

**FACTORS INFLUENCING TECHNICAL AND ENTREPRENEURIAL  
SKILLS ACQUISITION BY YOUTHS IN KENYA: A CASE OF  
YOUTH POLYTECHNICS IN EMBU COUNTY**

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the Award of the Degree of Master of Arts in Project Planning and  
Management of the University of Nairobi**

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**DECLARATION**

This research project report is my original work and as not been presented for award of any degree in any other university.

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## **DEDICATION**

This research project is dedicated to my wife Silveria Rigiri and entire family for their support and encouragement during the course of my study.

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## **ABBREVIATIONS AND ACRONYMNS**

<b>CDYT:</b>	County Director of Youth Training
<b>KANU:</b>	Kenya African National Union
<b>KCPE:</b>	Kenya Certificate of Primary Education
<b>KCSE:</b>	Kenya Certificate of Secondary Education
<b>KIE:</b>	Kenya Institute of Education
<b>MDG:</b>	Millennium Development Goals
<b>MOYAS:</b>	Ministry of Youth Affairs and Sports
<b>NARC:</b>	National Alliance of Rainfall Collision
<b>NVCET:</b>	National Vocational Certificate in Education and Training
<b>SYPT:</b>	Subsidied Youth Polytechnic Tuition
<b>TVET:</b>	Technical and Vocational Education and Training
<b>TQM:</b>	Total Quality Management
<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 training demanded by our agricultural based economy. The role played by youth polytechnics in the development of our country is crucial and therefore the need to improve training of youth polytechnics graduates in order for them to be efficient and effective in their service delivery is now more than ever. Technical training is a systematic development of knowledge and attitudes required of YP graduates to perform adequately on a given task or job and therefore the youth polytechnic should be able to train their trainees adequately and prepare them for world of work. Based on the above facts, the project investigated the factors influence equipping of youth with technical and entrepreneurial skills in youth polytechnics in Embu County. The study aimed at establishing and determining the extent to which entry qualifications of youth polytechnic trainees, teaching and learning equipment's used by trainees and industrial attachment of the YP trainee's influences equipping of youth with technical and entrepreneurship skills in youth polytechnics in Kenya. The study adapted a descriptive survey research design and used descriptive statistics models to analyze the data. The target population for the study was the County director of youth training, the youth polytechnic managers, youth polytechnic instructors and youth polytechnic trainees. A sample size of 80 was used. Questionnaires were used to collect qualitative data to ensure reliability and validity; however quantitative techniques were applied to communicate results where applicable. The data collected was analyzed to establish the relationship between independent variable with the dependent variable. The results revealed that entry qualifications of the trainees, teaching and learning materials used and industrial attachment contributed significantly to equipping of youth with technical and entrepreneurial skills training of YP trainees. The analysis established that that majority of the youth polytechnic trainee's had Kenya certificate of primary education as their highest academic qualifications before enrolling in the polytechnic and that entry qualifications before enrolling in the polytechnic played a role in boosting effective skills training and that appropriate teaching and learning equipment and materials assist trainees in acquiring skills training to a very large extent. The study also established that that industrial attachment enhanced their technical training of youth polytechnic trainees and provided practical application of skills, safety, consciousness and interpersonal skills needed in world of work. The study concluded that promotion of technical and vocational education and training for industrialization, economic development and wealth creation and poverty eradication is now need more than ever and therefore youth polytechnics have a key role to play and cannot be ignored any more. The government must realize in principle that development of youth polytechnic education system is a key component for Kenya economic development.

## **CHAPTER ONE**

### **INTRODUCTION**

#### **1.1 Background of the Study**

Technical and Vocational Education and Training (TVET) has fuelled phenomenal economic growth in some countries and fallen short of expectations in others (UNESCO, 1999). The definition of TVET as adopted at the Korean Congress in 1999 was “Those aspects of the educational process involving, in addition to general education, the study of technologies and related sciences, and the acquisition of practical skills, attitudes, understanding and knowledge relating to occupants in various sectors of economic and social life” (UNESCO, 1999). TVET also refers to education and training that prepares persons for gainful employment (Finch and Crunkilton 1999).

Globally over 50 million students were enrolled in technical and vocational education in 2012. However, the enrolment rates vary widely by regions. In Europe and East Asia, including China, such programs accounted for 50% and 33%, respectively. In the other regions, technical and vocational enrolment is far less common. In Africa and South America, the share is less than 20%, and in North America and West Asia less than 10% and 4%, respectively (Maclean & Wilson, 2012).

The goal of technical training 'is to teach people to follow prescribed procedures and to perform in a standardized manner. It requires training of knowledge workers using different educational policies, facilities, curricula and teachers. Teachers must be transformed from those who impart knowledge to those who facilitate learning. Curricula must be transformed from mechanisms to deliver facts into mechanisms to promote and facilitate learning and thinking. TVET curricula have been in transition from its industrial age mix of 50% theory and 50% practical to one that is 80% theory and 20% practical, paralleling the transition from the industrial to the information age (UNESCO, 1999). TVET has consistently faced problems stemming from the negative image commonly held by students, parents and many sectors of societies. This also relates to the lack of student motivation to enroll in TVET programmes. Tilak (2003) characterizes TVET as

an equity measure because it promotes equity with a rural bias and serves the needs of relatively poor people as well as being an antidote to urban-biased elite education worldwide.

While most polytechnics worldwide were formed in the expansion of higher education in the 1960s, some can trace their history back much further than this. The London polytechnic (now the university of Westminster), emerged from the royal polytechnic institution which was founded at Regent Street-London in 1838 (Tilak, 2003). The establishment of the polytechnic was a reaction to the rise of industrial power and technical education in France, Germany, and the USA. Prior to the 1960s, the University of London validated degrees at the London Polytechnic. The first British Institution to use the name "Polytechnic" was the Royal Cornwall Polytechnic Society, which it retains, together with the affectionate nickname "The Poly".

In Britain, some polytechnics are often seen as ranking below universities in the provision of higher education because they lack degree-awarding powers, concentrated on applied education for work, and have less research than the universities and because the qualifications necessary to gain a place in one are lower than those for a university.

In Kenya youth polytechnics were established to take care of vocational and technical education, however less emphasis was placed on technical education (UNESCO-UNEVOC, 2010). Overtime, the quality of technical training deteriorated to the extent that village polytechnic were regarded as inferior institutions reserved for school failures and dropout (Kinyajui, 2007). The challenges facing these institutions included lack of policy framework for governance and management, Poor infrastructure, inadequate and absolute tools and equipment's, lack of social amenities and recreational facilities and a varied curriculum lacking quality assurance mechanism (Wanyonyi 2009).

This led to graduates of the village polytechnics possessing inadequate technical and entrepreneurial skills required by the labour market (Moyas, 2006a). The development of Technical, Vocational, and Entrepreneur Training (TVET) is fundamental in Kenyan's effort to lower levels of poverty and create opportunities for out of school youth (Vision 2030). Further, it places great emphasis on science, technology, and innovation in

general and TVET in particular as a means of social economic and technological transformation. Since 1963, Kenya has undergone extensive upgrading of its educational systems. Many youth polytechnics have been created to serve post primary school people in need of employment skills but despite the massive investment in youth polytechnic programs, It was been reported that employees have a problem with the youth polytechnic graduates ( Ndua 1988, Kinyanjui 2007, Wanyonyi 2009 , Kelemba 2010, UNDP 2012).

The YP graduates have to be re-trained to bring them at par with the prevailing job requirements and dynamics. The training the youth polytechnic trainees get does not expose them to the present realities in the job market (Kelemba, 2012: UNDP, 2012). It has also been reported that the graduates of youth polytechnics have difficulties in using modern equipments. They also display lack of adequate skills due to limited practical exposure. They also have weakness in work attitude, communication, customer care and social skills and therefore unable to effectively deliver the required services.

The success or failure of a venture depends on performance of the individual involved in the venture. Muchinsky (2003) says that job performance is the set of workers behavior, which is measured, assessed, and monitored at individual level. In technical education systems, the skills training of youth polytechnic trainees will determine their effectiveness in service delivery. In order for YP graduates to maintain a high level of professional performance, they must be adequately prepared and assume personal responsibility for their own performance and growth. For youth polytechnics to perform their duties and make meaningful contributions they will need to deliver and prepare their trainees adequately without constraining factors. Muchinsky (2003) found out that trainee achievement as the most crucial in the field of technical education whiles instructors are the most crucial component of any supplier of vocational and skills training. This project therefore, investigated whether entry qualification of the trainees, teaching and learning equipment's and materials used and industrial attachment influences skills training in the youth polytechnics.



## **1.2 Statement of the Problem**

Youth polytechnics are low cost based post-primary training institutions (Yambo, 1986). They were established to help attack the problem of unemployment of primary school graduates and those who are unable to find employment, further training, or education (Wanjala 1973; Kinyanjui, 1974; King, 1977; Anderson, 1970). The major objective of youth polytechnics is to equip young school graduates of post primary age with relevant vocational skills and attitudes that would lead the young people so trained into gainful self employment and enable them to contribute more competently in the development of their communities by building up the economic strength of those communities (Waithaka, 1989; Kasina, 1987 ). They are also supposed to equip the youth with technical and entrepreneurial skills based on appropriate technology enabling them unleash their entrepreneurial capacity to exploit local resources for employment creation.

However, Ndua (1988), Simiyu (1990), Kinyanjui (2007), Wanyonyi (2009), Kelemba (2010), and UNDP (2012) found out that the graduates from the youth polytechnics have difficulties in using modern equipment, lack the necessary and required skills that employment demands for them. 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 fixed a prescribed job process that was expected of them during the evaluation period.

In addition Embu County polytechnics were selected due to availability of both urban and rural polytechnics in the county and the recommendation of Kinyanjui (2007) in a tracer and policy study of youth polytechnics graduates from Kwale, Kitui, Makueni and Taita Taveta who recommended a study on factors influencing technical training to be carried out in other areas to guide on youth polytechnics training policy. It is against this background that the project sought to investigate whether entry qualifications of youth polytechnic trainees, teaching and learning equipment and materials used by trainees and industrial attachment of youth polytechnic trainees influences equipping of youth with technical and entrepreneurship skills in youth polytechnics in Kenya.

