polytechnic graduates to entrepreneurship development in respondent's opinion in relation to their role in entrepreneurship development in the country. This enabled the researcher to bring out the elements of the findings in a more clear and comprehensive manner. According to Creswell (2002) descriptive survey design is used when data is collected to describe person, organization, settings, and phenomena. A survey reports the way things which include behavior, attitude, values and characteristics are formed (Mugenda and Mugenda, 2003). The above design was therefore used to investigate the role of village polytechnic graduates to entrepreneurship development in Embu County. A self-administered questionnaire was used to collect the required quantitative and qualitative data from former trainees of Karurumo Youth Polytechnic. The Questionnaire comprised of two sections. The first part was designed to determine the demographic characteristics of the respondents, while the second part consisted of questions focusing on the four independent variables to be studied (Work done by graduates after graduation, business enterprises started by graduates, new innovations started by the YP graduates and Vocational skills acquired by YP graduates) had a role to play in entrepreneurship development in Embu county and Kenya as whole.

The questionnaire was designed in line with the objective of the study. To enhance quality of data obtained, Likert types of questions were included whereby respondents indicated the extent to which the variables were practiced in a five part Likert scale (Gamer, 2010). Structured and un-structured questions were also used to facilitate analysis and encourage the responses to give an in-depth response about the variables

without feeling held back in revealing any information. Secondary data was collected from the ministry of youth affairs and sports at the headquarters and from the county director of youth training in the county. This included annual reports and other related returns.

### 3.3 Target Population

The target population according to Cox (2010) is the entire set of units for which the survey data are used to make references. The target population constitutes the entire or totality of the items under study (Kothari, 2004). The target population for this study was 325 former graduates from Karurumo village polytechnic who graduated between 2003 and 2012 (10 years).

**Table 3.1 Target Population**

	<b>population</b>
YP Graduates from 2003 to 2012	325
<b>Total</b>	<b>325</b>

### 3.4 Sampling Procedure and Sample Size

Mugenda and Mugenda (2003) defined sampling as the selection of a portion of a population such that the selected portion represents the population adequately. Mugenda and Mugenda (2003) suggest that for descriptive studies 10% or above of the accessible population is enough for the study. This study targeted 20% of the target population of 325 making a total sample size of  $(0.20 \times 325) = 65$  as indicated in the below table:-

**Table 3.2 Sample Size**

	<b>Sample size</b>
YP Graduates (20% of 325)	65
<b>Total</b>	<b>65</b>

The former graduates of Karurumo youth polytechnic were traced in the whole county by the four research assistants under my guidance as the principal researcher. The research assistants were briefed on the research problem and what was expected from the questionnaire. The research assistants were encouraged to work as a team where necessary. In order to identify the respondents, the researchers were advised to visit the YP manager, instructors and chiefs to help them in tracing the graduates.

### **3.5 Data Collection Methods and Instruments**

The study used questionnaires in collecting data from graduates. The questionnaire combined both open-ended and close-ended questions which were administered to the graduates. Questionnaires were considered ideal for collecting quick data from the graduates.

The data collection procedure entailed the researcher obtaining an introduction letter from the University. The researcher then sampled graduates to inform them about the study and made arrangements for issuing questionnaires. The respondents were given instructions and assured of confidentiality and were given enough time to fill in the questionnaires, after which the researcher collected the filled –in questionnaires.

The researcher therefore sourced data from both primary and secondary sources. Primary data was gathered directly from respondents through questionnaires. Secondary data was used because there were some data from published materials and information e.g. journals and the internet.

#### **3.5.1 Pilot Testing of the Questionnaires**

Pilot testing of the questionnaires before embarking on real research was important in order for it to reveal deficiencies (Mugenda and Mugenda (2003). Eleven questionnaires were used for pilot testing to ensure reliability and validity in the adjacent Tharaka Nithi County. Former graduates of Muthambi YP were traced and interviewed. The pilot data was not included in the study. The recommendations of the supervisor enhanced the validity of the instruments. This established the reliability and the validity of the instruments.

### **3.5.2 Reliability of the Research Instruments**

In order to ensure reliability of instruments, questions in the questionnaires were constructed and first pre-tested to ensure consistency in measurement. The test-retest technique of assessing reliability of a research involved in administering the same instruments twice to the same group of subjects. This was after a lapse of two weeks. Spearman rank order correlation was employed to compute the correlation coefficient in order to establish the extent to which the content of the questionnaires was consistent in eliciting the right responses every time the instrument was administered. A correlation coefficient ( $r$ ) of 0.85 was considered high enough in judging the reliability of the instruments.

### **3.5.3 Validity of the Research Instruments**

Just as it was observed by Patten (2004) and Wallen & Fraenkel (2001) that a study instrument is only valid if it measures what it is intended to measure and accurately achieves the purpose for which it was designed, the current study put in place measures to ensure that the instruments used in the study provided accurate result. The content validity of the instruments was measured. The researcher's supervisors helped the researcher to assess the concept the instruments was measuring in order to determine whether the set of items were accurately representing items under study. The recommendations of the supervisor enhanced the validity of the instruments.

### **3.6 Data Analysis Techniques**

The data collected was coded, cleaned and entered into the computer and analyzed using the statistical package for social sciences (SPSS). Descriptive statistics was used to analyze the data. Descriptive statistics provided for meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution and was used to analyze and generalize the results of analysis to the population (Kothari, 2008). This is because the variables studied were measured at ratio or interval scales and were continuous (Patton, 2003). For analysis of quantitative data, the data was converted into numeric codes representing attributes or measurements of variables. Coding included as much information as possible because once the coded data was entered into the computer,



it was possible to recover any details, which were omitted ( Mugenda &Mugenda, 2003). Generalization was done from the themes about the phenomena in question and interpreted in the light of available literature (Kumar, 2005). Qualitative analysis was important since it supplemented the quantitative analysis that created a better framework for the interpretation of the findings (Kothari 2008). Data was then presented in pie charts and tables and explained

### **3.7 Operational Definition of Variables**

To operationalize the research variables, the matrix below defines how the variables was measured

### 3.8 Operational Definition of Variables

To operationalize the research variables, the matrix below defines how the variables was measured

**Table 3.3 Operational definition of variables**

Objectives	Variables	Indicators of Measurements	Measurements scale	Tools of Analysis	Type of Analysis
To determine how vocational skills acquired by graduates from Karurumo Village Polytechnic in the last 10 years contributed to entrepreneurship development in Embu county	Independent: vocational skills acquired by graduates	<ul style="list-style-type: none"> <li>No. of graduates in gainful employment</li> <li>No. of courses taken by graduates</li> </ul>	Nominal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To find out whether what graduates from Karurumo village polytechnic do after graduation contributed to entrepreneur development in Embu county	Independent: what graduates from Karurumo village polytechnic do after graduation	<ul style="list-style-type: none"> <li>No. of graduates employment</li> <li>No. of graduates self- employment</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: Entrepreneur development in Embu county	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Nominal		
To determine whether types of business started by graduates from Karurumo Village Polytechnic in the last 10 years contribute to entrepreneurship development in Embu County	Independent: types of business started by graduates	<ul style="list-style-type: none"> <li>No. of business started</li> <li>Types of business started</li> </ul>		Frequencies Percentages	Descriptive
	Dependent: Entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		
To establish whether innovations started by graduates of Karurumo Village Polytechnic in the last ten years contribute to entrepreneurship development in Embu County	Independent: Innovations started by graduates	<ul style="list-style-type: none"> <li>No. of new products started</li> <li>No. of new technologies started</li> <li>New markets started</li> </ul>	Ordinal	Frequencies Percentages	Descriptive
	Dependent: entrepreneurship development in Embu County	<ul style="list-style-type: none"> <li>No. of graduates equipped with entrepreneur skills</li> <li>% of graduates with requisite entrepreneur skills</li> </ul>	Ordinal		

**Table 3. 4 The number of Trainees enrolled at Karurumo Youth Polytechnic since 2003 to December 2012**

Dist.	YP	Name of Course	Youth Polytechnic Graduates since 2003 to December, 2012																													
			2003			2014			2005			2006			2007			2008			2010			2011			2012					
			M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T			
Emb		MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10
		Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11
		Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10
		Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15
		Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17
<b>Grand Total</b>												25						36					18			34			53			63

### **3.9 Ethical Considerations**

To avoid biases in this study, the researcher took into consideration the qualitative research that uses a case study approach which tends to skew data in certain ways (Mason, 2002). All ethical procedures were considered. Multiple methods were used and acknowledgement of researchers' role assisted in mitigating all the biases in the study.

