

**DETERMINANTS OF ENROLMENT IN TECHNICAL AND
VOCATIONAL TRAINING IN YOUTH POLYTECHNICS IN NYERI
COUNTY, KENYA**

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Degree of Master of Education in Economics of Education**

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DECLARATION

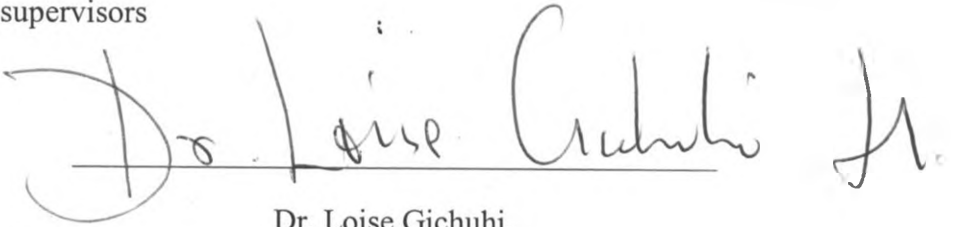
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This project report has been submitted for examination with our approval as university supervisors



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DEDICATION

This project is dedicated to my husband, Charles Nderitu and son, Edwin Chiuri and my daughters, Sylvia Waguthi and Marion Wanjiru.

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ABBREVIATIONS AND ACRONYMS

EFA	Education For All
FPE	Free Primary Education
HOD	Heads of Department
ITs	Institutes of Technology
KCPE	Kenya Certificate of Primary Education
KTTC	Kenya Technical Training College
MoEST	Ministry of Education Science and Technology
MOYAs	Ministry of Youth Affairs and Sports
NCST	National Council of Science and Technology
NIVTCs	National Industrial Vocational Training Centres
NPs	National Polytechnics
PDE	Provincial Director of Education
PYTO	Provincial Youth Training Officer
RATVET	Rapid Appraisal for Technical and Vocational Education and Training
TTIs	Technical Training Institutes

TVT Technical and Vocational Training

UNESCO United Nations Education Sciences and Cultural Organizations

YPs Youth Polytechnics

ABSTRACT

Enrolment in any academic institution is crucial as far as that institution's existence and survival are concerned. This study sought to investigate the determinants of enrolment in technical and vocational training in youth polytechnics in Nyeri County. Three objectives guided the study; to establish the college related factors that influence enrolment in YPs, to determine the government policies that enhance enrolment in YPs and to establish the extent to which home- based factors influence enrolment in YPs. The theoretical framework of this study was derived from the human capital theory. The study adopted descriptive survey research design. Data collection involved administering questionnaires to students and HODs and an interview schedule to provincial youth training officer. The target population comprised of 192 finalist's students, 85 HODs and the provincial youth training officer. A sample of 17 YPs was randomly selected. A sample of 192 students from the sampled YPs was selected using stratified random sampling. The research instruments were validated using content validity. The test re-test technique was used to measure the reliability of research instruments. The collected data were analyzed using descriptive statistics and presented in percentages and frequency distribution tables. The statistical package for social sciences computer package was used to analyze the data.

The key findings of the study show that inadequate and outdated physical facilities, irrelevant courses, low academic qualifications of trainers, inadequate trainers and parents' negative attitudes towards YPs influence enrolment of students in YPs in Nyeri County. The recommendations of the study were that; there is need for the government to provide adequate and modern equipment and tools, the courses offered in youth polytechnics should suit the labour market demands, attainment of pedagogical skills by trainers to enable them offer quality training to make YPs attractive, use of affirmative action to encourage female students to enrol in male dominated courses and the government need to sensitize the parents to change their negative attitudes towards the YPs. The study suggested that a similar study be carried out in other counties in the country for comparison purpose.

CHAPTER ONE

INTRODUCTION

1.1 Background to the Study

In a rapidly changing and competitive global economy, skill development is important in enhancing productivity and bringing about economic development. Improving productivity requires not only investment in physical capital but also investment in education and training. Education contributes to sustainable development, and is recognised in Kenya as a priority area of development intervention as reflected in policy documents: Poverty Reduction Strategy Plan (PRSP) of 2002, Economic Recovery Strategy Programme (ERS) of 2003, and the Vision 2030 of 2008; they all emphasize the importance of education in development. Education provides the skills that will be required to steer Kenyans to the economic and social goals of Vision 2030 (Republic of Kenya, 2007a).