### **1.3 Purpose of the Study**

The purpose of the research was to investigate factors influencing technical and entrepreneurship skills acquisition by youths in youth polytechnics in Kenya.

### **1.4 Research Objectives**

This study was guided by the following objectives:

- i. To determine the influence of entry qualifications on technical and entrepreneurship skills acquisition by youths in polytechnics in Embu County.
- ii. To establish the influence of teaching and learning equipments and materials on technical and entrepreneurship skills acquisition by youths in polytechnics in Embu County.
- iii. To assess the influence of industrial attachment on technical and entrepreneurship skills acquisition by youths in polytechnics in Embu County.

### **1.5 Research Questions**

The study sought to answer the following research questions:

- i. Do trainee's entry qualifications influence technical and entrepreneurship skills acquisition by youths in polytechnics in Embu County?
- ii. Does teaching and learning equipments and materials influence technical and entrepreneurship skills acquisition by youths in polytechnics in Embu County?
- iii. Does industrial attachment influence technical and entrepreneurship skills acquisition by youths in polytechnics in Embu County?

### **1.6 Significance of the Study**

The study investigated the factors influencing skills training of youth polytechnics trainees in Embu County youth polytechnics. The findings of this study may contribute additional knowledge and form an appropriate framework upon which implementation of skills training for youth polytechnics trainees' can be done in Embu country. This study is important to the policy makers in the ministry of youth affairs and sports as its

highlights the factors influencing equipping of the youth with technical and entrepreneurship skills and how they affect the service delivery.

It has identified the strategies and policies to use in order to effectively and efficiently deliver quality skills training. It may help the management of youth polytechnics to re-align their strategic plans to meet the emerging challenges and expectations brought about by the new constitutional dispensation. It may also act as a basis for further research. The study determined to what extent the three isolated factors influences equipping of youth with technical and entrepreneurship skills and the measures that can be put in place to ensure the youth polytechnics achieve their set objectives as envisaged in Kenya Vision 2030.

### **1.7 Delimitation of the Study**

This study was concerned with the factors influencing skills training of youth polytechnics trainees in Embu county youth polytechnics. It was limited to how entry qualifications, materials, and equipments used and industrial attachments by the youth polytechnic trainees influence skills training. The views were sought from the county director of youth training, youth polytechnic managers, youth polytechnic instructors and youth polytechnic trainees.

### **1.8 Limitation of the Study**

Given that the present study dealt with issues of failure on part of the managers and instructors and the trainees, it was difficult to draw out the necessary information from the respondents; however, the research maintained the techniques of anonymity and confidentiality to overcome this limitation.

The other limitation was the researcher had limited time because he was in full time employment in Nairobi but this was solved by talking the annual leave during the survey to enable the researcher complete the study in time. On the limitation, that much has not been done on factors influencing equipping of Youth with technical and entrepreneurship

skills in Embu county youth polytechnics, efforts was made to fill the gap by reviewing available literature extensively.

### **1.9 Assumption of the study**

The study assumed that equipping of youth with technical and entrepreneurship skills was delivered in a most effective, efficiency and professional manner. Effective training is influenced by several factors that we need to take into account if we have to succeed in achieving what the youth polytechnics have set out to do and the respondents involved were able to express themselves freely and without fear bearing in mind that the research is only for academic purposes only.

### **1.10 Definition of Significant Terms Used in the Study**

**Entry Qualifications:**

This refers to the grade of trainees who enroll in the youth polytechnic. They may be either primary school graduates, primary school dropouts or high school graduates or high school dropouts.

**Factors:**

These are demanding tasks and situations, which affect effective and efficient equipping of technical and entrepreneurship skills to youth in youth polytechnics.

**Industrial Attachment:**

This refers to the time when YP trainees are sending to the industries that are related to the course they are taking to earning practice experience.

**Teaching and Learning Equipment and Materials:** This refers to the equipments, space, materials, and other comforts used by

the youth polytechnic trainees in their skills training in the youth polytechnic

**Youth Polytechnic:**

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

**Youth Polytechnic trainee:**

This refers to post primary school learners in youth polytechnics have come to the youth polytechnics to acquire training.

**1.11 Organization of the Study**

This study is organized in five chapters. Chapter one deals with background on factors influencing equipping of youth with technical and entrepreneurship skills in youth polytechnics. It explores three key components that are involved in equipping of the youth with technical and entrepreneurship skills (entry qualification of the trainees, teaching and learning equipment's used by the trainees and the industrial attachment of trainees) can be used to improve service delivery in youth polytechnics

Chapter two discusses the historical perspectives 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 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 Youth Polytechnics trainees and other respondents.

Chapter four deals with data analysis while Chapter five deals with recommendations, It looks at how budgetary provision of developing and upgrading infrastructure, teaching and learning equipment's in the youth polytechnics can be done in order to enhance equipping of youth with technical and entrepreneurship in a more effective way. It also

looks at how industrial attachment of trainees can be enforced to help trainees develop practical skills, communication and competencies in their skills training. It further examines what minimum entry qualification can be set for admission into a youth polytechnic in order to reduce challenges of comprehending and absorption of what is being taught in youth Polytechnics.

## **CHAPTER TWO**

### **LITERATURE REVIEW**

#### **2.1 Introduction**

This chapter presents a review of the literature relevant to study. It establishes the knowledge gap that was used to bring out the best in technical training and thereby produce organizational capability that delivers sustainable youth polytechnic training results. The chapter discusses empirical literature review, theoretical framework and the conceptual framework of the project.

#### **2.2. Historical Perspectives of Youth Polytechnics in Kenya**

A youth polytechnic is a low cost community based post primary having 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 studies followed the graduates of youth polytechnics to discover and establish what they were doing after graduation. The studies depended on self-reports of youth polytechnics graduates ( Awoundo, 1975; Ongolo ,1983 ; Nzioka 1986, Kinyanjui 2007, Yambo 1986). Yet these studies are old and require an update. They focused mainly on employemt prospects for graduates. Ongolo focused on twelve youth polytechnic in Western Kenya on the impact of youth polytechnic programs on employment. He followed 120 graduates. Exactly how the graduates were selected and traced was not stated. Nor the interview techniques delineated. Yambo (1986) conducted a more extensive study on 26youth polytechnics and 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 economical value and predicted that new courses will eventually be introduced in Youth Polytechnics.

On studies on attitudes towards vocational skills training it was found out that trainees who join technical or vocational centers for training already have formed opinions; some of these opinions are culturally biased. They have found some cultural beliefs and practices among Kenyan communities towards technically industry related work. Some communities showed the low status accorded to craft and vocational education. Masonry, tailoring, carpentry, driving, dressmaking, and metalwork are despised. The community said these jobs were for other people not their children. In the report of the commission of inquiry into education system of Kenya of 1999, Totally Integrated Quality Education and Training, TIQET, chaired by Koech pointed out that one of the hindrance to the development of a technological culture is found in some cultural beliefs and practices among a number of Kenyan communities towards technically related work. Gitau (1998) argues that educationist should be liberated from this mentality. 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.

One important recommendation of the Koech commission was that education be designed to play a deliberate role of demystifying the negative attitude towards work and locally manufactured goods. It is possible for trainers to build positive attitude into students to ensure good performance. Positive attitude is an ingredient in achieving desirable performance in vocational training. Dutton (1988) asserts that immediately after independence students' attitude toward vocational training was very positive. He further notes that it is at this time that the youth polytechnics were very vibrant. It found a relationship between attitude and performance in mathematics that played a vital role in determining the pupils' performance in the subject.

There was no linkage between the polytechnic and the informal sector. Most youth trainees in youth polytechnics were not absorbable in the informal sector. They recommended a coherent partnership among government, employers, professional association, and industry to promote good governance for growth and prosperity of youth polytechnics and ensuring quality training that will facilitate competitive participation in community, national, regional, and global economy. 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 instructors 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.

Ministry of Youth Affairs and Sports (2012) in a needs assessment of youth polytechnics found out that adequate infrastructure and equipment is essential for quality training and conducive learning environment. The need for suitable infrastructure, appropriate and adequate teaching equipment was key to enhancing skills training of youth polytechnics.

The provision of infrastructure facilities and equipment in youth polytechnics has remained a perpetual problem. The condition of the youth polytechnic is deplorable due to lack of power, adequate and reliable water supply and poor access roads. The training equipments were obsolete, non-functional, and dilapidated. This compromises the quality of skills training and therefore performance of youth polytechnics. There no budgetary provision of developing and upgrading infrastructure and equipment from the central government and the communities are economically incapable of meeting huge budget necessary for the infrastructure.

The Ministry of Youth Affairs and Sports in conjunction with Kenya Institute of Education and Kenya National, Examination Council carried out a monitoring of the NVCET curriculum (2012) and identified several gaps; they recommended that there is a need to build the capacity of youth polytechnic instructors so that they can ably deliver the curriculum to the learners. They found out that most instructors lacked pedagogical skills. The tools and infrastructure in youth polytechnic was found to be wanting. They need to be improved and refurbished in order for the curriculum to meet the set objectives.

The NVCET curriculum aims to develop responsible, independent, creative, self-confident, and enterprising trainees. It integrates generic skills, life skills and entrepreneurship education into the mainstreams of technical and vocational training while at the same time equipping the trainees with trade skills. It is competency based and modular in approach enabling accommodation of diverse interests of the groups of youth employment and future aspiration and it is expected to improve skills training of youth polytechnic trainees.

### **2.3 Entry Qualifications and Technical and Entrepreneurial Skills Acquisition by**

#### **Youths**

Entry qualification of the trainees can enhance equipping of youth with technical and entrepreneurship skills in youth polytechnics as it determines the prior knowledge the trainees have and how they use the previous knowledge in building new learning

experiences and outcomes. In order for the youth polytechnic trainees to maintain high level of professional skills training, they must have the right qualification, and experience as they enroll into the youth polytechnics ( Yambo, 1986; Ndua,1988; Kelemba 2012 ) .