## CHAPTER FOUR: DATA ANALYSIS, PRESENTATION AND DISCUSSION

### 4.1 Introduction

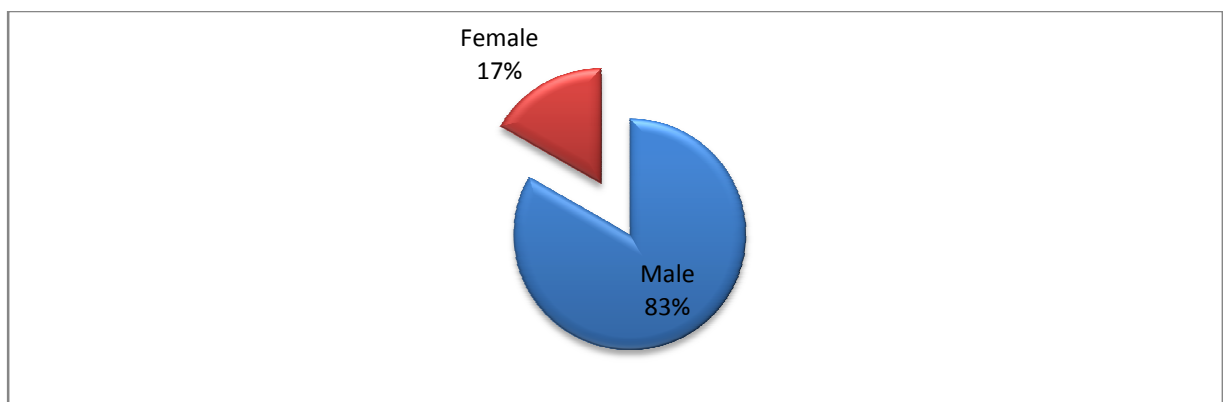
This chapter presents analysis and findings of the study as set out in the research methodology. The results were presented on the role of village polytechnics in entrepreneurship development. The study targeted 65 respondents out of which 60 responded and returned their questionnaires contributing to the response rate of 92.3%. This response rates were sufficient and representative and conforms to Mugenda and Mugenda (1999) stipulation that a response rate of 50% is adequate for analysis and reporting; a rate of 60% is good and a response rate of 70% and over is excellent. This commendable response rate was due to extra efforts that were made via personal calls and visits to remind the respondent to fill-in and return the questionnaires. The chapter covers the demographic information, and the findings were based on the objectives.

### 4.2 Demographic Information

#### 4.2.1 Gender distribution of the respondents

The study sought to establish the respondent's gender distribution. The findings are as stipulated in figure 4.1.

**Figure 4.1 Gender of the respondents**



From the findings illustrated in figure 4.1 the majority of the respondents (83%) were males while 17% were females. This illustrates that there was gender disparity as majority of the respondents were males.

### 4.2.2 Highest level of Education

The research sought to establish respondents' highest level of Education. The findings are as stipulated in figure 4.2.

**Figure 4.2 Highest level of Education**

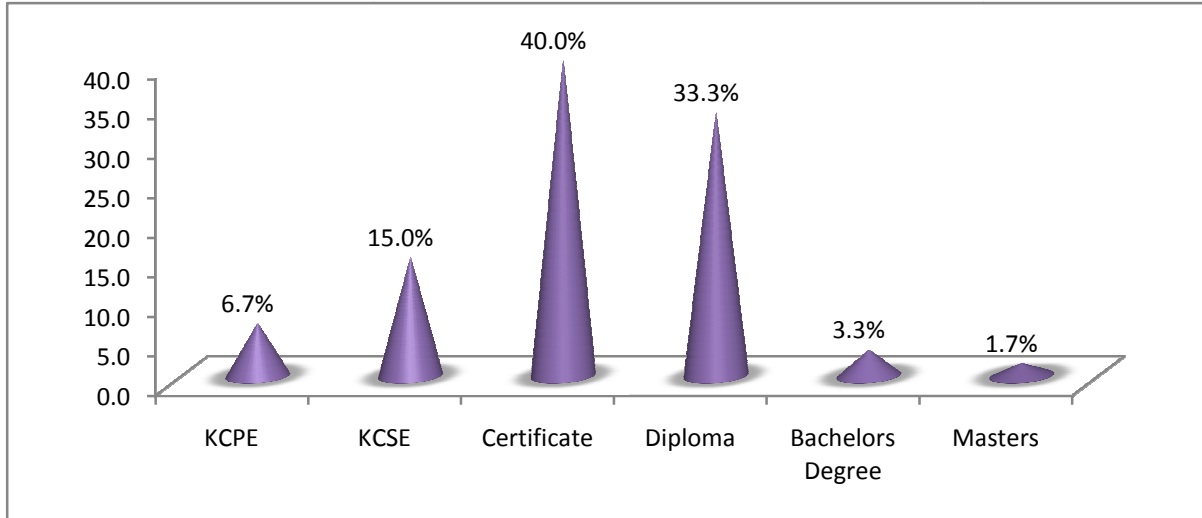
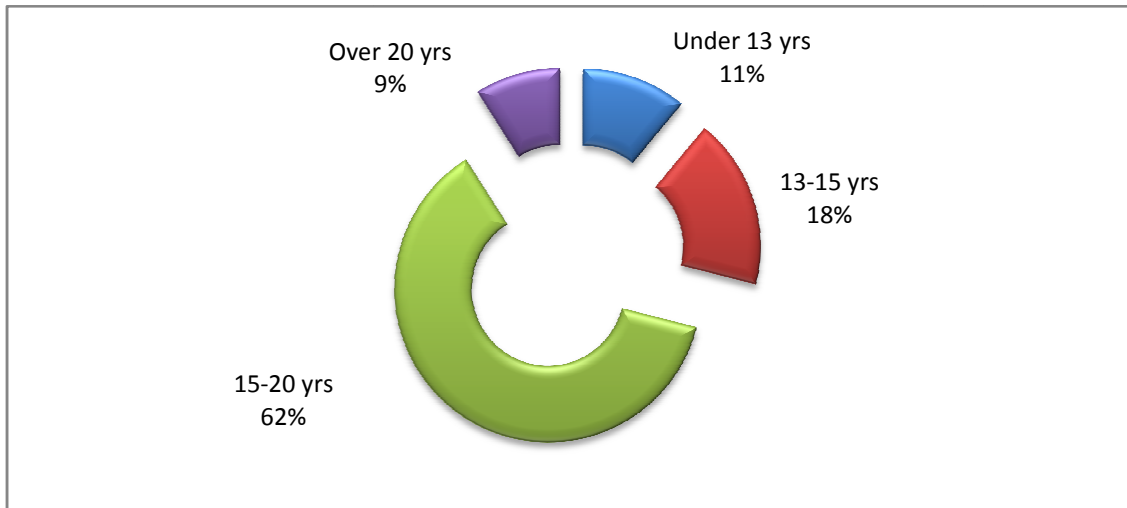


Figure 4.2 indicates that most of the former graduates from Karurumo youth polytechnic (40%) had college certificates level of education, 33.3% had college diplomas and 15% had Kenya certificate of secondary education while 6.7%, 3.3% and 1.7% had Kenya certificate of primary education, bachelor's degree and Masters degree respectively. This illustrates that majority of the graduates from Karurumo Youth Polytechnic had college certificates and diplomas respectively. This shows that most of the graduates were able to carry out entrepreneurship development without many problems owing to their level of education.

### 4.2.3 Age the trainees joined the Polytechnic

The study also sought to establish the age at which the respondents joined the Polytechnic. The findings are as stipulated in figure 4.3.

**Figure 4.3 Age trainees joined Polytechnic**



From the study findings, majority of the respondents (62%) joined the Polytechnic at the age of 15-20 years, 18% at the age of 13-15 years while 11% and 9% joined the polytechnic at the age of less than 13 years and over 20 years respectively. This implies that majority of the graduates from Karurumo youth polytechnic had joined the institution at the age of 15-20 years. This was the normal age at which students/trainees are enrolled in the polytechnics and therefore they were suitable to join the training.

**4.2.4 Number of Years trainees spent in the Polytechnic**

The study further sought to establish the number of years that the respondents spent in the polytechnic. The findings are as stipulated in table 4.1.

**Table 4.1 Number of Years trainees spent in the Polytechnic**

	Frequency	Percentage
< 1 yr	3	5.0
1 & < 2 yr	14	23.3
2 & <3 yrs	23	38.3
3 & < 4 yrs	11	18.3
> 4 years	9	15.0
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents (38.3%) had spent 2-3 years at Karurumo youth polytechnic, 23% had spent 1-2 years and 18.3% had spent 3-4 years while 15% had spent over four years at Karurumo Youth Polytechnic. This implies that majority of the graduates from Karurumo Youth Polytechnic had spent 2-3 years in the institution that was relatively enough to acquire the desired skills. This is the normal duration that the trainees take in the polytechnics.

#### 4.2.5 Reasons for enrolling in the Youth Polytechnic

The study sought to establish the reasons why the respondents enrolled in the youth polytechnic. The findings are as stipulated in table 4.2.