Technical and Vocational Training (TVT) provide practical skills, knowledge, attitude, and values for employment (Atchoarena and Delluc, 2001). The role of TVT in furnishing skills required to improve productivity, raise income levels and improve access to employment opportunities has been widely recognised (Bennell, 1999). However, there are strong opponents as well. In a seminal article by Phillip Foster (1965) in *Vocational School Fallacy*, it clearly argued that vocationalisation cannot be a remedy for educated unemployment: it cannot

prepare students for specific occupations and reduce mismatch between education and the labour market; academic streams promise higher wages than vocational streams; accordingly demand for vocational education might not exist.

Formal TVT provides needed skills for the economy that cannot be offered elsewhere more efficiently. Moreover, on-the-job training does not supply all the skilled labour needed for a country's economic growth and enhancing the achievement of policy priorities on economic recovery for wealth and employment creation. Beyond a certain level of sophistication, trade skills demand a theoretical foundation in order to be properly applied. The abstract knowledge that provides a solid basis for training in sophisticated labour skills is best imparted in the classroom, hence the need to embrace TVT that provides skills and technology (Republic of Kenya, 2005).

TVT has been used by several developed countries as an instrument of development. Countries such as Japan, Sweden and Italy have given more recognition to TVT through adequate funding. Students get exposed to vocational training and to a culture of scientific investigation and application at an early age. In Europe, at least 50 per cent of the students in upper secondary education pursue some form of technical or vocational education. In China, India and South East

Asia, the figure is 35-40 per cent, whereas in Africa, it is less than 20 per cent (Nyerere, 2009).

While enrolment in TVT is quite high in North Africa (averaging 22.95 per cent of total secondary enrolment between 2001 and 2005), the sector generally occupies a smaller, if not marginal, position in school systems in Sub-Saharan Africa (5.2 per cent between 2001 and 2005 with a falling trend). The low proportion of students enrolled in TVT programmes signals stagnation and overall poor training capacity (UNESCO, 2006).

Gender stereotyping is noted in TVT programmes in developing countries. Females and males are channelled or channel themselves into different career learning paths. Females usually enrol in the 'traditional female occupations' training programmes such as secretarial duties, hairdressing, dressmaking, food and nutrition while male enrol in mechanics, carpentry, and engineering (Rubagiza, 2010). Women continue to choose careers that offer low pay, very limited benefits and few opportunities for upward mobility (Kiluva-Ndunda, 2001). The Kenya government has recognised that gender plays a key role in education attainment hence the need to articulate a gender policy in education to promote gender equity and equality (Republic of Kenya, 2007b).

The World Bank review of skills development reveals that the existing public TVT system in Kenya suffers from the decline of quality; lack of relevance to occupational and social realities; under-enrolment; and under-funding. In the Sessional Paper No. 2 of 1996, Kenya articulates its intention to industrialize by the year 2020. Unfortunately, the TVT system that is expected to play a critical role in this endeavor by providing necessary skills that will catalyze the industrialization processes is in a sorry state.

The greatest potential to empower rural communities lies in equipping individuals with entrepreneurship skills so that they can create local business, jobs and wealth. Individuals' who complete a TVT programme are generally more likely to be adequately equipped for self-employment in the rural community than many graduates from academic programmes. In regard to this; failure to increase enrolment in TVT perpetually compromise the required human capital accumulation and jeopardize Kenya's economic recovery. The provision of appropriate TVT programmes increase productivity and significantly improve the country's fortunes (MoEST, 2007).

Although Education Commissions after independence encouraged TVT, they ignored the critical role played by YPs. They encouraged technical schools and technical training institutes. This locked out a big number of pupils who never proceeded to secondary school. The Mackey Report (1981) recommended the 8-

4-4 education system that was geared towards acquisition of appropriate skills to enhance self-employment. The 8-4-4 education system in Kenya was introduced to increase vocationalisation of the curriculum. It was hoped that graduates would have some scientific and practical knowledge for self-employment, salaried employment or further training (Republic of Kenya, 1984, P.1). However, an assessment of the impact of the 8-4-4 system on vocational education in secondary school was not encouraging. Kibera (1993) observed that the system had not positively influenced students towards self-employment, technical and farm-related occupation and that their desire for white collar jobs was unabated. Sifuna (1992) agreed with this assessment. A possible explanation was offered: “.....most teachers handling pre-vocational subjects in the schools were generalists and were therefore ill-equipped intellectually to pass on technical knowledge and skills to the pupils” (P. 143).

Mackey (1981) noted the need for middle-level managers, technicians, craftsmen as well as skilled artisans who are required to turn the national economy and usher in the desired technological advancement elevating Kenya from a ‘consumer’ nation to a ‘producer’ nation. He recommended for the abolition of technical secondary schools and converting them to technical training colleges to produce a mass of middle level skilled women and men, for such have assisted in the

industrial process in the fast growing economies of East Asia and in industrialized countries like Germany and Canada.