Skills training play a great role in the youth polytechnic trainee intellectual, personal and social development thereby influencing the whole nation's development. The trainee's aptitude, attitude, subject mastery, learning methodology and effectiveness in absorbing the subject matter affect his/her skills training in the youth polytechnics ( Moyas, 2012 ). Primary school dropouts, Primary school graduates, secondary school dropouts and secondary school graduates learn and absorb the skills different as their understanding capabilities are different and therefore making it impossible for the instructors to deliver quality skills training. The report cited that instructors complained that the trainees entering youth polytechnic lack basic literacy, numeracy and comprehension skills to enable them competently train effectively and therefore the project sought to investigate whether entry level and qualification had influence on equipping the youth with technical and entrepreneurship skills in Embu youth Polytechnics.

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.

United Nations Development Program (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.

On studies on materials and equipments used in polytechnics, World Bank (2001) says that in many cases the lack and inadequacy of instructional materials seriously hampers the effectiveness of non – formal training. Above all, the viability and sustainability of programs has frequently proved difficult. For example, if a trainee has to effectively acquire tailoring skills he has to be provided with a sewing machine, threads, tapes, bobbin, bobbin case and fabrics. This indicates that the vocational education and training requires adequate instructional resources in order for the delivery to be adequate. The adequacy of the resources gives the trainers easy time in explaining facts and learners' acquisition.

Learners are able to grasp better explanation if they are demonstrated using available resources. Maclure (1997) asserts that this sector of education has been ignored for a long time in most countries. According to him, it is evident that fewer financial and human resources have been devoted to vocational education and training. It is finances that enable the heads of vocational institutions to purchase learning resources that are adequate in supporting skills acquisition.

## **2.4 Teaching and Learning Materials and Entrepreneurial Skills Acquisition by**

### **Youths**

Teaching and learning equipment's and materials: for youth polytechnics to effectively deliver quality training appropriate teaching and learning equipment and materials must be supplied to the polytechnics (Moyas, 2012). Teaching and learning materials are essential ingredients in learning and the intended curriculum cannot be delivered without them.

Over the past forty years, World Bank (2001) says that the importance of adequate teaching and learning materials provision including textbooks, equipment's and other supplementary materials to support education development and quality upgrading has been recognized by governments throughout the developing world and by most development partners. There is new substantial research evidence, which shows that equipment and textbooks are one of the most important inputs that have a demonstrable impact on skills training and job performance. The development of teaching and learning materials is important in ensuring that the identified goals are realized.

The duty of the instructor is to provide appropriate environment where the trainee will construct his knowledge by interacting with his/her physical and social environment. This way teaching and learning equipment's and materials in youth polytechnic ensures that quality skills training for the youth polytechnic trainees provide the required working tools that the instructors and trainees will use to ensure they succeed in achieving their set goals hence improving Youth Polytechnic skills training in their goals of equipping the youth with entrepreneurship skills in Youth Polytechnics in Embu County.

The viability and sustainability of programs has frequently proved difficult. For example, if a trainee has to effectively acquire tailoring skills he has to be provided with a sewing machine, threads, tapes, bobbin, bobbin case and fabrics. This indicates that the vocational education and training requires adequate instructional resources in order for the delivery to be adequate. The adequacy of the resources gives the trainers easy time in explaining facts and learners' acquisition.

## **2.5 Industrial Attachment of Trainees and Entrepreneurial Skills Acquisition by Youths**

Industrial attachment of youth polytechnic trainees is essential in developing the practical and the communication skills and competencies of the trainees as well as equipping the youth with technical and entrepreneurship skills in youth polytechnics. Industrial attachment provides continuing trainees to improve their labour market relevance and exposure. In addition, it also links in-school training with on-the-job training, which will

provide the trainee with the opportunity to have an insight into the practical application of their skills, safety consciousness, and interpersonal skills in the industry. The industrial attachment targets both trainers and trainees. It assists trainees to attain the intermediate level in their fields of training and provides the opportunity to practically apply all those concepts and theoretical knowledge they gathered during their training.

Kinyanjui (2007), Moyas (2012) found out that industrial attachment provides the right ground for the trainees to acquire the right skills and experience to enable the trainees perform effectively after leaving the youth polytechnics. It also provides the employers the opportunity to give back to the society and as well as assisting the youth polytechnics, to respond to the identified areas of key skills needs. It provides trainees with the opportunity to understand the individual and group working dynamics as they prepare to go the world of work.

Trainees go for the industrial attachment to enable them earn the required experience as they take to their careers in future. Joyce and Weil (1986) identified five categories of instructional strategies that are essential in learning. They are direct instruction, indirect instruction, interactive instruction, independent study, and experimental learning and all must be used to improve equipping of youth with technical and entrepreneurship skills in youth polytechnics.

The above variables were measured through various indicators, for instance entry qualification of the trainees was measured through level of education and primary secondary student ratio and the number and the challenges faced by various categories of the trainees. Teaching and learning equipments and materials was measured by the number of materials and equipment available to the trainees and how frequently are the equipment used. The industrial attachment was measured through the number of hours for industrial attachment and places of attachment.

## **2.6 Theoretical Framework**

This study was guided by the human capital theory advanced by Shultz and Becker in 1960s (McIntyre, 2004). This theory holds that investment in education and training

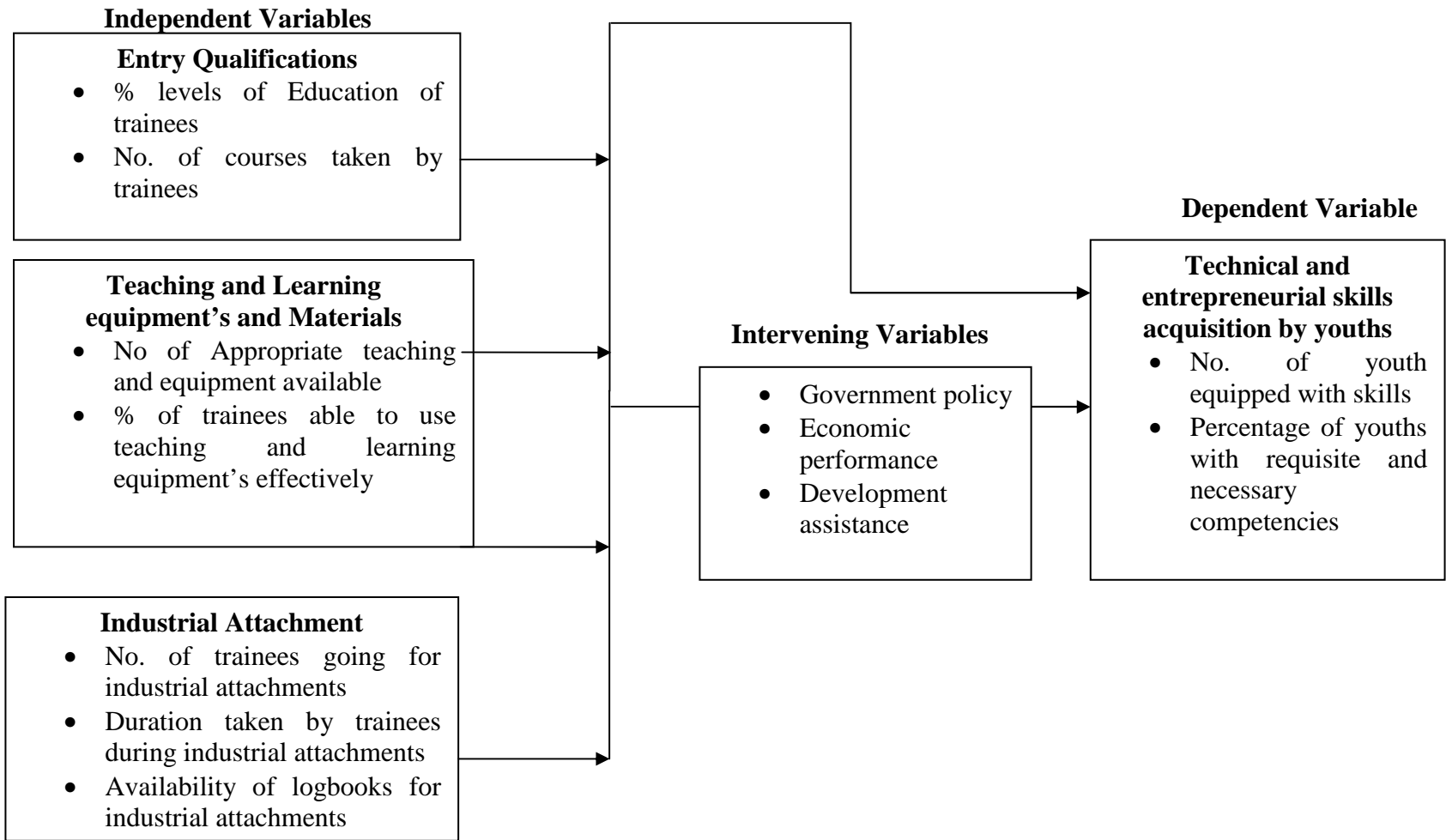
increases an individual's, organization's or country's human resource pool. Through education and training one acquires more knowledge, skills, and abilities which can potentially increase productivity at work and also in life in general. This theory is appropriate for the study since it seeks to examine the influence of equipping of the youth with technical and entrepreneurship skills in youth polytechnics as they prepare the trainees to be competent and prepare them for future life.

Examining the influence of equipping the youth with technical and entrepreneurship skills in youth polytechnics is an important undertaking that will result into addition of value to the polytechnic graduates. Human resource development entails equipping an individual with skills for present and future work activities (Stoner, 2007).