**Table 4.2 Reasons for enrolling in the Youth Polytechnic**

	Frequency	Percentage
Acquiring of skills	53	88.3
Interested or liked courses offered in the YPs	44	73.3
Forced by circumstances	49	81.7
Lack of school fees for secondary education	51	85.0
Failure to score good grades in KCPE	53	88.3
To be self employed	39	65.0
Polytechnic education is affordable	46	76.7

From the study findings, majority of the respondents (88.3%) indicated acquiring of skills and failure to score good grades in KCPE as the reasons why they enrolled in the youth polytechnic, 85% cited lack of school fees for secondary education and 81.7% indicated that they were forced by circumstances to enroll in the youth polytechnic. On the other hand, 76.7% indicated that polytechnic education was affordable and 73.3% cited that they were interested or liked courses offered in the YPs while 65% indicated that they enrolled in the youth polytechnic due to failure to score good grades in KCPE. Majority of the trainees had divergent reasons why they joined the polytechnics but acquiring of skills and failure to score good grades in KCPE stood out.

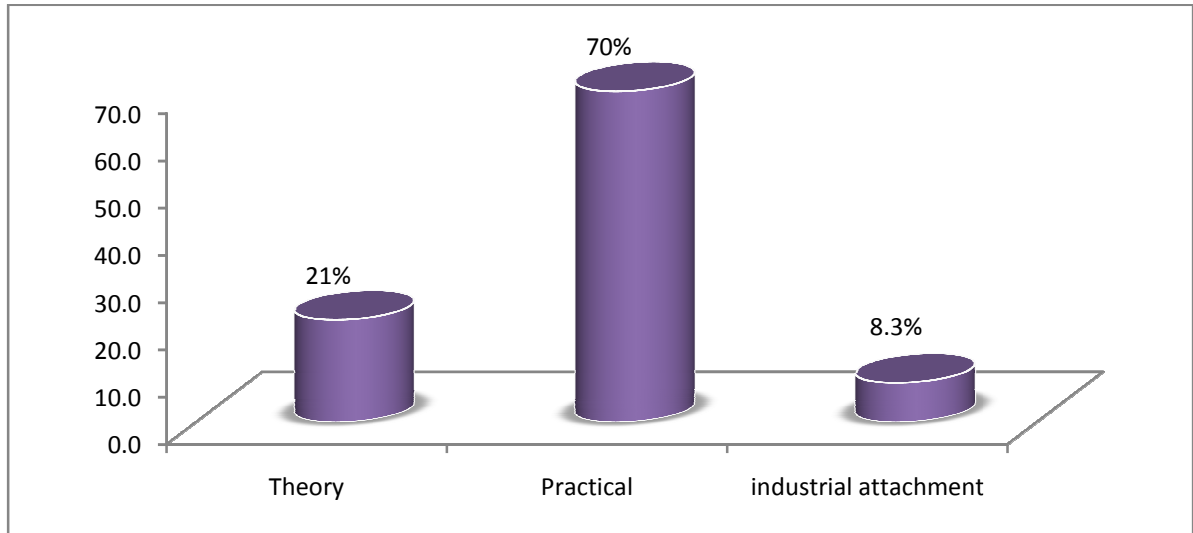


### 4.3 Vocational Skills and Entrepreneurship Development

#### 4.3.1 Aspects of the course undertaken in the polytechnic and day today life

The study asked the respondents to indicate the aspects of the course undertaken in the polytechnic and what they were doing on day today life. The findings are as stipulated in figure 4.4.

**Figure 4.4 Aspects of the course undertaken in the polytechnic**



From the study findings, majority of the respondents (70%) indicated that the aspects of the course undertaken in the polytechnic was practical in their day to day life, 21% indicated that it was theoretical while 8.3% indicated that the aspects of the course undertaken in the polytechnic helped the respondents in their industrial attachment. This meant that the respondents were able to acquire practical skills that they used when they got out from the polytechnic and were able to use it to develop their entrepreneurship skills. This shows that the graduates were able to get the right practical skills that enabled them to be competent, effective and efficient in the operations of the day to day life.

#### 4.3.2 Outcome of vocational skills acquired in the polytechnic

The study also sought to establish the outcome of vocational skills acquired in the polytechnic among the respondents. The findings are as stipulated in table 4.3.

**Table 4.3 Outcome of vocational skills acquired in the polytechnic**

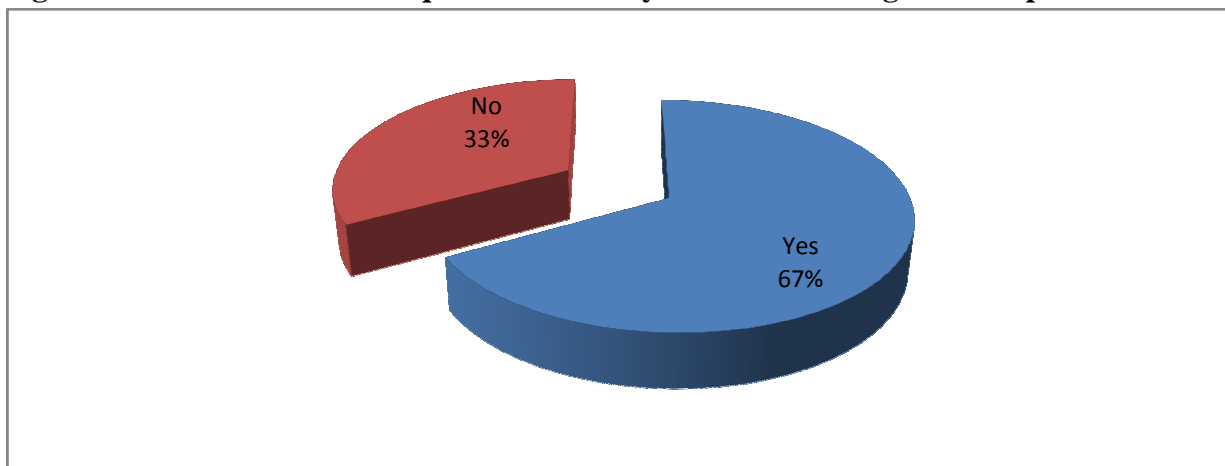
	Frequency	Percentage
Entrepreneur	23	38.3
Trainer	11	18.3
Self-employed	18	30.0
Employed	8	13.3
<b>Total</b>	<b>60</b>	<b>100.0</b>

From the table above, most of the respondents, 38.3% indicated that the vocational skills acquired in the polytechnic helped them to be entrepreneurs, 30% indicated self-employed while 18.3% and 13.3% indicated that the vocational skills acquired in the polytechnic helped them to be trainers and employed respectively. This implies that the vocational skills acquired in the polytechnic helped majority of the graduates from Karurumo Youth Polytechnic to be entrepreneurs. It also shows that Karurumo Youth Polytechnic graduates were doing well in life because of the vocational skills they acquired during their training. This was in line with expectation as they joined the polytechnic.

#### **4.3.3 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

The study asked the respondents to indicate whether the Vocational skills acquired in the Polytechnic helped them become an Entrepreneur. The findings are as stipulated in figure 4.5.

**Figure 4.5 Vocational skills acquired in the Polytechnic and being an Entrepreneur**

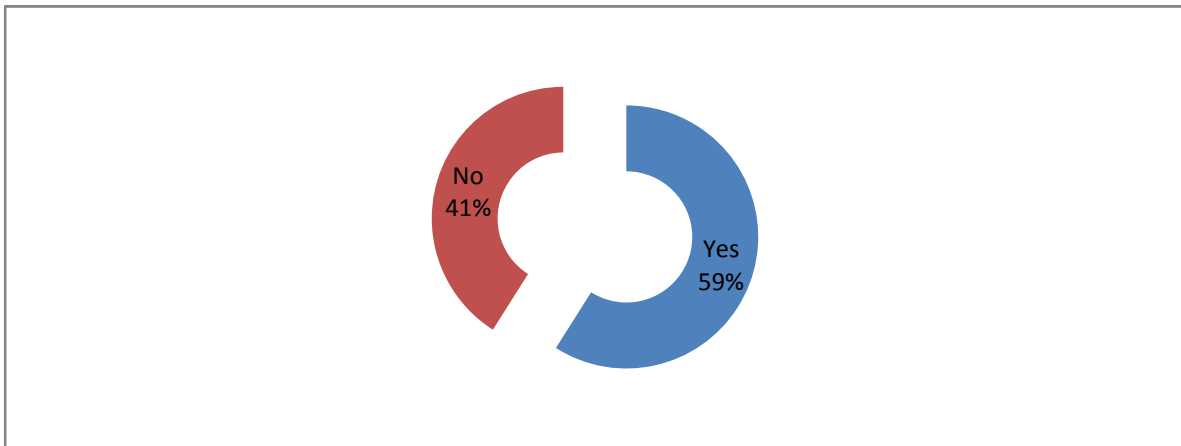


From the study findings, majority (67%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them become an entrepreneur while 33% were of a contrary opinion. This implies that vocational skills acquired in the Polytechnic help graduates become Entrepreneurs.