TVT institutions in Kenya comprise the informal sector (Jua Kali), National Industrial Vocational Training Centres (NIVTCs), Youth Polytechnics (YPs), Technical Training Institutions (TTIs), Institutes of Technology (ITs) and National Polytechnics (NPs). NIVTCs are government owned and are charged with training and in-servicing personnel working in government and industries in technical fields. TTIs and ITs mainly train graduates of secondary school in craft and diploma courses. YPs (formerly Village Polytechnics) are responsible for training in artisan courses, popularly known as Government Trade Tests, for primary school leavers (MoEST, 2007). Initially, YPs were under the Ministry of Culture and Social Services, and then to the Ministry of Technical Training, before moving to the Ministry of Labour and Human Resource Development. Currently YPs fall under the MOYAS, in the Department of Youth Training (MOYAS, 2006).

TVT programmes in Kenya target to absorb the large proportions of students who cannot progress to the higher levels of education. The enrolment in TVT institutions in general has been on the increase as depicted in Appendix 1. The overall enrolment in TVT institutions increased by 25 per cent from 71,167 in

2006 to 89,023 in 2009. However, the enrolment decreased by 6.9 per cent from 89,023 in 2009 to 82,843 in 2010. The YPs have the highest enrolment among TVT institutions (Republic of Kenya, 2010). Nyeri County has the highest number of YPs in Central Province, yet the student enrolment is low compared to Kiambu County which has 23 YPs with 2,006 students.

Table 1.1 Youth Polytechnics counties enrolments in Central Province, 2011

County	No. of YPs	Males	Females	Total
Nyeri	34	1261	650	1911
Murang'a	29	974	526	1500
Kirinyaga	10	467	167	634
Kiambu	23	1265	741	2006
Nyandarua	12	902	362	1264

Statistical data on YPs in Central province

In Table 1.1, it is clear that Nyeri County has the highest number of YPs followed by Murang'a and Kiambu Counties. Nyandarua and Kirinyaga Counties had the least number of YPs. Although Nyeri County has the highest number of YPs, student enrolment is low compared to Kiambu County.

1.2 Statement of the Problem

Upon completing primary school, the graduates who miss form one places in secondary schools can further their education in YPs. Youth Polytechnics are

designed to provide practical training to assist in formation of trained artisans for the rural economy. The development of YPs is fundamental in Kenya's efforts to create opportunities for out-of-school youth.

The implementation of FPE program in 2003 in Kenya has resulted to a significant increase in enrolment in primary education. Every year, more than 500,000 candidates sit for KCPE and over 250,000 graduates miss form one places and the number is on increase (MoEST, 2009). In Nyeri County, only 67 per cent pupils proceed to secondary school while 33 per cent are the target group to join YPs (PDE's office, Nyeri). The growing number of primary school leavers who do not have access to secondary education is a cause of alarm to the government, parents and the youths because they do not have the necessary skills to take jobs. This study, therefore, seeks to investigate the factors that influence enrolments in YPs in Nyeri County. The findings of the study may be used to reach out the many primary school graduates in the rural areas.

1.3 The Purpose of the Study

The purpose of the study was to investigate the determinants of enrolment in technical and vocational training in Youth polytechnics in Nyeri County.

1.4 Objectives of the Research

- i. To establish the college related factors that influence enrolment in YPs in Nyeri County.
- ii. To determine the government policies that enhances enrolment in YPs in Nyeri County.
- iii. To establish the extent to which home- based factors influence enrolment in YPs in Nyeri County.

1.5 Research Questions

- i. What are the college related factors that influence enrolment in YPs in Nyeri County?
- ii. What are the government policies that enhance enrolment in YPs in Nyeri County?
- iii. To what extent do home-based factors influence enrolment in YPs in Nyeri County?

1.6 Significance of the Study

The Ministry in charge of YPs, MOYAS, may find the study useful in the formulation of future plans aimed at strengthening YPs training in imparting relevant skills to students in readiness for employment. Curriculum developers may use the findings of the study on redesigning the existing curriculum to suit the dynamic work of today's technology. Parents too may use the information to

identify the factors that are out of their own contribution which influence enrolment in YPs. Also, the findings may give researchers an insight and starting point for further research.