In order to ensure sustainable supply of human resources, a country needs to have in place programs that link the world of work with training institutions. Consequently, this ensures suitability of skills offered to trainees in line with market demand. Although a lot of efforts have been made to make these trainings offered by polytechnics relevant, to current employment needs, sometimes such trainings become obsolete by end of training (Kitainge, 2003). This scenario calls for constant review of training curriculum in the polytechnics to ensure the development of technical and entrepreneurship skills

## **2.7 Conceptual Framework**

The interrelationship within study variables was conceptualized as shown in figure 2.1.



**Figure 2. 1: Conceptual Framework**



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 three independent variables namely; entry qualification of the youth polytechnic trainees, teaching and learning materials and equipment's as well as industrial attachment of the trainees.

The study sought to explain the influence of equipping of youth with technical and entrepreneurship skills in youth polytechnics in Kenya. It was guided by the three identified independent variables as indicated in the conceptual framework. The entry qualification of trainees has direct influence on equipping the youth with technical and entrepreneurial skills in youth polytechnics. Entry qualification of trainees provided basic literacy, numeracy and comprehension skills that needed to equip them with the right skills.

Teaching and learning materials and equipment's used by the trainees has direct influence on equipping of youth with technical and entrepreneurship skills. Equipment's used must be appropriate and right type if polytechnics have to succeed in their endeavors. This calls for continues review of equipment's used in polytechnics. Industrial attachment of trainees has direct influence on equipping the youth with technical skills and entrepreneurial skills in youth polytechnics. Industrial attachments provide much need practical skills and safety. It helps in providing developing competencies to the trainees as they move to the world of work.

## **2.8 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>
Entry Qualifications and Technical and Entrepreneurial Skills Acquisition by Youths	Kelemba, (2012) Ndua,(1988) Moyas, (2012) Chambers , (2005) Maclure, (1997)	Found out that their existed a strong relationship between entry academic qualifications and technical and entrepreneurial skills acquisition by any segments of learners in any academic institutions. 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
Teaching and learning materials, equipments and technical and entrepreneurial skills acquisition by youths	Moyas (2012) Carr, (2005) Loveridge (2007) World Bank (2001)	These studies found out that their existed a strong relationship between teaching, learning and availability of training equipments with entrepreneurial skills acquisition by any segments of learners in any academic institutions. 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 design a clear methodology to verify this influence
Industrial attachment and Technical and Entrepreneurial Skills Acquisition by Youths	Gregory (2009) Kinyanjui (2007) Joyce (1986)	There seems to exist a strong relationship between industrial attachment and entrepreneurial skills acquisition by any segments of learners in any academic institutions.	There is a need examine and emphasize this relationship in great detail.

## **2.9 Summary of Literature Review**

This chapter highlights the review of the previous studies on youth polytechnics in Kenya and the human capital theory that the investigation used to explain the study. It further reviewed the conceptual framework with the three independent variables studied (entry qualification, teaching and learning materials used and industrial attachment and how they influenced equipping of youth with technical and entrepreneurship skills in the youth polytechnics as the dependent variable. Debate has raged on whether training adds more value to the trainees and contributes to one's competency and general development.

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 trainees.

Technical training is not a new concept in Africa. It underscores the importance of vocational training in human development yet little has been done. This could be due to lack of both intensive and extensive research from scholars to convince relevant authorities on the importance of technical training on attainment of vision 2030. Technical trainings has been accorded less importance in donor financing, however, since a country without a skilled, productive labour force cannot achieve economic and social development, and would more likely be trapped in underdevelopment for longer periods. There is need for scholars to undertake research that would enable donors overcome their dilemma in supporting technical trainings in the country. Korea system of technical training has been hailed as an excellent example. However this requires further research to find out its applicability in Kenyan environment.

## CHAPTER THREE

### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter sets out the research methodology used in completing the study. This chapter is an overall scheme, plan and structure that aided the study in answering the research questions. It contains the selected research design, target population, data collection instrument, data collection procedures and how data was analyzed.

#### 3.2. Research Design

The research design used in this study was descriptive survey design. The study aimed at investigating the factors influencing equipping of youth with technical and entrepreneurial skills in youth polytechnic in Embu County. The design was ideal because the study aimed at collecting information from respondent's opinion in relation to factors that influence effective skills training of youth polytechnic trainee's.

According to Creswell (2002) descriptive survey design is used when data collected is used 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). According to Cooper and Schundler (2003) descriptive study is concerned with the finding of where, what and how of a phenomena and therefore fitted very well with this project.

#### 3.3 Target Population

According to Cox (2010) a target population for a survey is the entire set of units for which the survey data are used to make references. Ngechu (2004) says that population is a well-defined set of people, services, elements or events or a group of things or household being investigated. Target population constitutes the entire or totality of the items under study (Kothari, 2004). The target population of this study were County director of youth training, the managers, instructors, and trainees from the 16 Youth Polytechnics in Embu County. The target population is as tabulated in table 3.1:-

**Table 3.1 Target Population**

	<b>Population</b>
County Director of Youth Training	1
Youth Polytechnic Managers	16
Youth Polytechnic Instructors	130
Youth Polytechnic Trainees	650
<b>Total</b>	<b>797</b>

### 3.4 Sample Size and Sampling Procedure

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. In this project, the researcher targeted 10% of the target population of 797 making a total sample size of 80.

According to Mugenda and Mugenda (2003) stratified random sampling involves selecting subjects in such a way that the existing sub-groups in population are more or less reproduced in the sample. The procedure that starts with stratification of the sub-groups and then followed by random sampling will be used. In this study Stratified random sampling was used except for the county director of youth training where purposive sampling will be used because she is the only one. The sub groups will be those of youth polytechnic managers, youth polytechnic instructors, and youth polytechnics trainees. The respondents were picked using random digits table.

The sample size was as tabulated in the table 3.2:-

**Table 3.2 – Sample Size**

<b>Groups</b>	<b>Sample size</b>
County Director of Youth Training	1
Youth Polytechnic Managers	2
Youth Polytechnic Instructors	13
Youth Polytechnic Trainees	65
<b>Total</b>	<b>80</b>

### **3.5 Research Instruments**

The questionnaire for the county director of youth training and the managers and instructors of the selected polytechnic was used to get policy issue in youth polytechnic skills training and a self-administered questionnaire was used to collect the required data from the trainees. The Questionnaire comprised of two sections. The first part was designed to determine the demographic characteristics of the respondents, while the second part focused on the three independent variables that was studied (Entry Qualification of the YP trainees, Teaching and Learning Equipment's and Industrial Attachments of YP trainees).

The questionnaire was designed in line with the objective of the study. To enhance quality of data obtained, Likert type of questions was included whereby respondents indicated the extent to which the variables are practiced in a five part Likert scale (Gamer, 2010). Structured and un-structured questions were also be 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

#### **3.5.1 Pilot Testing of Research Instruments**

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. One for county director, 5 for YP trainees and 5 for managers and instructors. The pilot data was not be included in the study. The recommendations of the supervisor enhanced the validity of the instruments.

#### **3.5.2 Validity of the Research Instruments**

McMillan and Schumacher (2001) recommend that researchers conduct a pilot study before using them for intended studies. Validity is concerned with ideas the research

design fully addresses the research questions and objectives the research is trying to answer and address. Construct validity technique was used to test the instruments. This was a measure of the degree to which data obtained from the instruments accurately and meaningful represented the theoretical concept and in particular how the data represented the variables. Where validity is established, any references made from such data is accurate and meaningful (Mugenda and Mugenda) 2003.

### **3.5.3 Reliability of Research Instruments**

Reliability is a measure of degree to which instruments yield consistence results after repeated trials. A reliable instruments is one which yields consistency results when used more than ones to collect data from a sample randomly drawn from the population ( Mulusa, 1990). To test the reliability, the researcher used split-half technique. This determined the co-efficient of internal consistency or reliability co-efficient whose value varied between 0.00 (indicating no reliability and +1.00 indicating perfect reliability). The researcher split into two subtests one consisting of odd numbered items and the other made of all even numbered items. The scores of all odd and even numbers of the respondents in the pilot study were computed separately. The odd numbered scores for all the items were then correlated with the even numbered scores using the cronsbach's correlation co-efficient. A correlation of 0.86was accepted.

### **3.6 Data Collection Procedures**

The study used primary data. Primary data refers to that which will originally be collected for the first time for the purposes of this study. The use of primary data is supported by (Saunders et al, 2007). The type of data to be collected was informed by the objectives of the study as supported by Teddlie (2010).

After successfully defending the proposal, the researcher sought to obtain a research permit from NACOSTI. He then enlisted all respondents by obtaining their email addresses or telephone contacts. The entire data collection exercise took about 2 Months. After the data was collected, checking for errors and inconsistencies was then undertaken.

### **3.7 Data Analysis Techniques**

After collection of raw data, it was sorted, edited and organized in order to get rid of those questionnaires that were not filled properly. Qualitative data was derived from the open ended questions in the questionnaires. Since it is difficult to be completely prescriptive about qualitative data as it is extremely variable in type, qualitative data was organized into key themes as established by open ended questionnaires. Descriptive statistics was used to analyze the data. Descriptive statistics provides for meaningful distribution of scores using statistical measures of central tendencies, dispersion, and distribution (Kothari, 2008).

The program Statistical Package for Social Scientists (SPSS) was used to define the different quantitative variables. These variables were defined in all items in the questionnaire. The data collected was analyzed in the most logical and meaningful way and relevant comments made appropriately. 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 to create a better framework to the interpretation of the findings (Kothari 2008). The Data was then presented in tables and percentages and interpretation done.