#### 4.3.4 Vocational skills acquired in the Polytechnic

The study further asked the respondents to indicate whether the vocational skills acquired in the polytechnic helped them improving entrepreneurship skills. The findings are as stipulated in figure 4.6.

**Figure 4.6 Vocational skills acquired in the Polytechnic**



From the study findings in the figure above, majority (59%) of the graduates from Karurumo youth polytechnic indicated that the vocational skills acquired in the polytechnic helped them improve their entrepreneurship skills while 41% were of a contrary opinion. This is in line with Waithaka, (1989) who observed that young school graduates with relevant skills and attitudes would lead the young people to enable the young people during and after training to contribute more competently in the development of their communities by building up the economic strength of those communities.

#### 4.3.5 Vocational skills and Entrepreneurship development

The study sought to establish the role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. The findings are as stipulated in table 4.4.

**Table 4.4 Vocational skills and Entrepreneurship development**

	<b>Frequency</b>	<b>Percentage</b>
Promotion of new business	33	55.0
Promotion of innovations	44	73.3
Provision of new technologies	49	81.7
Creation of new products	51	85.0
Acquiring of new skills	56	93.3
Creation of new markets	39	65.0

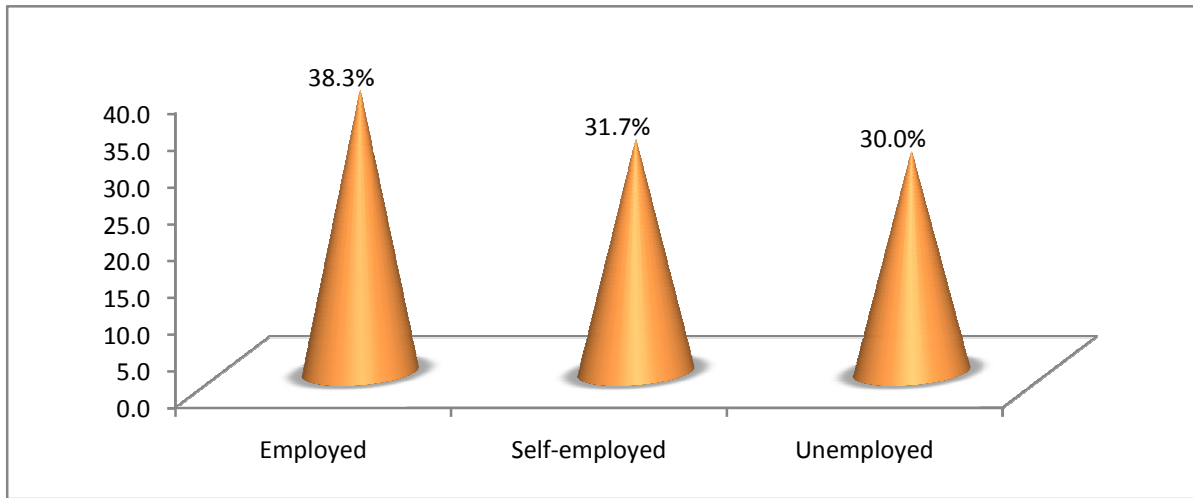
From the study findings, majority of the respondents (93.3%) indicated acquiring of new skills as the role of promotion of entrepreneurship development, 85% indicated creation of new products, 81.7% indicated provision of new technologies and 76.7% indicated new production methods while 73.3% indicated Promotion of innovations. On the other hand, 65% indicated creation of new markets and 55% indicated promotion of new business. This implies that acquiring of new skills was the main role of vocational skills acquired in the Polytechnic in promotion of Entrepreneurship development. This agrees with Schumpeter (1934) who indicated that entrepreneurship is primary concerned with broad process through which new products are created and introduced replacing conventional things or practices. Innovations involve introduction of new products, or services, starting new technologies and new markets that never existed before.

#### **4.4 What graduates do and Entrepreneurship Development**

##### **4.4.1 Employment status**

The study sought to establish the employment status of the graduates from Karurumo youth polytechnic. The findings are as stipulated in figure 4.7.

**Figure 4.7 Employment status**

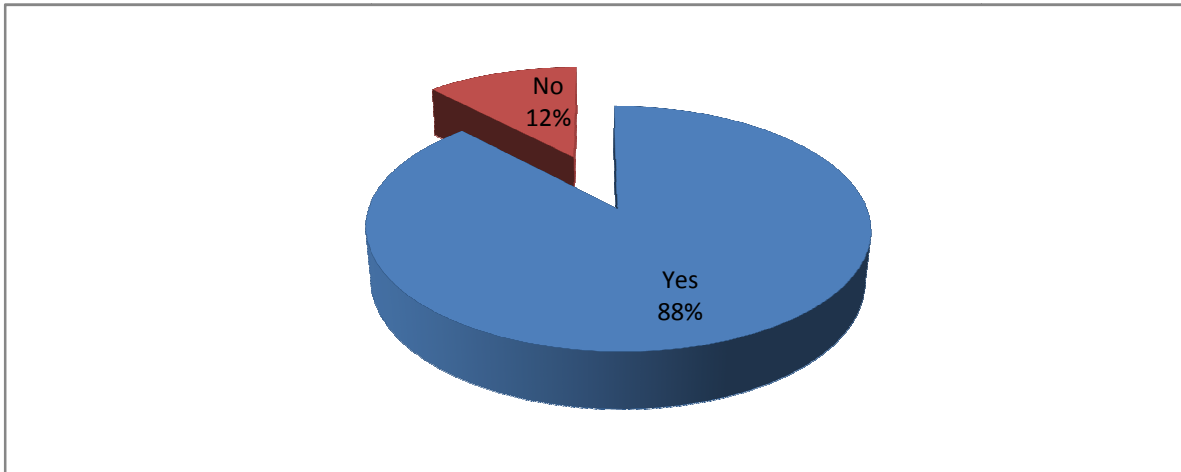


From the study findings, most (38.3%) of the graduates from Karurumo youth polytechnic indicated that they were employed, 31.7% were self-employed while 30% were unemployed. This implies majority of the graduates from Karurumo youth polytechnic were employed. This finding concur with the findings of Achieng (2012) on the study of factors affecting acquisition of vocational skills among learners in Maranda division of Siaya district that found that vocational education main aim is to offer skills to learners that can help them to be self-employed. Vocational skills create greater impact on human resource development and economic growth.

#### **4.4.2 Certificate from Youth Polytechnic and chances of employment**

The study asked the respondents to indicate whether skill training certificate from youth polytechnic enhanced their chances of employment. The findings are as stipulated in figure 4.8.

**Figure 4.8 Certificate from Youth Polytechnic and chances of employment**

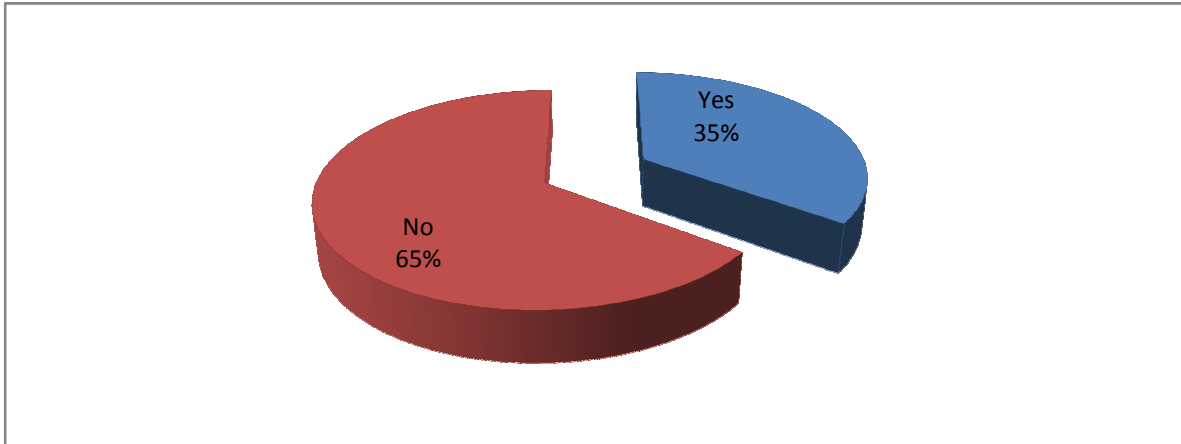


From the figure above, majority (88%) of the graduates from Karurumo youth polytechnic agreed that skill training certificate from youth polytechnic enhanced their chances of employment while 12% disagreed. This implies that skill training certificate from youth polytechnic enhanced graduates chances of employment. This concurred with the findings of Ibuathu (2013) on the study of the impact of vocational training for rural development in Nyambene district in Kenya that found out that 60% of the respondents said youth polytechnic graduates were marketable were learning their own business that included tailoring, carpentry and welding shops.