1.7 Limitations of the Study

There are various factors that influence enrolment in YPs. The factors considered in this study were; college related factors (courses offered, physical facilities, training instructors), government policies (affirmative action), and home based factors (parent's income, education and attitude). The study was limited to these factors. The researcher was not able to control or manipulate the attitudes and perceptions of the respondents. The researcher used different sampling units.

1.8 Delimitation of the Study

The study was restricted to youth polytechnics which are registered in Nyeri County. Non-registered YPs were excluded from the study. The study used students, Heads of Departments and Provincial Youth Training Officer as the only respondents yet other stakeholders were very important in the enrolment process.

1.9 Assumptions of the Study

- i. Both male and female have equal enrolment opportunities
- ii. The sample was to represent the population.

1.10 Definition of Significant Terms

Vocational Training: refers to the programmes that impart skills and knowledge at artisan level.

Technical Training: refers to programmes that impart skills and knowledge to enable individuals take middle level professional position in the world of work.

Enrolment: refers to number of trainees admitted to youth polytechnics.

Youth polytechnics: refers to local, low cost training institution.

Gender disparity: refers unequal representation of males and females in terms of enrolment.

Gender equity: refers to practice of fairness in the distribution of educational resources.

Gender equality: refers to equal treatment of boys and girls in accessing educational opportunities.

1.11 Organization of the Study

The study was organized in five chapters. Chapter one covered background to the study, statement of the problem, purpose of the study, objectives of the study, research questions, significance of the study, limitations and delimitations of the study, assumptions of the study and definitions of significant terms. Chapter two dealt with literature review. It focused on the determinants of enrolment in TVT institutions, summary of literature review, theoretical framework and conceptual framework. Chapter three dealt with the research methodology. This included the

research design, target population, sampling and sampling procedure, research instruments, validity and reliability of research instruments, data collection procedure and data analysis techniques. Chapter four focused on data analysis, interpretation and discussion of the findings. Finally, chapter five provided the summary of the findings, conclusions, recommendations and suggestions for further research.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

This chapter discusses the determinant of enrolment in TVT institutions; basically, college related factors (physical facilities, courses offered, training instructors), government policies on affirmative action and home based factors (parent's attitude, parent's income, parent's education level). The theme of this chapter is based on the research objectives.

2.2 College related factors

2.2.1 Physical facilities provision in TVT institutions

Adequate and modern facilities are essential features in a sound and vibrant TVT system. The availability of adequate and modern training facilities to cope with rapid technological changes has been a daunting task even for the richest nations. However, there is a need to recognise that training is an investment and not a cost (MoEST, 2003). The potentiality of TVT in Africa is hindered by the quality of training offered in the TVT institutions and the quality of trainees graduating from these institutes. Rao (1996) argues that the poor quality of training may be attributed to decline in teaching standards due to poor and outdated facilities and equipment and this may be attributed to the low investment by the government towards the TVT sector.

Owano (1988) assessed the contribution of the YPs programmes to youth employment in Kenya. The study found out that the programme catered for a tiny fraction of the unemployed primary school leavers. The study also revealed that enrolment in most YPs was far below capacity despite the apparent high demand for the training. The researcher suggested that provision of better equipped workshops, adequate supply of training materials and greater emphasis on practical skills would improve the programme and lead to an increase of the numbers enrolled for training. However, the scholar did not point out other factors that influence enrolment in YPs. This study endeavors to investigate other factors that influence enrolment in YPs other than physical facilities.

According to National Development Plan 2002-2008 (Republic of Kenya, 2002), there is more theoretical teaching in TVT institutions at the expense of practical skills. This is due to inadequate and modern tools, equipment and materials for practical training. A lot of equipment and facilities are broken down or poorly maintained due to neglect, lack of adequate funds for maintenance.

There exists a wide diversity in terms of enrolment and physical facilities among TVT institutions. Enrolment in business-oriented courses and applied sciences far exceed technical disciplines, thus defacing the original objective of establishment of TVT institutions. Some TVT institutions offer courses for which they have no adequate equipment thus greatly affecting the quality of training and risking public confidence in TVT (Republic of Kenya, 2002). According to the

recommendations of the Presidential Working Party on education and manpower training for the next decade and beyond (Republic of Kenya, 1988), TVT should be provided with adequate scientific facilities, equipment and materials for effective training.

2.2.2 Technical and vocational training programmes and the labour market demand

Technical and vocational training and labour market are closely related and as such should have a formal link. Labour market requires individuals with skills which are acquired through training. Due to this, the labour market demands should determine the kind of skills being offered to trainees. According to Gill, Fruitman and Dar (2000), the main objectives of TVT are: to help the unemployed find jobs, to prepare the school leavers to enter job market and to upgrade skills of employed workers. In addition, they maintain that TVT is more effective when used to meet clearly observed, current labour market needs than when used to meet purposes such as helping the unemployed find jobs.