### **3.8 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.



### 3.9 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 whether entry qualification of Youth Polytechnic trainees influence skills training of the Youth Polytechnic trainees in Embu County	Independent: Entry Qualification of Youth Polytechnic trainees	<ul style="list-style-type: none"> <li>• % levels of Education of trainees</li> <li>• No. of courses taken by trainees</li> </ul>	Nominal Ordinal Ratio	Frequencies Percentages	Descriptive
	Dependent: Equipping of Youth with technical and entrepreneurial skills in Youth Polytechnics	<ul style="list-style-type: none"> <li>• No. of youth equipped with skills</li> <li>• % of youth with right competencies</li> </ul>	Nominal Ordinal Ratio		
To establish whether teaching and learning equipments and materials used by the YP trainees influence skills training of Youth Polytechnic trainees in Embu County	Teaching and Learning equipment's and Materials used by YP trainees	<ul style="list-style-type: none"> <li>• No of Appropriate teaching and equipment available</li> <li>• % of trainees able to use teaching and learning equipments effectively</li> </ul>	Ordinal Ratio	Frequencies Percentages	Descriptive
	Dependent: Equipping of Youth with technical and entrepreneurial skills in Youth Polytechnics	<ul style="list-style-type: none"> <li>• No. of youth equipped with skills</li> <li>• % of youth with right competencies</li> </ul>	Ordinal Ratio		
To establish whether industrial attachment of YP trainees influence skills training of the YP trainees in Embu County Polytechnics	Industrial attachments of YP trainees	<ul style="list-style-type: none"> <li>• No. of trainees going for industrial attachments</li> <li>• Duration taken by trainees during industrial attachments</li> <li>• Availability of logbooks for industrial attachments</li> </ul>	Ordinal Ratio	Frequencies Percentages	Descriptive
	Dependent: Equipping of Youth with technical and entrepreneurial skills in Youth Polytechnics	<ul style="list-style-type: none"> <li>• No. of youth equipped with skills</li> <li>• % of youth with right competencies</li> </ul>	Ordinal Ratio	Frequencies Percentages	

## CHAPTER FOUR

### DATA ANALYSIS, INTERPRETATION AND PRESENTATION

#### 4.1 Introduction

This chapter focuses on the data analysis, interpretation and presentation of the findings. The main purpose of this research was to examine the factors influencing equipping of youth with technical and entrepreneurial skills in youth polytechnic in Embu County, Kenya. The study sought to establish whether entry qualifications of youth polytechnic trainees, teaching and learning equipments and materials used by the YP trainees and industrial attachment of youth polytechnic trainees influence equipping of youth with technical and entrepreneurial skills in Embu county youth polytechnics. The researcher made use of frequency tables, percentages, mean and standard deviation to present data.

#### 4.2 Questionnaire Response Rate

The study sampled 80 respondents from the target population of 797 in collecting data with regard to factors influencing equipping of youth with technical and entrepreneurial skills in youth polytechnic in Embu County, Kenya. The questionnaire response rate results are shown in Table 4.1.

**Table 4.1 Questionnaire Response Rate**

	<b>Frequency</b>	<b>Percentage</b>
Responded	72	90
Non response	8	10
<b>Total</b>	<b>80</b>	<b>100</b>

From the study, 72 out of 80 target respondents filled in and returned the questionnaire contributing to 90%. This response rate was good, representative and conforms to Mugenda and Mugenda (2003) 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 above is excellent. This commendable response rate can be attributed to the data collection procedure, where the researcher administered questionnaires and waited for respondents to fill in, while respondents left with questionnaires were reminded to fill in the questionnaires through frequent phone calls and

picked the questionnaires once fully filled. Any clarifications sought by the respondents were addressed without delay. The questionnaires that were not returned were due to respondents not being available to fill them on time and after persistence follow-ups, there was no positive feedback from them. The response rate here demonstrated the willingness of the respondents to participate in the study.

### 4.3 Demographic Characteristics of the Respondents

The section highlights on demographic characteristics of the respondents.

#### 4.3.1 Distribution of Respondents by Gender

The study targeted county director of youth training, the managers, instructors, and trainees from the 16 youth polytechnics in Embu County.

**Table 4.2 Gender of the respondents**

	Frequency	Percentage
Male	49	68.1
Female	23	31.9
<b>Total</b>	<b>72</b>	<b>100.0</b>

From the findings illustrated in table above, the majority of the respondents (68.1%) were males while 31.9% were females. This illustrates that there is gender disparity as majority of the respondents were males.

#### 4.3.2 Distribution of Respondents by Age

The study investigated the age brackets within which that the youth polytechnic trainee's respondents were. Table 4.3 shows the summary of the findings.

**Table 4.3 Distribution of Respondents by Age**

	Frequency	Percentage
Under 15 years	7	9.7
15-19 years	19	26.4
20 -24 years	13	18.1
25-29 years	22	30.6
Over 30 years	11	15.3
<b>Total</b>	<b>72</b>	<b>100.0</b>

From the study (30.6%) of the youth polytechnic trainees were aged 25-29 years, (26.4%) aged between 15-19 years, (18.1%) aged 20-29 years and (15.3%) aged over 30 years while (9.7%) were aged below 15 years.

#### 4.3.3 Distribution of Respondents by Reasons for Enrolling in Youth Polytechnics

The study sought to establish the reasons why the respondents enrolled in the Youth Polytechnic. The findings are as stipulated in table 4.4.

**Table 4.4 Distribution of Respondents by Reasons for Enrolling in Youth Polytechnics**

	Frequency	Percent
Acquiring of skills	53	73.6
Interested or liked courses offered in the YPs	44	61.1
Forced by circumstances	49	68.1
Lack of school fees for secondary education	51	70.8
Failure to score good grades in KCPE	53	73.6
To be self employed	39	54.2
Polytechnic education is affordable	46	63.9

From the study findings, majority of the respondents (73.6%) indicated acquiring of skills and failure to score good grades in KCPE as the reasons why they enrolled in the youth polytechnic, 70.8% cited lack of school fees for secondary education and 68.1% indicated that they were forced by circumstances to enroll in the youth polytechnic. On the other hand, 63.9% indicated that polytechnic education was affordable and 61.1% cited that they were interested or liked courses offered in the YPs while 54.2% indicated that they enrolled in the youth polytechnic due to failure to be self-employed.

#### 4.3.4 Distribution of Respondents by Courses Taken in Polytechnics

The study sought to establish the course undertaken in the Polytechnics. The findings are as stipulated in table 4.5.

**Table 4.5 Distribution of Respondents by Courses Taken in Polytechnics**

	<b>Frequency</b>	<b>Percent</b>
Masonry	5	6.9
Dress making	8	11.1
Carpentry and joinery	23	31.9
Motor vehicle mechanic	14	19.4
Electrical	11	15.3
Metal work	11	15.3
<b>Total</b>	<b>72</b>	<b>100.0</b>

From the study findings, most of the respondents (31.9%) were undertaking a course in carpentry and joinery, 19.4% were undertaking motor vehicle mechanic and 15.3% were undertaking electrical and metal work respectively while 11.1% and 6.9% undertook dress making and masonry courses respectively.

#### **4.3.5 Distribution of Respondents by Level of Education for Key Informants**

The research sought to establish level of education for key informants. The findings are as stipulated in the table below.

**Table 4.6 Distribution of Respondents by Level of Education for Key Informants**

	<b>Frequency</b>	<b>Percentage</b>
Bachelors degree	3	4
KCPE	47	65
KCSE	14	19
EACE	8	11
<b>Total</b>	<b>72</b>	<b>100.0</b>

From the findings of the study, majority (65%) of the key informants had KCPE certificate, 19% had KCSE certificate and 11% had East African Certificate of Education while 4% had Bachelor's degree. This illustrates that majority of the key informants had KCPE as their highest academic qualifications.

#### **4.4 Entry Qualifications and Equipping of Youth with Technical and Entrepreneurial**

##### **Skills**

The section highlights the influence of entry qualifications on the equipping of youth with technical and entrepreneurial skills in the youth polytechnics.

##### **4.4.1 Distribution of Respondents by Level of Education before Enrolling in Polytechnics**

The research sought to establish respondents' highest level of Education before enrolling in the polytechnic. The findings are as stipulated in the table 4.7.

**Table 4.7 Distribution of Respondents by Level of Education before Enrolling in Polytechnics**

	<b>Frequency</b>	<b>Percentage</b>
Primary Dropout	18	25.0
KCPE	39	54.2
Secondary Dropout	9	12.5
KCSE	6	8.3
<b>Total</b>	<b>72</b>	<b>100.0</b>

From the findings of the study, majority (54.2%) of the youth polytechnic trainee's had Kenya certificate of primary education before enrolling in the polytechnic, 25% were primary school dropouts and 12.5% were secondary school dropouts while 8.3% had Kenya certificate of secondary education before enrolling in the polytechnic. This illustrates that majority of the youth polytechnic trainee's had Kenya certificate of primary education as their highest academic qualifications before enrolling in the polytechnic.

##### **4.4.2 Role of Level of Education in Boosting Equipping of Youth with Technical and Entrepreneurial skills**

The study also sought to establish whether entry qualifications before enrolling in the polytechnic played any role in boosting equipping of youth with technical and entrepreneurial skills in youth polytechnics. The findings are presented in the table 4.8.

**Table 4.8 Role of Level of Education in Boosting Equipping of Youth with Technical and Entrepreneurial Skills**

	<b>Frequency</b>	<b>Percentage</b>
Yes	49	68.1
No	23	31.9
<b>Total</b>	<b>72</b>	<b>100.0</b>

Majority, (68.1%) of the respondents were of the opinion that entry qualifications before enrolling in the polytechnic played a role in boosting equipping of youth with technical and entrepreneurial skills in youth polytechnics while 31.9% were of a contrary opinion. When further asked how entry qualifications before enrolling in the polytechnic played a role in boosting equipping of the skills to the trainees, 68.1% indicated that entry qualifications before enrolling in the polytechnic provided intellectual, personal and social development skills necessary for training and it provided basic literacy, numeracy and comprehension skills for effective training while 31.9% indicated that entry qualifications before enrolling in the polytechnic provided subject mastery and learning methods to enable effective training.

#### **4.4.3 Entry Qualifications and Difficulties in Equipping of Youth with Technical and Entrepreneurial skills**

The study also sought to establish whether entry qualifications before enrolling in the polytechnic made trainees have difficulties/challenges in equipping of youth with technical and entrepreneurial skills. The findings are presented in the table below.