#### **4.4.3 Offering of Training by the former Polytechnic Graduates**

The study sought to establish whether the graduates from Karurumo youth polytechnic offered any training. The findings are as stipulated in figure 4.9.

**Figure 4.9 Offering of Training by the former Polytechnic Graduates**

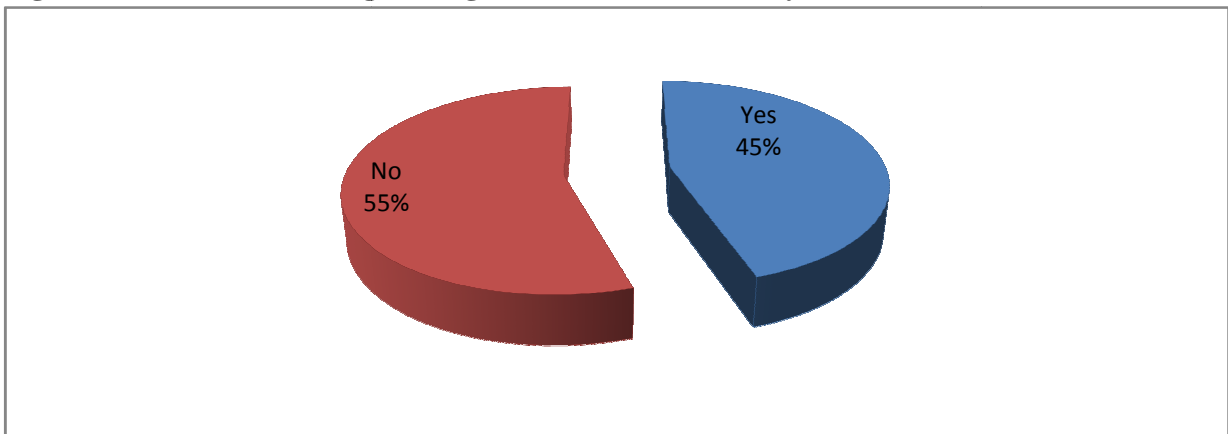


From the findings of the study, majority (65%) of the graduates from Karurumo youth polytechnic disagreed that they offered trainings with 35% agreeing that they offered trainings. This implies that graduates from Karurumo youth polytechnic did not offer trainings. This is in line with Kinyanjui (2007) the youth polytechnic employees enter the labour market as employees, Self-employment and only 22.2% of the graduates were unemployed.

**4.4.4 Use of Training skills gained in the Youth Polytechnic to train**

The study further sought to establish whether the graduates from Karurumo Youth Polytechnic used the training skills gained in the Youth Polytechnic to train. The findings are as stipulated in figure 4.10.

**Figure 4.10 Use of Training skills gained in the Youth Polytechnic to train**



From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic disagreed that they used the training skills gained in the Youth Polytechnic to train with 45% who used the training skills gained in the Youth Polytechnic to train. This implies that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train.

#### 4.4.5 Role of training in entrepreneurship development

The study asked the respondents to indicate the role of training in entrepreneurship development in the County. The findings are as stipulated in table 4.5.

**Table 4.5 Role of training in entrepreneurship development**

	Frequency	Percentage
started new business	33	55.0
Created new products in the market	35	58.3
Value addition to products	49	81.7
New technology	32	53.3
Opening new markets	53	88.3
Providing new services	41	68.3
Providing training services	58	96.7

From the table above, majority (96.7%) of the graduates from Karurumo youth polytechnic indicated provision of training services as the role of training in entrepreneurship development in Embu County, 88.3% indicated opening of new markets, 81.7% indicated value addition to products and 68.3% indicated provision of new services while 58.3%, 55% and 53.3% indicated creation of new products in the market, starting of new businesses and new technology as the role of training in entrepreneurship development in Embu County. McClelland (1996) stressed the need for achievement as the most directly relevant factor for explaining economic behavior hence the rise of entrepreneurship. The motive is defined as the tendency to strive for success in situations involving an evaluation of one's own performance in relation to some standard of excellence.

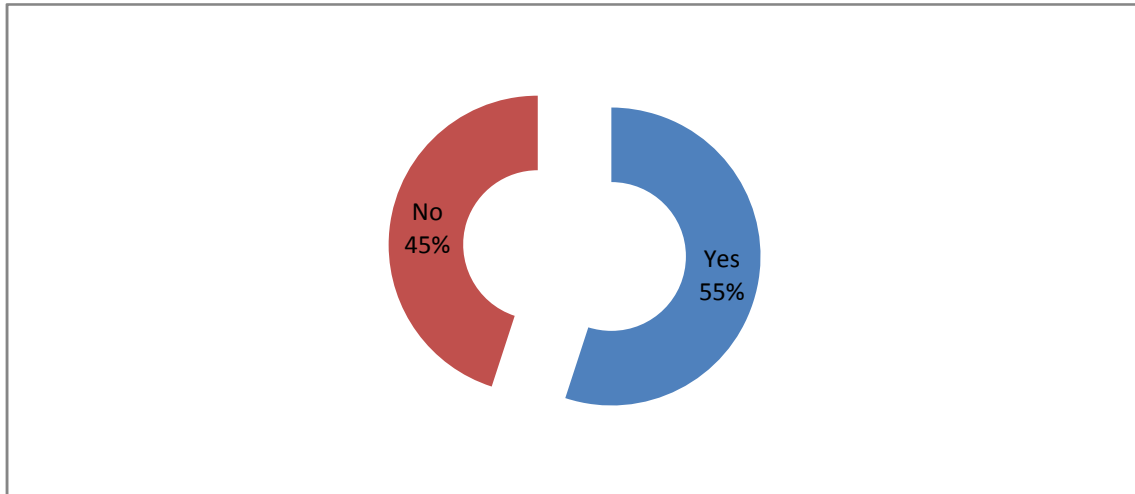


## 4.5 Business started and their role in entrepreneurship

### 4.5.1 Business enterprise after graduation

The study asked the respondents to indicate whether they had started any business enterprise after graduation. The findings are as stipulated in figure 4.11.

**Figure 4.11 Business enterprise after graduation**

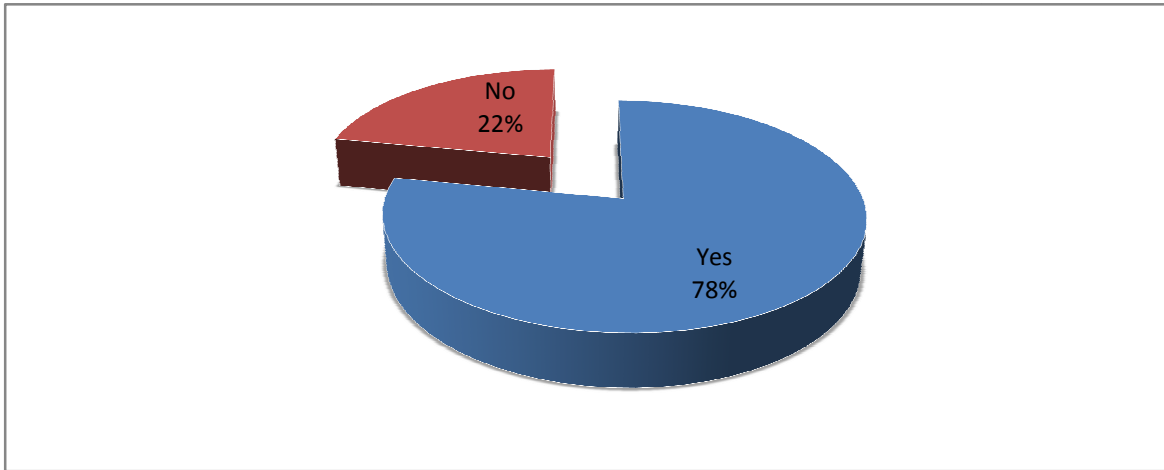


From the findings of the study, majority (55%) of the graduates from Karurumo youth polytechnic agreed that they had started business enterprise after graduation while 45% had not. This implies that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation.

### 4.5.2 Business started and course taken at polytechnic

The study also sought to find out whether the businesses started were related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.12.