The Germany system of vocational training, commonly referred to as dual system, has frequently been referred to as an example of excellent practice of TVT (Beardwell and Holden, 2001). Employers fund two-third of the training and together with trade unions and the local government, they have a considerable influence on the control of the education system. Laws and guidelines of

vocational training regulate the system so that the employers are duty bound to provide funding and resources for training. Although it would be expensive to transfer Germany's dual system as a whole in Africa, it is important to note the influence exerted by organisations on funding for the on the job training and in regulation of skills being offered. In African countries, organisations' influence in the running of TVT is almost zero. TVT is entirely a responsibility of the government and especially the trainees.

In Asian countries, key industries led to large public and private investments in the relevant fields of education and skills training (Lall, 1999). On the contrary, skills levels are under-developed in developing countries. Industries play a limited role in influencing the education and training policy environment (MOEST, 2003). Employers have limited influence on appropriate education policies and systems to promote the acquisition of relevant knowledge and skills geared to business needs. For most developing economies, strong linkages are lacking between education and training with the labour market (Gill, Fruitman and Dar, 2000).

Koech (1999) highlights one of the objectives of TVT in Kenya as focussing on education and training for direct employment as well as self-employment at each level. He recommends that more collaboration mechanism between industry and training institutions be put in place to ensure relevance of TVT. The industry should inform the training institutions about what skills are on demand to ensure

that the products of TVT are absorbed in the industry. Koech further recommends that TVT programs be matched with the human resource needs through regular review and consultation with the industry to ensure it keeps abreast new developments.

Kenya's skills and training mechanisms have not been adaptive enough to meet the challenges of social, economic, and technological changes in the private and public sector. There is a mismatch of skills taught and skills demanded by the industry. Dynamic, flexible and market-driven curriculum structures and content necessary for high levels of employment are also weak. The mismatch between the education and training and skills demanded by the industry has been associated to the fact that education policy framework has more focus on academic disciplines compared to technical subjects (MOEST, 2003).

2.2.3 Qualifications of training instructors in TVT institutions

In planning the quality of education and training, it is clear that teachers are probably the most important components of the education process. Anderson (1991) points out that there various inputs which affect learning outcomes. However, it must be realized that any meaningful improvement in the quality of education that trainees receive is highly dependent on the quality of instructions that teachers provide.

The academic qualifications and professional training are key contributors of the quality education and training. Omulando and Shiundu (1992) noted that teachers without proper and adequate academic professional qualifications fail to do justice to the subject they teach. Moreover, adequate qualification of the trainers instils self-confidence in the trainer and serves as an inspiration to the trainee. TVT trainees should therefore be exposed to trainers who have the necessary academic qualifications and professional skills.

The delivery of quality TVT is dependent on the competence of the trainer. Training instructors in TVT institutions lack necessary industry-based technological skills updated through industrial attachment. KTTC has shifted from its original mandate as a producer of trainers and is now competing to offer programmes similar to national polytechnics. It has been observed that teachers in the TVT institutions rarely go for refresher courses (Nyerere, 2009).

The Koech commission (1999) noted that the majority of instructors in YPs are not trained in pedagogy and are also inadequately trained in technical trade areas; have no schemes of service and are paid extremely low wages and consequently very low morale. This raised a lot of concerns; therefore this study seeks to investigate the impact of training instructors on students' enrolment of in YPs.

2.3 Government Policies on enrolment in TVT institutions

The EFA Global Monitoring Report (UNESCO, 2003), indicate that at the national level, Kenya has attained gender parity in enrolment at both the primary and secondary education levels. However, the gender gap widens as one goes higher up the education ladder. The government of Kenya recognises that gender imbalances at tertiary institutes are a matter of concern. Data on course enrolment showed that females were concentrated in business-oriented courses (accounting and secretarial studies). While male trainees registered evenly in manual skill-oriented courses (mechanical, electronics and building) the few females in such courses were concentrated (above 90%) in Food and production, and clothing and Textiles. Females are yet to penetrate the male-dominated courses (Ngware, 2002).