**Table 4.9 Entry Qualifications and Difficulties in Equipping Youth with Technical and Entrepreneurial Skills**

	<b>Frequency</b>	<b>Percentage</b>
Yes	14	20
No	58	80
<b>Total</b>	<b>72</b>	<b>100</b>

Majority (80%) of the respondents indicated that entry qualifications before enrolling in the polytechnic did not make them have difficulties/challenges in training while only 20% pointed that entry qualifications before enrolling in the polytechnic made them have

difficulties/challenges in training. This implies that entry qualifications before enrolling in the polytechnic did not make trainees have difficulties/challenges in training. On further investigation, the study established that problems in subject mastery of what was being taught, difficulties in understanding concepts which were being taught and comprehending what was being taught were the difficulties/challenges encountered by majority of the trainees in training.

#### **4.4.4 Effects of the Challenges Encountered by Trainees on Equipping of Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

The study also sought to establish whether the difficulties/challenges encountered by trainees affected their training in the polytechnics. The findings are presented in the table 4.10.

**Table 4.10 Effects of the Challenges by Trainees on Equipping Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

	<b>Frequency</b>	<b>Percentage</b>
Yes	42	41
No	30	59
<b>Total</b>	<b>72</b>	<b>100</b>

Majority (59%) of the respondents indicated that the difficulties/challenges encountered by trainees affected their skills training in the Polytechnics affected skills training while the rest (41%) were not affected by the difficulties/challenges encountered by trainees.

#### **4.4.5 Statements on Entry Qualifications of the Polytechnics Trainees**

The study requested respondent to indicate their level of agreement with the statements relating to entry qualifications of the Polytechnics trainees. 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 4.11.



**Table 4.11 Statements on Entry Qualifications of the Polytechnics Trainees**

	Mean	STDev
Entry qualification of the Youth Polytechnic trainees influences skills training in Youth Polytechnics to large extent	4.65	0.482
Trainees with higher qualifications find it easy in skills training and adapt quickly to the skills training.	4.44	0.524
Trainees with lower qualification take longer time in Youth Polytechnics to train	4.53	0.621
Trainees with higher Qualifications comprehend and analyze problems and situation in faster way than those with lower qualification.	3.97	0.905

From the study findings in Table 4.11, majority of the respondents strongly agreed that entry qualification of the Youth Polytechnic trainees influences training in youth polytechnics to large extent; trainees with lower qualification take longer time in youth polytechnics to train and trainees with higher qualifications find it easy in training and adapt quickly to the training while trainees with higher Qualifications comprehend and analyzed problems and situation in faster way than those with lower qualification as indicated by the mean scores of 4.65, 4.53, 4.44 and 3.97 respectively.

#### **4.4.6 Discussion on whether Entry Qualifications of Youth Polytechnic Trainees Influence Equipping of Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

On whether entry qualifications of youth polytechnic trainees influence equipping of youth with technical and entrepreneurial skills in Embu County youth polytechnics, the study established that that majority of the youth polytechnic trainee’s had Kenya certificate of primary education as their highest academic qualifications before enrolling in the polytechnic and that entry qualifications before enrolling in the polytechnic played a role in boosting effective training. Further, that entry qualifications before enrolling in the polytechnic provided intellectual, personal and social development skills necessary for training and it provided basic literacy, numeracy and comprehension skills for effective training. This is similar to Yambo (1986) who conducted a more extensive study on 26 youth polytechnics and found that graduates who had been trained in carpentry and masonry were somewhat more rural oriented than those trained in

welding and plumbing. Yambo contended that many courses had economic value and predicted that new courses will eventually be introduced in youth polytechnics. This finding also concurs 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 entry qualification affected vocational education training. The study also found out that the main aim of vocational education 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.

#### **4.5 Influence of Teaching and Learning Equipment and Materials on Equipping of Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

The influence of teaching and learning equipments on equipping the youth with technical and entrepreneurial skills in youth polytechnics in Embu County is as discussed.

##### **4.5.1 Appropriate Teaching and Learning Equipment and Materials to Support Training**

The study also sought to establish whether there were enough and appropriate Teaching and learning equipment and materials to support training in youth polytechnics. The findings are presented in the table below.

**Table 4.12 Appropriate Teaching and Learning equipment and materials to equipping of youth with technical and entrepreneurial skills in youth polytechnics**

	<b>Frequency</b>	<b>Percentage</b>
Yes	45	63
No	27	37
<b>Total</b>	<b>72</b>	<b>100</b>

Majority (63%) of the respondents indicated that there were enough and appropriate Teaching and learning equipment and materials to support training in Youth Polytechnics while the rest (37%) were of a contrary opinion.

##### **4.5.2 Extent to which Teaching and Learning Equipment and Materials assist in Equipping of Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

The study sought to find out the extent to which teaching and learning equipment and materials assist in training. The findings are indicated in the table 4.13.

**Table 4.13 Extent to which Teaching and Learning Equipment and Materials assist in Equipping Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

	Frequency	Percentage
Very Large Extent	18	25
Large Extent	39	54
Some Extent	9	13
Very Little Extent	6	8
<b>Total</b>	<b>72</b>	<b>100</b>

Majority (54%) of the respondents agreed that teaching and learning equipment and materials assist trainees in acquiring skills training to a large extent, 25% to a very large extent while 13% and 8% agreed that teaching and learning equipment and materials assist trainees in acquiring skills training to some extent and to a little extent respectively. This implies that teaching and learning equipment and materials assist trainees in acquiring skills training to a large extent.

#### **4.5.3 Availability of Teaching Materials and Learning Equipment's and Materials and Equipping of Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

The study sought to find out whether the availability of teaching materials and learning equipment's and materials affect equipping of youth with technical and entrepreneurial skills in youth polytechnics. The findings are indicated in the table below.

**Table 4.14 Availability of Teaching Materials and Learning Equipment's and Materials and Equipping of Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

	Frequency	Percentage
Yes	62	86.1
No	10	13.9
<b>Total</b>	<b>72</b>	<b>100</b>

Majority (86.1%) of the respondents indicated that availability of teaching materials and learning equipment's and materials affected their skills training at the polytechnic while the rest (13.9%) were of a contrary opinion.

**4.5.4 Statements on entry qualifications of the Polytechnics trainees on equipping of youth with technical and entrepreneurial skills in youth polytechnics**

The study requested respondent to indicate their level of agreement with the statements relating to teaching and learning equipment and materials used by the YP trainees in the youth polytechnic. 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 4.15.

**Table 4.15 Statements on Entry Qualifications of the Polytechnics Trainees on Equipping of Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

	Mean	STDev
Teaching and learning equipment and materials used by the YP trainees assist them in acquisitions of Knowledge	3.56	1.002
Availability of Standard study rooms and workshops provide conducive environment for skills training	4.13	1.49
Availability of appropriate teaching and learning materials and equipments enhances training of Youth Polytechnic Trainees	4.11	0.583
Availability of modern teaching and learning materials and equipments in Youth Polytechnic exposures the trainees to gain the required skills and exposure to the tools of trade when they go to the world of work	3.50	1.238

From the study findings in Table 4.15, majority of the respondents strongly agreed that availability of standard study rooms and workshops provide conducive environment for skills training; availability of appropriate teaching and learning materials and equipment’s enhances training of youth polytechnic trainees; teaching and learning equipment and materials used by the YP trainees assist them in acquisitions of knowledge and that availability of modern teaching and learning materials and equipment’s in youth polytechnic exposures the trainees to gain the required skills and exposure to the tools of trade when they go to the world of work as shown by the mean scores of 4.13, 4.11, 3.56 and 3.50 respectively.

#### **4.5.5 Discussion on Teaching Materials used by the YP Trainees influence equipping of Youth with Technical and Entrepreneurial skills in Youth Polytechnics**

In regard to the objective seeking to find out whether teaching and learning equipments and materials used by the YP trainees influence equipping of youth with technical and entrepreneurial skills in Embu county youth polytechnics, the study established that there were enough and appropriate Teaching and learning equipment and materials to support skills training in youth polytechnics and that teaching and learning equipment and materials assist trainees in acquiring skills training to a large extent. Further, availability of teaching materials and learning equipment's and materials affected skills training at the polytechnic.

This agrees with World Bank (2001) that says that in many cases the lack and inadequacy of instructional materials seriously hampers the effectiveness of non – formal training. Above all, the viability and sustainability of programs has frequently proved difficult. For example, if a trainee has to effectively acquire tailoring skills he has to be provided with a sewing machine, threads, tapes, bobbin, bobbin case and fabrics. This indicates that the vocational education and training requires adequate instructional resources in order for the delivery to be adequate. The adequacy of the resources gives the trainers easy time in explaining facts and learners' acquisition. Maclure (1997) asserts that this sector of education has been ignored for a long time in most countries. According to him, it is evident that fewer financial and human resources have been devoted to vocational education and training. It is finances that enable the heads of vocational institutions to purchase learning resources that are adequate in supporting skills acquisition and must be supported at all cost.

#### **4.6 Industrial Attachments of Youth Polytechnic Trainees on Equipping of Youth with Technical and Entrepreneurial Skills in Youth Polytechnics**

##### **4.6.1 Aspects of trainings**

The study asked the respondents to indicate the aspects of training that they liked most. The findings are indicated in the table 4.16.

**Table 4.16 Aspects of trainings on Industrial attachment**

	Frequency	Percentage
Practical's	22	31
Theory	11	15
Industrial attachment	39	54
<b>Total</b>	<b>72</b>	<b>100.0</b>

From the study findings, majority (54%) of the respondents indicated Industrial attachment as the aspects of training that they liked most, 31% indicated practical's while 15% indicated theory. This implies industrial attachment were the aspects of training that youth polytechnics trainees liked most.

#### 4.6.2 Industrial Attachments

The study further sought to find out whether the trainees who went for industrial attachment. The findings are indicated in the table 4.17.