**Figure 4.12 Business started and course taken at polytechnic**

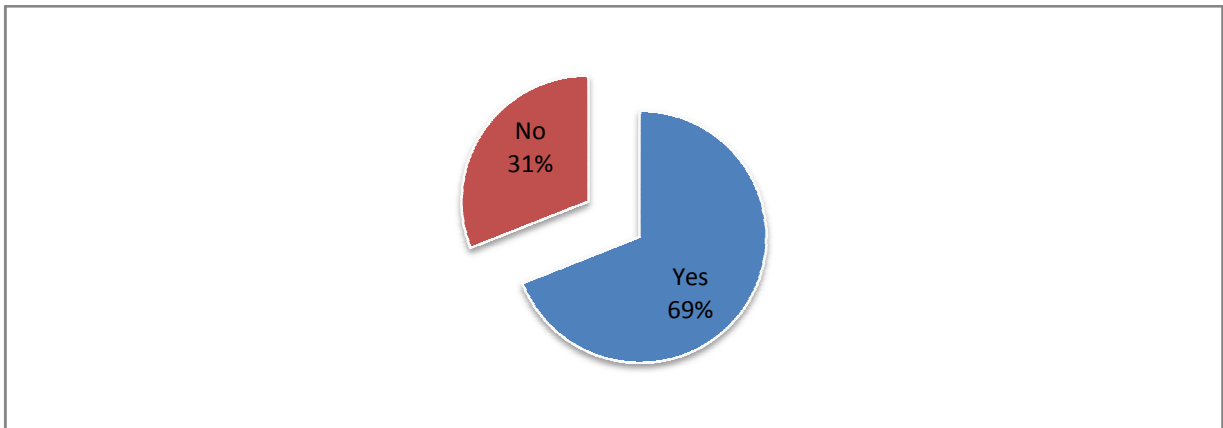


From the findings of the study, majority (78%) of the graduates from Karurumo youth polytechnic agreed that the businesses they had were related to the course undertaken at the polytechnic. This implies that majority of the graduates from Karurumo youth polytechnic had started businesses related to the course undertaken at the polytechnic.

#### **4.5.3 Business enterprise and improvement of entrepreneurship skills**

The study further sought to find out whether the business enterprise stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.13.

**Figure 4.13 Business enterprise and improvement of entrepreneurship skills**



From the figure above, majority (69%) of the graduates from Karurumo youth polytechnic agreed that the business enterprise stated assisted them to improve their entrepreneurship skills. This findings agrees with the findings of Kivu (2013) on the study of influence of leadership on the growth of enterprises in Machakos county that found innovation influenced growth of entrepreneurs in Machakos and that emotional intelligence plays a key role in product and process innovation.

#### **4.5.4 Role of business in improving economic development in the county**

The study asked the respondents to indicate the role of business in improving economic development in the County. The findings are as stipulated in table 4.6.

**Table 4.6 Role of business in improving economic development in the county**

	<b>Frequency</b>	<b>Percentage</b>
Training others	33	55
Doing things better, faster and at less cost	57	95
Opening new markets	51	85
Use of newly found material	32	53
Brought new technologies	53	88

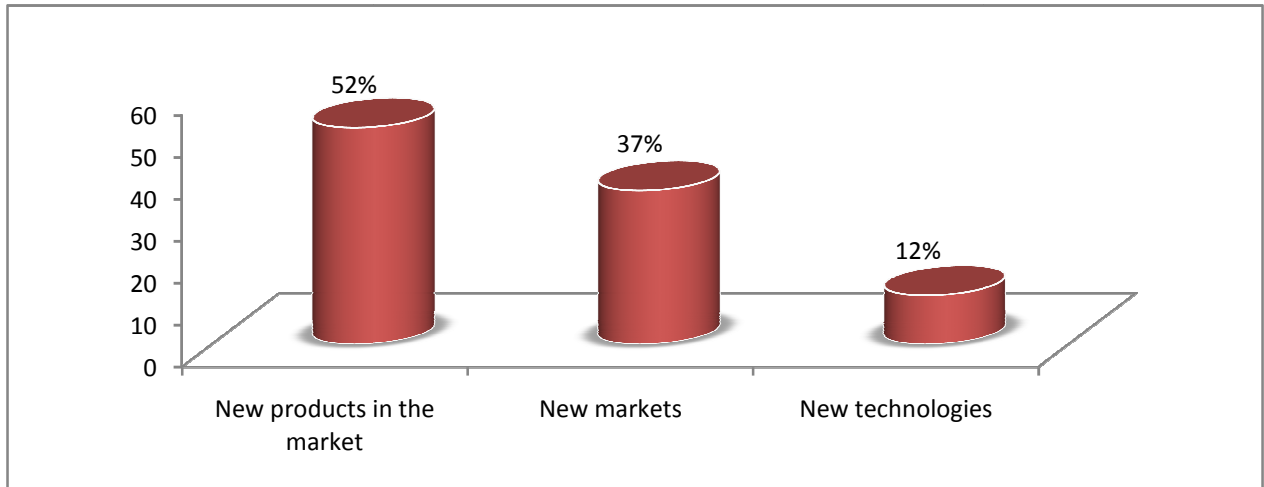
From the table above, majority (95%) of the graduates from Karurumo Youth Polytechnic indicated that the role of business in improving economic development in the County was through doing things better, faster and at less cost, 88% indicated that it brought new technologies, 85% cited that it opened new markets and 55% said that they trained others while 53% indicated that it was through use of newly found materials. Ndua (1988) completed a study in 16 youth polytechnics in five districts in eastern province of Kenya. He found out that lack of adequate initial capital discouraged the graduate to buy tools and equipments for small-scale business. Certification was important factor for trainees in terms of wage employment in the formal sector and there was need for coordination of progress in terms of curriculum standardization and staffing.

## 4.6 Innovations started and entrepreneurship development

### 4.6.1 Innovations started since leaving polytechnic

The study sought to find out the innovations started by the graduates since they left polytechnic. The findings are as stipulated in figure 4.14.

**Figure 4.14 Innovations started since leaving polytechnic**

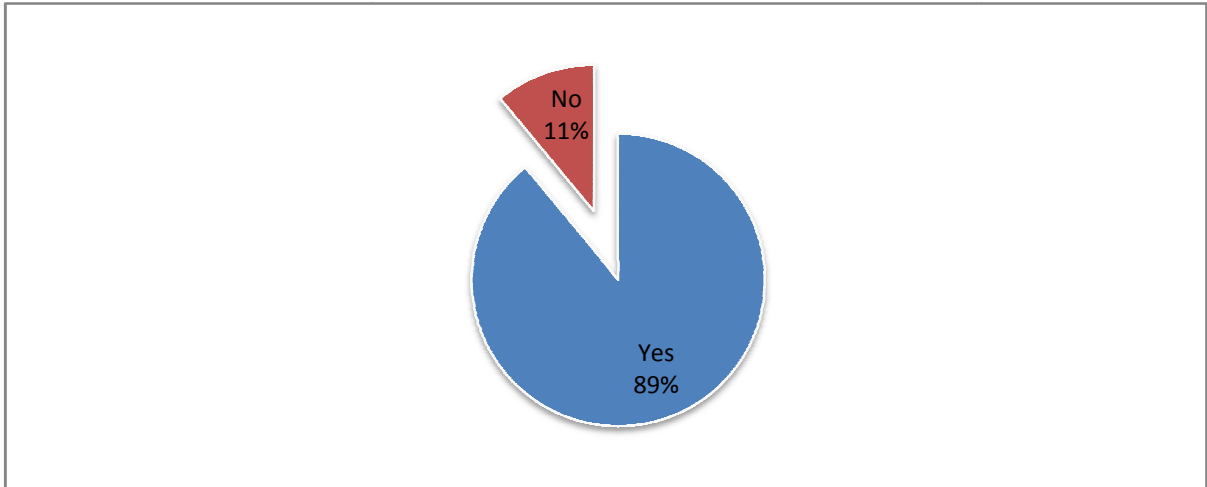


From the study findings, majority (52%) of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic, 37% had introduced new markets while 12% had introduced new technologies since they left polytechnic. This agrees with Yambo (1986) who observed that youth polytechnics were established to help attack the problem of unemployment of primary school graduates in rural areas; those who were unable to find employment, further training or education.

### 4.6.2 Innovations started and course taken at polytechnic

The study also sought to find out whether the innovations stated was related to the course undertaken at the polytechnic. The findings are as stipulated in figure 4.15.

**Figure 4.15 Innovations started and course taken at polytechnic**

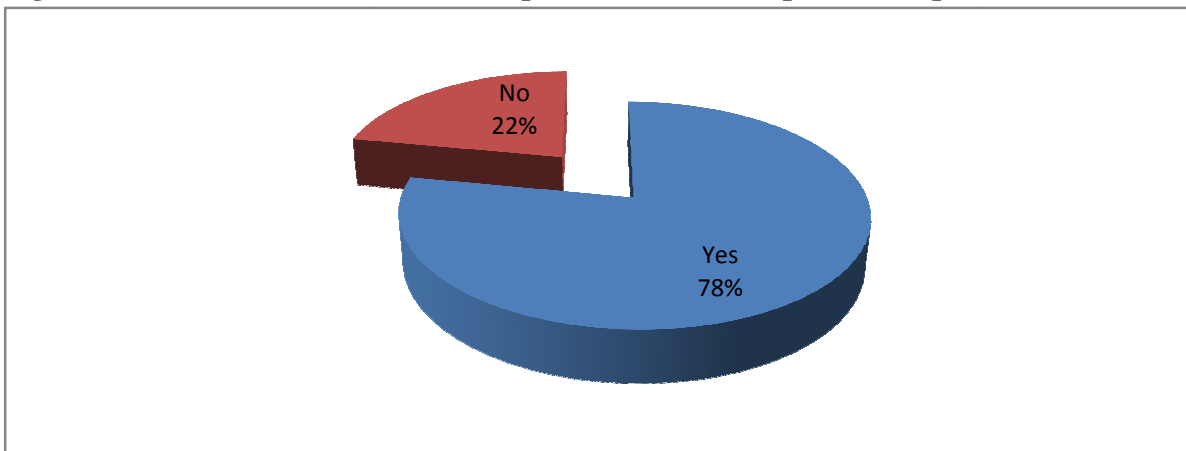


From the figure above, majority (89%) of the graduates from Karurumo youth polytechnic agreed that the innovations stated were related to the course undertaken at the polytechnic.