In 2007, the Ministry of Education launched a gender policy to enhance access and gender equity in education. However, the policy has not been widely disseminated and limited resources have been allocated for implementation. The government of Kenya recognises that gender imbalance at tertiary institutions is a matter of concern. Sessional Paper No. 1 of 2005 acknowledged that despite the rapid expansion of higher education, challenges of access and equity still exist. Sessional Paper No. 2 of 2006 supports the implementation of measures like affirmative action in the admission of girls to university, re-entry of adolescent mothers to school and enhanced bursaries for girls' education. It also promotes a review of curriculum and teaching materials to ensure gender sensitivity

(Republic of Kenya, 2006). Whereas the government has made these recommendations in policy documents, they have not been implemented or there is no documented evidence to show the progress. There is no clear indication that TVT in rural areas have benefited from the government policies formulated at the national level.

TVT pertain to YPs straddles several Ministries and Departments and that makes coordination and regulation cumbersome. The Koech Commission (1999) strongly recommended that since YPs operate without clear legal framework provisions, the government move fast to install some policies. However, the commission did not point out the government policies that affect the enrolment of students in YPs; hence the need for this study.

2.4 Home based factors

Parents influence the enrolment at all levels of education. The factors considered in this study are; parent's attitude towards TVT, parent's income and parent's education level.

2.4.1 Parent's attitude towards TVT

It is accepted that all forms of education will help people to improve themselves and to get better jobs but many parents believe that only university education will offer their children the opportunity to acquire a good job. As a result, many

(Republic of Kenya, 2006). Whereas the government has made these recommendations in policy documents, they have not been implemented or there is no documented evidence to show the progress. There is no clear indication that TVT in rural areas have benefited from the government policies formulated at the national level.

TVT pertain to YPs straddles several Ministries and Departments and that makes coordination and regulation cumbersome. The Koech Commission (1999) strongly recommended that since YPs operate without clear legal framework provisions, the government move fast to install some policies. However, the commission did not point out the government policies that affect the enrolment of students in YPs; hence the need for this study.

2.4 Home based factors

Parents influence the enrolment at all levels of education. The factors considered in this study are; parent's attitude towards TVT, parent's income and parent's education level.

2.4.1 Parent's attitude towards TVT

It is accepted that all forms of education will help people to improve themselves and to get better jobs but many parents believe that only university education will offer their children the opportunity to acquire a good job. As a result, many

countries find the number of graduates from universities far exceeds the capacity of the labour market to provide appropriate employment. At the same time, these countries are unable to attract enough people to train for those positions of greater need, which might be “blue collar” jobs that might appear to involve manual labour, be dangerous, dirty and difficult (Commonwealth of Learning, 2001).

Omulando and Shiundu (1992) assert that there has been evidence for negative attitudes towards TVT by a large section of the Kenyan community. It has been claimed that the negative attitude was bred and crystallised with the advent of colonial rule in Africa and the discriminative approach to colonial administration to the education of the African in relation to that of children of the white colonists. These actions could have influenced negatively the smooth incorporation of TVT programmes into the regular school system of education.

A study by Mureithi (2008) on the challenges facing Youth polytechnics in Rift Valley province, Kenya, found out that parents belief that only those who fail to make it to the secondary schools should be admitted to the YPs. The situation is further worsened by the low level of wages earned by vocationally trained graduates. Accordingly, many TVT students have ended up with limited opportunities for pursuing graduate or advanced technological education (Tum, 1996). Kerre (1995) concedes that generally efforts at providing effective TVT in Africa have not succeeded and TVT still receives low status.

In Africa, the roles of men and women in all spheres of life are still heavily type-cast, a situation which is even more pronounced in rural areas. This is reflected in practices of education and in the world of work. Females are marginalised as far as TVT is concerned. Female enrolment in TVT reveals a heavy traditional bias in favour of home science, secretarial duties, with very few enrolments in the traditionally male dominated technical areas in mechanics, building construction metal works. This bias could be influencing enrolment of females in TVT (King and Hill, 1993). It is worth noting that this bias may not be strong as it used to be. However, it still seems to be a factor to be considered.

2.4.2 Influence of Parent's income on enrolment

Poor economic growth in Kenya has led to persistent poverty among Kenyan households. Majority of Kenyans live below the poverty line and are therefore unable to access basic services like food, shelter, health and education (Republic of Kenya, 2002). Although the Government of Kenya has subsidized TVT education to a tune of Ksh. 15,000 for each student per year, there are direct and indirect costs met by the parents. This affects the enrolment of students in YPs, particularly in rural areas. Majority of the rural household depend on agricultural produce to obtain income to meet the costs of schooling. Student are locked out of TVT programmes if they cannot meet the direct and indirect costs of education (Mukudi, 2004).

Children of poor families are less apt to enroll in school than children of better-off families (Lockheed, 1991). Families pay for the education of these children both directly and indirectly. Parents decide to bear the cost of education if they perceive that the returns for education justify the expense.