**Table 4.17 Industrial Attachments**

	Frequency	Percentage
Yes	60	84
No	12	16
<b>Total</b>	<b>72</b>	<b>100</b>

From the findings, majority (84%) of the trainees had gone for industrial attachment while 16% had not gone for industrial attachment. This implies that majority of the trainees in the youth polytechnics had gone for industrial attachment.

#### 4.6.3 Duration for industrial attachment

The study further sought to find out the duration that the trainees went for industrial attachment. The findings are indicated in the table 4.18.

**Table 4.18 Duration for industrial attachment**

	Frequency	Percentage
Less than 3 months	5	7
3-4 Months	18	25
Over 4 months	49	68
<b>Total</b>	<b>72</b>	<b>100.0</b>

From the study findings, majority of the respondents (68%) had been on attachment for a period of over four months, 25% for 3-4 months while 7% had been on attachment for less than 3 months.

#### **4.6.4 Industrial Attachment and equipping of youth with technical and entrepreneurial skills**

The study also sought to find out whether the industrial attachment enhanced trainees Skills Training. The findings are indicated in the table 4.19.

**Table 4.19 Industrial Attachment and Skills Training Enhancement**

	<b>Frequency</b>	<b>Percentage</b>
Yes	50	69
No	22	31
<b>Total</b>	<b>72</b>	<b>100</b>

From the findings, majority (69%) of the trainees indicated that industrial attachment enhanced their Skills while 31% felt that the industrial attachment did not enhanced their skills. On further investigation, the study established that industrial attachment provided practical application of skills, safety, consciousness and interpersonal skills; industrial attachment made trainees understand individual and group dynamics to the world of work; it provided the opportunity to apply theoretical knowledge gathered during training and it also provided the opportunity to develop practical and communication skills and competencies.

#### **4.6.5 Statements on industrial attachment of Youth Polytechnic trainees on equipping of youth with technical and entrepreneurial skills in youth polytechnics**

The study requested respondent to indicate their level of agreement with the statements relating to industrial attachment of Youth Polytechnic trainees and equipping of youth with technical and entrepreneurial skills in youth polytechnics. 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 4.20.

**Table 4.20 Statements on industrial attachment of Youth Polytechnic trainees and skills training**

	<b>Mean</b>	<b>STDe v</b>
Develops the practical and communication skills/competencies of trainees	4.11	0.851
Enhances training of Youth Polytechnic Trainees	3.23	1.193
Develops the manual skills of trainees associated with scientific and technological operations.	3.21	1.133
Develops the trainees' personality and understanding of individuals and groups in work situations	2.92	1.315
Provides to the trainee background information and experience in career choice when they get out.	3.26	1.055
Makes trainees appreciate the importance of human relationships and work attitudes.	4.45	0.862
Makes trainees understand the constraints of working life and functional relationships within and between organizations.	3.89	1.01
Makes trainees apply theoretical concepts and school based skills to practice	4.26	0.723
Industrial attachments orient trainees towards work processes.	3.40	1.498
Makes trainees develop work attitudes like curiousness, self-confidence, maturity, and self-reliance.	3.19	1.48
Obtain knowledge of potential careers and develop new areas of interest.	3.63	1.321

From the study findings in Table 4.20, majority of the respondents strongly agreed that industrial attachment makes trainees appreciate the importance of human relationships and work attitudes; it makes trainees apply theoretical concepts and school based skills to practice and it makes trainees develops the practical and communication skills/competencies of trainees as shown by the mean scores of 4.45, 4.26 and 4.11 respectively. On the other hand, most of the trainees indicated that industrial attachment made them understand the constraints of working life and functional relationships within and between organizations; obtain knowledge of potential careers and develop new areas of interest; industrial attachments orients trainees towards work processes; provides the trainee to background information and experience in career choice when



they get out; enhances training of Youth Polytechnic Trainees develops the manual skills of trainees associated with scientific and technological operations and industrial attachment makes trainees develop work attitudes like curiousness, self-confidence, maturity, and self-reliance as indicated by the mean scores of 3.89, 3.63, 3.40, 3.26, 3.23, 3.21 and 3.19 respectively.

From this findings, it is clear that industrial attachment makes trainees appreciate the importance of human relationships and work attitudes; it makes trainees apply theoretical concepts and school based skills to practice and it makes trainees develops the practical and communication skills/competencies of trainees.

#### **4.6.6 Discussion on whether Industrial Attachment of Youth Polytechnic Trainees Influence Equipping of Youth with Entrepreneurial Skills in Youth Polytechnics**

On whether industrial attachment of youth polytechnic trainees influence equipping of youth with technical and entrepreneurial skills in Embu county youth polytechnics, the study found out that industrial attachment were the aspects of training that youth polytechnics trainees liked most and that majority of the trainees in the youth polytechnics had gone for industrial attachment while majority had been on attachment for a period of over four months. The study also established that that industrial attachment enhanced their skills and that it provided practical application of skills, safety, consciousness and interpersonal skills; industrial attachment made trainees understand individual and group dynamics to the world of work; it provided the opportunity to apply theoretical knowledge gathered during training and it also provided the opportunity to develop practical and communication skills and competencies.

This agrees with 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. 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 especially on industrial attachment.

## **CHAPTER FIVE**

### **SUMMARY OF FINDINGS, CONCLUSIONS AND RECOMMENDATIONS**

#### **5.1 Introduction**

This chapter provides a summary of the findings, conclusions and recommendations of the study based on the objectives of the study. The chapter finally presents the suggestions for further studies and research.

#### **5.2 Summary of the Findings**

The studies found out that majority of the respondents were males aged between 15-19 years by the time they were joining the youth polytechnic. Majority of them enrolled in the youth polytechnic to acquire skills and failure to score good grades in KCPE and that they trained in carpentry and joinery respectively.

On whether entry qualifications of youth polytechnic trainees influence equipping of youth with technical and entrepreneurial skills in youth polytechnics, the study established that that majority of the youth polytechnic trainee's had Kenya certificate of primary education as their highest academic qualifications before enrolling in the polytechnic and that entry qualifications before enrolling in the polytechnic played a role in boosting effective skills training. Further, that entry qualifications before enrolling in the polytechnic provided intellectual, personal and social development skills necessary for training and it provided basic literacy, numeracy and comprehension skills for effective training.

The study also established that entry qualifications before enrolling in the polytechnic did not make trainees have difficulties/challenges in training and that problems in subject mastery of what was being taught, difficulties in understanding concepts which were being taught and comprehending what was being taught were the difficulties/challenges encountered by majority of the trainees in skills training.

In regard to the objective seeking to find out whether teaching and learning equipment's and materials used by the YP trainees influence equipping of youth with technical and entrepreneurial skills in Embu County youth polytechnics, the study established that there were enough and appropriate teaching and learning equipment and materials to support skills training

in youth polytechnics and that teaching and learning equipment and materials assist trainees in acquiring skills training to a large extent. Further, availability of teaching materials and learning equipment's and materials affected skills training at the polytechnic. The study also established that availability of standard study rooms and workshops provide conducive environment for skills training; availability of appropriate teaching and learning materials and equipment's enhances training of Youth Polytechnic Trainees; Teaching and learning equipment and materials used by the YP trainees assist them in acquisitions of knowledge and that availability of modern teaching and learning materials and equipment's in youth polytechnic exposures the trainees to gain the required skills and exposure to the tools of trade when they go to the world of work.

On whether industrial attachment of youth polytechnic trainees influence equipping of youth with technical and entrepreneurial skills in youth polytechnics in Embu county youth polytechnics, the study found out that industrial attachment were the aspects of training that youth polytechnics trainees liked most and that majority of the trainees in the youth polytechnics had gone for industrial attachment while majority had been on attachment for a period of over four months. The study also established that that industrial attachment enhanced their skills and that it provided practical application of skills, safety, consciousness and interpersonal skills; industrial attachment made trainees understand individual and group dynamics to the world of work; it provided the opportunity to apply theoretical knowledge gathered during training and it also provided the opportunity to develop practical and communication skills and competencies. Further, the study established that industrial attachment makes trainees appreciate the importance of human relationships and work attitudes; it makes trainees apply theoretical concepts and school based skills to practice and it makes trainees develops the practical and communication skills/competencies of trainees.

### **5.3 Conclusions**

The promotion of technical and vocational education and training for industrialization, economic development, wealth creation and poverty eradication demands policies and strategies that address the cross-cutting issues of quality and relevance of training, employability, collaboration between training institutions and employers, assessment, certification, internal and external quality assurance of training programmes.. This calls for a system that is competency-based and

employment led, with proficiency testing of trainees as proof of competence. Greater emphasis on industrial attachment of the trainees in youth polytechnics be done since it assists trainees develop practical skills and competencies. Youth polytechnic should also be seen and acknowledged by all stakeholders as a valid passport to a well-paid job or self-employment or higher education and not as an alternative educational opportunity fit only for early school leavers and the less academically endowed or the poor.

Technical and vocational education and training alone by itself does not lead to rapid industrialization, or provision of jobs or eradication of poverty. Both national and county governments therefore, need to create an economic environment that promotes the growth of enterprises and generally stimulates the economy. When businesses develop and expand, additional labour-market demands for technical and vocational training emerge, and new job and further training opportunities are created to trace and light the path of industrialization. For this to happen on a sustainable basis, YP training system must be labour-market relevant, equitable, efficient, and of high quality.

The study also conclude that entry qualifications before enrolling in the polytechnic did not make trainees have difficulties/challenges in skills training and that problems is subject mastery of what was being taught, difficulties in understanding concepts which were being taught and comprehending what was being taught were the difficulties/challenges encountered by majority of the trainees. A minimum entry qualification of at least KCPE for admission into the youth polytechnics be set up and put in place and enforced as this will minimize the challenges enumerated above. The study also concludes that availability of standard study rooms and workshops provide conducive environment for skills training; availability of appropriate teaching and learning materials and equipment's enhances training of youth polytechnic trainees; teaching and learning equipment and materials used by the YP trainees assist them in acquisitions of knowledge and that availability of modern teaching and learning materials and equipment's in youth polytechnic exposures the trainees to gain the required skills and exposure to the tools of trade when they go to the world of work. A budget provision of developing and upgrading infrastructure, teaching and learning materials be set up by both national and county governments to enhance skills training in the polytechnics.