#### **4.6.3 Innovation started and improvement of entrepreneurship skills**

The study further sought to find out whether the innovation stated assisted the respondents to improve their entrepreneurship skills. The findings are as stipulated in figure 4.16.

**Figure 4.16 Innovation started and improvement of entrepreneurship skills**

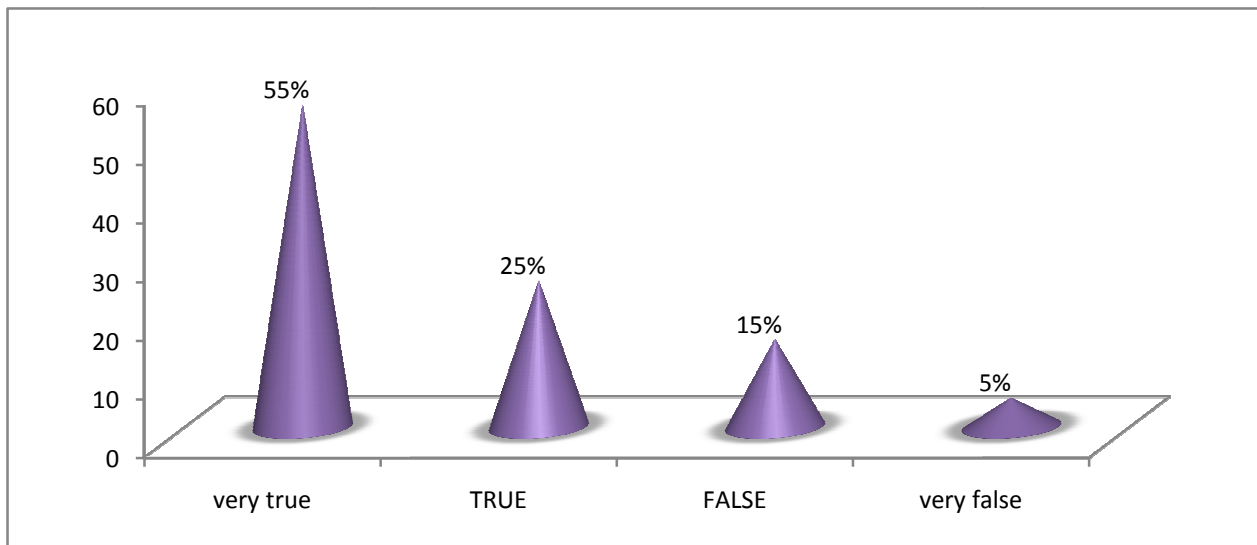


From the figure above, majority (78%) of the graduates from Karurumo youth polytechnic agreed that innovation stated assisted them to improve their entrepreneurship skills.

#### 4.6.4 Innovation started and graduate's role in economic services

The study further sought to find out whether the innovation stated assisted the respondents to enhance their role in providing economic services to the people. The findings are as stipulated in figure 4.17.

**Figure 4.17 Innovation started and graduate's role in economic services**



From the study findings, majority (55%) of the graduates from Karurumo youth polytechnic indicated that it was very true that the innovation stated assisted them to enhance their role in providing economic services to the people while 25% indicated that it was true and 15% indicated that it was false. This implies that the innovation stated assisted the graduates to enhance their role in providing economic services to the people. These findings concur with the findings of Wanyoko (2013) on his study on the influences of business incubation services on growth of small and medium enterprises in Kenya that found out that majority of the respondents in the study (83%) stated that innovation influenced the growth of business and entrepreneurship development and affects business to a greater extent.

#### 4.6.5 Extent to which innovations played role in entrepreneurship development

The study sought to establish the extent to which innovations started by graduates of the polytechnics play in entrepreneurship development. The responses were rated on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly

disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree. The mean and standard deviations were generated from SPSS and are as illustrated in table below.

**Table 4.7 Extent to which innovations played role in entrepreneurship development**

<b>Statement</b>	<b>SA</b>	<b>A</b>	<b>N</b>	<b>D</b>	<b>Mean</b>	<b>STDev</b>
Innovations make one risk money and fortunes and combine resources to start new products and services.	46	7	4	3	4.65	0.482
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people	41	12	5	2	4.44	0.524
New technologies assist in provision of efficient and effective services to ones customers	48	6	2	4	4.53	0.621

From the study findings in Table 4.7, majority of the respondents strongly agreed that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people as shown by the mean scores of 4.65, 4.53 and 4.44 respectively and the standard deviation of 0.482, 0621 and 0.524 respectively. This shows that most of respondents either agreed or strongly agreed to the statement.

It also shows the graduates used innovations to satisfy human needs in a more convenient and pleasant way and were able to grow their businesses. They were also able to discern new sources of materials to improve their entrepreneurship. This is in line with Kelemba (2010) who found out that every year graduate of Youth Polytechnic were able to start new technologies, new materials, new products and used their skills to improve their enterprises.

## **CHAPTER FIVE: SUMMARY, CONCLUSION AND RECOMMENDATIONS**

### **5.1 Introduction**

This chapter presents the summary of the study findings, conclusion and recommendations drawn from the study findings. The chapter is based on the study objectives, which were to determine whether the vocational skills acquired by graduates of Karurumo village polytechnic in the last 10 years since 2003 have contributed to entrepreneurship development in Embu county; to find out whether what graduates of Karurumo village polytechnic do after graduation contributes to entrepreneurship development in Embu county; to establish whether innovations started by graduates of Karurumo village polytechnic in the last ten years contributed to entrepreneurship development in Embu county and whether types of business started by the graduates of Karurumo village polytechnic have contributed to entrepreneurship development in Embu county.

### **5.2 Summary of findings**

The study established that the aspects of the course undertaken by the graduates from Karurumo Youth Polytechnic was practical in their day to day life since majority of the graduates ended up being entrepreneurs. Further, the study established that the vocational skills acquired in the polytechnic helped graduates from Karurumo Youth Polytechnic become Entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills by the graduates of Karurumo village polytechnic promoted entrepreneurship development in the County.

The study also established that skill training certificate from youth polytechnic enhanced graduates chances of employment thus majority of the graduates from Karurumo youth polytechnic were employed. Further, majority of the graduates did not offer trainings, however, the study established that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu county.

The study also found out that majority of the graduates from Karurumo youth polytechnic had started a business enterprise after graduation and the businesses were related to the



course undertaken at the polytechnic while business enterprise stated assisted them to improve their entrepreneurship skills. The study further established that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets.

The study found out that majority of the graduates from Karurumo youth polytechnic indicated that they had introduced new products in the market since they left polytechnic; the innovations stated were related to the course undertaken at the polytechnic and the innovation stated assisted them to improve their entrepreneurship skills. Further, the study established that the innovation stated assisted the graduates to enhance their role in providing economic services to the people of Embu county. Lastly, the study found out that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assisted in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

### **5.3 Conclusion**

The study concludes that there was gender disparity as majority of the graduates from Karurumo Youth Polytechnic were male who joined the institution at the age of 15-20 years and had spent 2-3 years in the institution. The study also concluded that majority of the graduates had enrolled in the youth polytechnic to acquire of skills and failure to score good grades in KCPE. The study also concludes that many youth polytechnics graduates find self-employment or start new business as a means of making a living. This creates growth and wealth.

The analysis reveals that graduates are making significant contributions in the labour market either as workers in business or in self-employment. In order to cater for the unemployed polytechnic graduates, the economy in the counties needs to be diversified while polytechnics should be upgraded and reconstituted in such a way that they are able to meet demands for market based knowledge and skill acquisition. The other issue that emerged in the analysis is that polytechnics are institutions whose goal is to ensure that trainees acquire

skills that assists' them in personal development as well as for the economic development of the counties and the country at large. Polytechnic education should aim at imparting creativity, innovation, independent thought and precision in polytechnic graduates.

The study concludes that the vocational skills acquired in the polytechnic helped graduates from Karurumo youth polytechnic become entrepreneurs due to the improved entrepreneurship skills. On the other hand, acquiring of new skills was the main role of vocational skills acquired in the polytechnic which promoted entrepreneurship development. The study also concluded that graduates from Karurumo youth polytechnic did not use the training skills gained in the youth polytechnic to train and for those who did, they provided training services to enhance entrepreneurship development in Embu County.