2.4.3 Influence of Parent's educational level on enrolment

Parent's educational level influences the kind of courses that their children enrol in. Elitists tend to oppose vocational training as far as their children are concerned (Sifuna, 1992). Students from well-educated parents tend to prefer technical related courses as compared to the less educated parents.

Although most parents feel competent enough to offer career advice, those who lack formal education are not perceived as capable of offering adequate information on careers to their children. These students consequently refrained from talking to their parents about careers and turned to other sources of information such as their career teachers. A study of female engineering students in several polytechnics in Kenya found that 50% of them made the decision due to influence from their fathers (Wambua, 2007). Female students in the non-engineering programs reported influence from their mothers.

2.5 Summary of Literature Review

From the literature review, it is clear that TVT has been the backbone of economic development. The studies undertaken in this area were only interested

in the extent to which the YPs contribute to socio-economic development and youth employment. However, these studies seem not to address the determinants of enrolment in YPs hence creating a potential gap in literature, which this study intends to fill. Besides, there is need to find out the factors that influence enrolment in YPs in Nyeri County, an aspect that the literature review has not addressed.

2.6 Theoretical Framework

The Theoretical Framework of this study was derived from the human capital theory. Human capital theory was proposed by Shultz (1961). This theory rests on the assumption that formal education is highly instrumental and even necessary to improve the production capacity of population hence an educated population is a productive population. The provision of formal TVET increase productivity in employees just the same way new machines increase productivity in an enterprise hence the need for human capital development.

Education is regarded as a capital good. It is used to develop the human resources necessary for economic and social transformation. The focus on education as a capital good relates to the concept of human capital which emphasises that the development of skills is an important factor in production activities. Education creates informed citizens and helps to upgrade the general standards of living in a society. This implies that TVET will ensure a strong background and base for human capital accumulation. Failure for students to enrol in YPs will deter

productivity and industrialisation in an economy. Empirical studies (World Bank, 1993) show that there is a strong positive relationship between high tertiary enrolment rates and rapid economic growth.

Human capital theory has been criticized on several grounds. At the individual level, it has become controversial whether or to what extent education and other forms of human investments are directly related to improvement in occupation and income.

Another major problem in the application of the theory is its failure to account for a growing gap between people's increasing learning efforts and knowledge base and the diminishing number of commensurate jobs to apply their increasing knowledge investment, especially in developing nations. The increasing learning efforts have not led to commensurate economic gains due to the declining quality of education.

2.7 Conceptual Framework

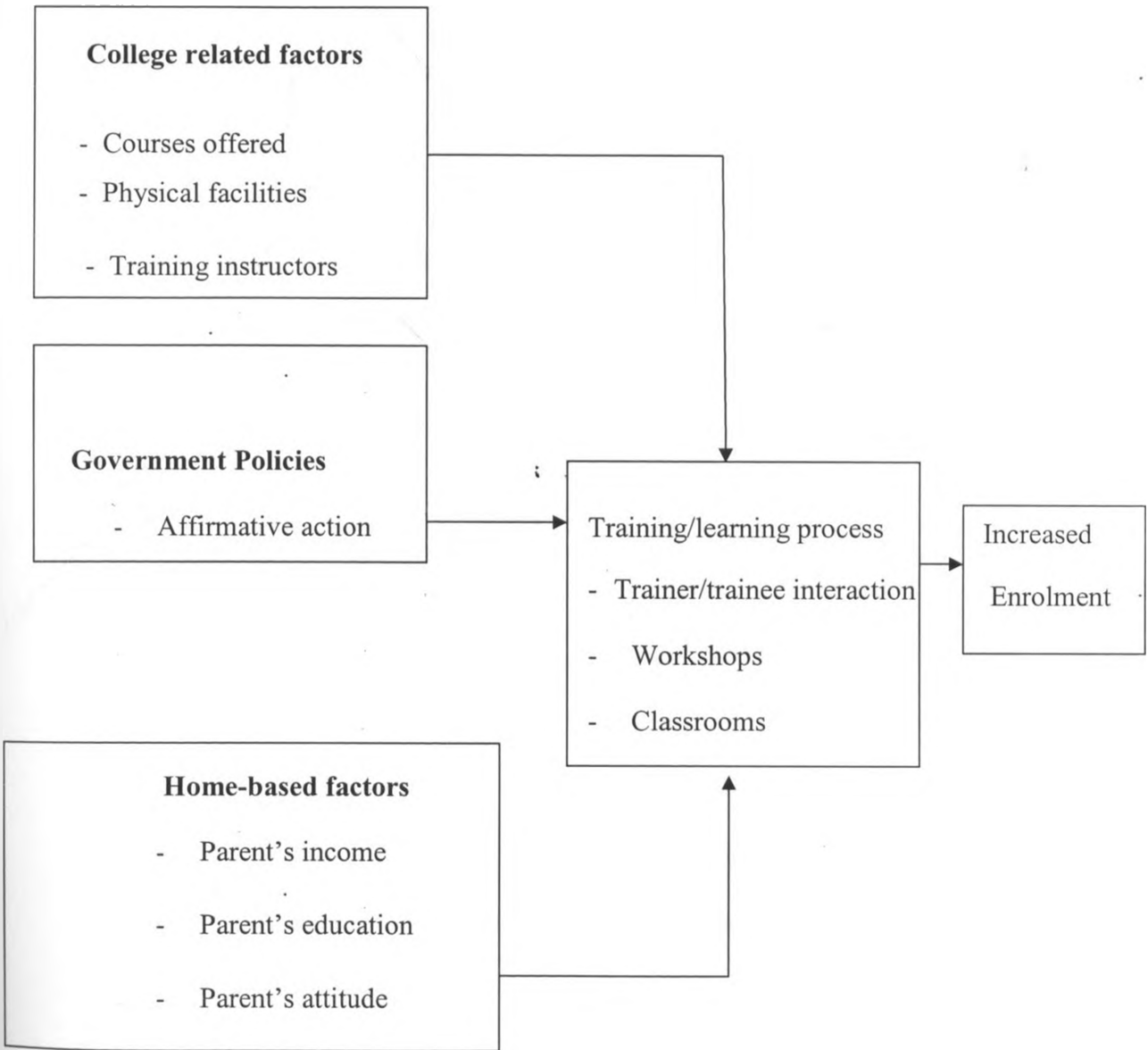
The conceptual framework highlights the factors influencing enrolment in YPs. The education production function summarizes the relationship between inputs to the output in the educational and training process. The production function theory was used to estimate the relative contribution of the various inputs to enrolment.