#### **5.4 Recommendations**

The study recommends that minimum entry qualification of at least a KCPE for admission into the youth polytechnics be set up and put in place and enforced. This will reduce the challenges that the trainees have in terms of subject mastery, understanding the concepts and comprehending what is being taught in the Polytechnics.

The study recommended that greater emphasis on industrial attachment of youth polytechnic trainees be stressed and enforced in the youth polytechnic training since it assists developing practical, communication and competencies in trainees as they move to the world of work. The polytechnic training should strive to restoring confidence and enhanced motivation by development of positive attitude towards youth polytechnic training.

The study further recommends that there should be a budgetary provision of developing and upgrading infrastructure and equipment from both central and county governments and the communities to upgrade the current infrastructure in the youth polytechnics. The equipment's in youth polytechnic are inadequate and old and therefore the management should purchase new and modern equipment to replace the old ones.

The study further recommended that there is a need to build the capacity of youth polytechnic instructors so that they can ably deliver the curriculum to the learners since most instructors lacked pedagogical skills. The government must realize in principle that quality control and the monitoring and evaluation of the YP training system is a key component of vocation education development. It must therefore establish a comprehensive quality control policy with YP training indicators, standards and tools for monitoring and evaluating education delivery systems and processes. This should also include evaluation of instructors, physical facilities and YP management to ensure continued sustainability.

#### **5.5 Suggestions for Further Studies**

The study has explored on the factors influencing equipping of youth with technical and entrepreneurial skills in Embu County youth polytechnics, Kenya. It is recommended that other studies be done with an aim to finding out factors influencing equipping of youth with technical and entrepreneurial skills in youth polytechnics in other counties in order to come-up with more reliable information that truly depicts the bigger picture as it is on the ground.

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## APPENDIX I

### LETTER OF TRANSMITTAL OF DATA COLLECTION INSTRUMENTS

Njeru N. Zaverio  
University of Nairobi  
P.O. Box 30197,  
Nairobi

#### RE: DATA COLLECTION INSTRUMENTS

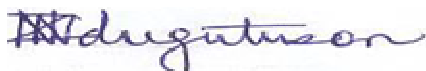
This is to inform you that I am undertaking a research study leading to the award of Master of Art Project in Planning and Management of the University of Nairobi.

The study focuses on “**Factors influencing Equipping the Youth with Technical and entrepreneurial skills in Youth Polytechnics in Kenya; A Case of Embu County polytechnics**”. When the study is successfully completed the findings will enable the Ministry of Youth Affairs and Sports to come up with the best practice that will ensure that skills training of Youth Polytechnic trainees in Embu County is enhanced. This will go a long way in ensuring that the training given in the Youth Polytechnic prepares the trainees for the World of work.

Attached herewith, Please find a questionnaire that requires you to provide the information by answering questions honestly and objectively. You are not required to record your name anywhere and the information you give will be treated with confidentiality.

Thank you.

Yours faithfully,



---

Zaverio N. Njeru

**APPENDIX II**

**QUESTIONNAIRE FOR YOUTH POLYTECHNIC TRAINEES**

This questionnaire is to collect data for purely academic purposes. The study seeks to investigate the factors equipping of youth with technical and entrepreneurial skills in youth polytechnics in Embu County Polytechnics. All information will be treated with confidentiality. *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. Indicate your age bracket

a) Under 15 years

b) 15-19 years

c) 20 -24 years

d) 25-29 years

e) Over 30 years

3. Highest Academic Qualifications

Primary Dropout

KCPE

Secondary Dropout

KCSE

Others (Specify)

4. Why are you taking this training ( Course )

i).....

ii).....

5. What do you expect to do after successful completing this training?

i).....

ii).....

6. (a) What things do you like about the training in general?

i).....

ii).....

(b) Reasons.....

7. (a)What things don't you like about the training in general?.....

(b) Reasons.....

**SECTION B: ON WETHER ENTRY QUALIFICATIONS OF YOUTH POLYTECHNIC TRAINEES INFLUENCE EQUIPING OF YOUTH WITH TECHNICAL AND ENTREPRENEURIAL SKILLS IN YOUTH POLYTECHNICS**

1. Level of education (Qualification) before enrolling in Youth Polytechnic

- 1. Primary school Drop-out
- 2. KCPE Graduate
- 3. Secondary school Drop-out
- 4. KCSE Graduate
- 5. Others ( Specify)

2. What course are you taking at the polytechnic?.....

3. (i) Does your Entry qualification make you have challenges in skills training?

Yes

No

(ii) List the main challenges you are facing during the training.....

4. (i) Does the above challenges affect equipping of youth with technical and entrepreneurial skills in the Youth Polytechnics ?

Yes

No

(ii) Explain how it affects you briefly.....

5. In what ways do you think these challenges can be solved?.....

6. State your level of agreement to the following statements as regards the Entry Qualification of Youth Polytechnic trainees (Please indicate on a five point Likert scale indicating to what extent you agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5- strongly agree. )

Statement	SA	A	N	D	SD
Entry qualification of the Youth Polytechnic trainees influences skills training in Youth Polytechnics to large extent					
Trainees with higher qualifications find it easy in skills training and adapt quickly to the skills training.					
Trainees with lower qualification take longer time in Youth Polytechnics to train					
Trainees with higher Qualifications comprehend and analyses problems and situation in faster way than those with lower qualification.					

**SECTION C: ON WETHER TEACHING AND LEARNING EQUIPMENT AND MATERIALS USED BY YP TRAINEES INFLUENCE EQUIPING OF YOUTH WITH TECHNICAL AND ENTREPRENEURIAL SKILLS IN YOUTH POLYTECHNICS.**

1. Are there enough and appropriate Teaching and learning equipment and materials to support equipping of youth with technical and entrepreneurial skills in Youth Polytechnics?

Yes

No

2. Explain to what extent they assist in equipping of youth with technical and entrepreneurial skills in youth polytechnics

Very large extent

Large extent,

Some extent,

Very little extent

No extent)

3. (i) Does availability of teaching materials and learning equipments and materials affect equipping of youth with technical and entrepreneurial skills in youth polytechnics?

Yes

No

(ii) Explain .....

3. State your level of agreement to the following statements as regards teaching and learning equipment and materials used by the YP trainees in the Youth Polytechnic (Please indicate on a five point Likert scale indicating to what extent you agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree. )

Statement	SA	A	N	D	SD
Teaching and learning equipment and materials used by the YP trainees assist them in acquisitions of Knowledge					
Availability of Standard study rooms and workshops provide conducive environment for skills training					
Availability of appropriate teaching and learning materials and equipments enhances training of Youth Polytechnic Trainees					
Availability of modern teaching and learning materials and equipments in Youth Polytechnic exposures the trainees to gain the required skills and exposure to the tools of trade when they go to the world of work					

**SECTION C: ON WHETHER INDUSTRIAL ATTACHMENTS OF YOUTH POLYTECHNIC TRAINEES INFLUENCE EQUIPING OF YOUTH WITH TECHNICAL AND ENTREPRENEURIAL SKILLS IN YOUTH POLYTECHNICS**

1. What aspects of the training did you like most?

- 1. Practical's
- 2. Theory
- 3. Industrial attachment

2. Where did you go for your industrial attachment.....

3. How many months did you go for industrial attachment.....

4. Did industrial attachment enhance equipping of youth with technical and entrepreneurial skills in youth polytechnics?

Yes

No

Explain .....

5. State your level of agreement to the following statements on whether Industrial attachment of Youth Polytechnic trainees influences equipping of youth with technical and entrepreneurial skills in Youth Polytechnic (Please indicate on a five point Likert scale indicating to what extent you agree to the statements, where: 1- strongly disagree, 2- disagree, 3- neutral, 4- agree and 5-strongly agree)

Statement	SA	A	N	D	SD
Develops the practical and communication skills/competencies of trainees					
Enhances training of Youth Polytechnic Trainees					
Develops the manual skills of trainees associated with scientific and technological operations.					
Develops the trainees' personality and understanding of individuals and groups in work situations					
Provides to the trainee background information and experience in career choice when they get out.					
Makes trainees appreciate the importance of human relationships and work attitudes.					
Makes trainees understand the constraints of working life and functional relationships within and between organizations.					
Makes trainees apply theoretical concepts and school based skills to practice					
Industrial attachments orient trainees towards work processes.					
Makes trainees develop work attitudes like curiousness, self-confidence, maturity, and self-reliance.					
Obtain knowledge of potential careers and develop new areas of interest.					

**APPENDIX III**

**QUESTIONNAIRE FOR COUNTY DIRECTOR, MANAGERS AND INSTRUCTORS**

This questionnaire is to collect data for purely academic purposes. The study seeks to investigate the factors influencing equipping of youth with technical and entrepreneurial skills in youth polytechnics in Embu County Polytechnics. 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. What is your designation?

- County Director of Youth Training
- Youth Polytechnic Manager
- Youth Polytechnic Instructor

2. Gender.....Male  Female

3. Highest Academic Qualifications

- KCPE
- KCSE
- Diploma
- Bachelors Degree
- Masters

4. What is the government policy on polytechnic education in the County?

.....

5. Who are the implementers of youth polytechnics education policy in the county?

.....  
.....

6. What challenges do youth polytechnics education policy implementers face?



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

7. How can the challenges faced above be solved ?

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

8. Do you think the YP managements in the County are serious in implementing equipping of Youth with technical and entrepreneurial skills in youth polytechnics in Embu County?

Yes

No

(ii) Explain?

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

9. What other factors have you observed for smooth running and implementationon equipping of youth with technical and entrepreneurial skills in youth polytechnics in Embu County?

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