The study further conclude that the role of business in improving economic development in the County was through doing things better, faster and at less cost, brought new technologies and it opened new markets. Lastly, the study concluded that innovations make one risk money and fortunes and combine resources to start new products and services; new technologies assist in provision of efficient and effective services to ones customers and innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people.

#### **5.4 Recommendations of the study**

The study recommends that there is need for strategic positioning of youth polytechnic education in the map of technical education in the country through diversification of the economy and upgrading of youth polytechnic in such a way that there are able to meet the demands of labour markets and skills acquisition. The graduates are making significant contribution in the labour market either in business or self –employment. Youth polytechnics are grassroots institutions that serve the needs of poor youth who are hopeless and helpless. Acquisition of skills and failure to perform well in the examinations are the key factors that drive the youth to enroll in polytechnics. The above perception must be done away with and a deliberate effort to position the youth polytechnics as centers of excellence for all.

The study also recommends that business skills courses taken in the youth polytechnics be strengthened and made more responsive and functional to enable the graduates of the polytechnics start business enterprise's and do business in a better, faster, less costly way and create new technologies in the markets. A deliberate effort to diversify the choice of courses for girls in the youth polytechnics be put in place. Some of the courses that might improve the choice of courses for girls are: secretarial, catering and housekeeping. More effort should also be put in order to encourage girls to enroll in male trades such as mechanic, electrical installations and welding. Communities need to be sensitized to ensure they also take girls to the polytechnics.

The study further recommends the vocational skills offered in the YPs be made more practical and entrepreneurial oriented to prepare the trainees for the world of work both in formal or self-employment. This will reduce the challenges of poverty in the counties and rural areas. There is also need to encourage the formation of right frameworks, networks and facilities that could encourage polytechnic graduates to enter into self-employment. The relationship between policy consumers, facilitators and implementers need to be defined.

Lastly, the study recommends youth polytechnic be made more innovative and creative to enable them to prepare their graduates to introduce new products in the markets, new services and even open new markets both in the rural and urban center's after graduation. This will prepare the graduates to be change agents and mobilize resources to establish small and micro enterprise's and create more employment opportunities for economic development in Kenya.

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**APPENDICES**

**APPENDIX I : DATA COLLECTION QUESTIONNAIRE FOR YP GRADUATES**

This is a self- administered questionnaire to collect data for purely academic purposes. The study seeks to analyze the “**Role of Youth Polytechnics in Entrepreneurship Development in Embu County**” All information will be treated with strict confidence. *Answer all questions as indicated by either filling in the blank or ticking the option that applies.*

**SECTION A: GENERAL INFORMATION**

1. Gender.....Male  Female

2 Highest Academic Qualifications

*KCPE*

*KCSE*

*Certificate*

*Diploma*

*Bachelors Degree*

*Masters*

3. Age at which you joined the Polytechnic

1. Under 13 years

2. between 13-15 years

3. 15-20 years

4. Over 20 years

5. Year you enrolled in the Polytechnic-----

6. Number of Years you spent in the Polytechnic.....

**SECTION B: ON WETHER, VOCATIONAL SKILLS ACQUIRED BY GRADUATES  
PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMEMT.**

1. What aspects of the course undertaken in the polytechnic are relevant to what you are doing in your day today life?.....  
.....

2. In what way has the vocational skills acquired in the polytechnic prepared you in what you are doing now?.....

3. Has the vocational skills acquired in YP assisted you in being an entrepreneur?

Yes

No

If Yes, Specify.....

If No, specify.....

4. Is the Vocational skills started above assisting to improve your entrepreneurship skills?

1. Yes

2. No

3. If Yes, Specify.....

4. If No, specify.....

5. Do you have suggestion on courses taken in the polytechnic that could help improving entrepreneurship skills in the county.....  
.....

6. What role does vocational skills acquired in YPs play in promotion of entrepreneurship development?

1. ....

2. ....

3. ....

**SECTION C: ON WHETHER WHAT GRADUATES FROM KARURUMO VILLAGE POLYTECHNIC DO AFTER GRADUATION CONTRIBUTE TO ENTERPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Are you employed or in self-employment or unemployed?

Yes  No

(ii) If employed, specify type of job.....

(iii) If Self –employed, specify type of business.....

(iv) If unemployed, specify for how long.....

2. In what way did the Youth Polytechnic skills training prepare you for employment or self-employment?

1. Self-employment aspect.....

2. Employment aspect.....

3. What factors did you consider when choosing where to seek employment or locate business?

1. Self-employment .....

2. Locate business.....

4. How long did you take to find employment or to start business?

1. Find employment .....

2. Self-employment .....

5. Did skills training certificate from youth polytechnic enhance your chances of employment?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

6. Do you offer any training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

7. Do you use training skills learnt at the polytechnic in your training?

Yes  No

(ii) If Yes, specify.....

(iii) If No, specify.....

8. What role as your training played in entrepreneurship development in Embu County?

1. Started new business

2. Created new product in the market

3. Value additions to products

4. New technology

5. Opening new markets

6. Providing new services

7. Providing Training services

Other(specify).....

**SECTION D:ON WHETHER TYPES OF BUSINESS ENTERPRISESSTARTED BY GRADUATES FROM KARURUMO POLYTECHNIC PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT IN EMBU COUNTY**

1. Have you started any business enterprise after graduation?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

2. Is the business related to what you did at the polytechnic?

1. Yes

2. No

3. If Yes, specify.....

4. If No, specify.....

3. Has your business enterprise assisted in improving your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, specify.....
- 4. If No, specify.....

4. What role does your business play in improving economic development in the County?

- 1. Training others
- 2. Doing things better, faster and at less cost
- 3. Opening up new markets
- 4. Use of newly found material
- 5. Brought new technologies
- 6. Other (Specify).....

**SECTION E: ON WETHER INNOVATIONS STARTED BY GRADUATES PLAY A ROLE IN ENTREPRENEURSHIP DEVELOPMENT?**

1. What innovations have you started since leaving the polytechnic?

- 1. Started new product in the market
- 2. Started New markets
- 3. Started New technologies
- 4. Other (specify).....

(ii) If, Yes above, specify-----

2. Is the innovation started above related to the course you did in the polytechnic?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

3. Is the innovation started above assisting to improve your entrepreneurship skills?

- 1. Yes
- 2. No
- 3. If Yes, Specify.....
- 4. If No, specify.....

4. Does the innovation started above enhance your role in providing economic services to people?

- 1. Very True
- 2. True
- 1. False
- 2. Very false

5. What role do the graduates play in promotion of innovation?

- 1. ....
- 2. ....
- 3. ....
- 4. ....

6. State your level of agreement to the following statement as regards whether innovations started by graduates of the polytechnics play a role in entrepreneurship development on a five point Likert scale indicating to what extent respondents agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree.

Statement	SA	A	N	D	SD
Innovations make one risk money and fortunes and combine resources to start new products and services.					
Innovations makes one a change agent enabling one to mobilize resources, establish small and micro enterprises and create employment opportunities for other people					
New technologies assist in provision of efficient and effective services to ones customers					

7. What would be your advice to Youth Polytechnic trainees in enhancing entrepreneurship development in the County?

- 1.....
- 2.....
- 3.....

## APPENDIX II : NUMBER OF TRAINEES AT KARURUMO YOUTH POLYTECHNIC FROM 2003 TO 2012

Cou	District	YP	Name of Course	Youth Polytechnic Graduates since 2003																														
				2003			2014			2005			2006			2007			2008			2009			2010			2011			2012			GT
Em				M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T	M	F	T				
Cou	Embu	Karurumo	MVM	5	0	5	6	0	6	5	0	5	6	0	6	6	0	6	9	0	9	7	0	7	6	0	6	8	0	8	10	0	10	
			Building Technology	4	0	4	8	0	8	7	0	7	5	0	5	9	0	9	7	0	7	4	0	4	6	0	6	9	0	9	11	0	11	
			Appropriate Carpentry	3	0	3	2	0	2	1	0	1	2	0	2	4	0	4	4	0	4	1	0	1	4	1	5	9	0	9	8	2	10	
			Electrical Installation	3	1	4	3	0	3	3	0	3	4	0	4	3	0	3	5	3	8	3	1	4	5	0	5	10	5	15	9	6	15	
			Garment Making	2	2	4	4	3	7	0	3	3	6	2	8	6	3	9	6	2	8	0	2	2	5	7	12	9	3	12	7	10	17	
<b>Grand Total</b>						<b>20</b>			<b>26</b>			<b>19</b>			<b>25</b>			<b>31</b>			<b>36</b>			<b>18</b>			<b>34</b>			<b>53</b>			<b>63</b>	<b>325</b>