$E = f(C, G, H)$ Where:

E – Enrolment, f – Function, C – College related factors,

G – Government policies, H – Home based factors

Figure 2.1 Determinants of enrolment in YPs



Factors that influence enrolment in YPs are; college related factors, government policies and home based factors which are the input. The input influences the output, that is; the enrolment. The independent variable is thus the determinants and the dependent variable is enrolment.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

This chapter discusses the research methodology to be utilized in conducting the study. It outlines the research design, the target population, sampling and sampling techniques, research instruments, validity and reliability of research instruments, data collection procedure and data analysis techniques.

3.2 Research Design

Research design is the blueprint for the collection, measurement and analysis of data (Kothari, 2003). The descriptive survey design was applied in this study. The survey method was appropriate for investigating the factors influencing enrolment in youth polytechnics in Nyeri County. The research design involved asking the same set of questions in the form of a written questionnaire and an interview schedule to respondents. The intention of a survey research was to gather data at a particular point in time and use it to describe the nature of existing conditions.

3.3 Target Population

Nyeri County comprises of eight districts; Tetu, Mukurwe-ini, Kieni East, Kieni West, Nyeri Central, Nyeri South, Mathira East and Mathira West. The study targeted all the 34 YPs in county. There are 1911 students enrolled, 1261 males

and 650 females. The target population of the study were the finalist's students, HODs and Provincial Youth Training officer. Finalist students were used in the study because they were likely to make adequate responses given the fact that they would have a wealth of experiences. The Provincial Youth Training Officer was also interviewed to give in-depth information on government policies on TVT.

3.4 Sampling and Sampling Techniques

Mugenda and Mugenda (1999) note that resources and time tend to be the major constraints in deciding the sample size to use. The study used 50% of the target population as its sample. 17 out of the 34 YPs (which account for 50%, Gay 1992) were randomly selected. Random sampling was carried out by writing names of all YPs in Nyeri County on pieces of paper. They were put in a container and picked randomly. The YPs whose names appeared on these papers constitute the sample. Stratified random sampling was used to select 192 students (10% of 1911). Gay (1992) suggests that 10% of accessible population is enough for descriptive studies. This technique allows the researcher to achieve the desired representation of sub-groups in the population. Subjects are then randomly selected in such a way that existing sub-groups in the population are fairly represented in the sample. The sample selected was maintained as the ratio of males and females; 128 males and 64 females. All the 85 HODs were requested to complete the questionnaires. PYTO was selected for the study. By virtue of his

administrative position, he was considered to have a grip of government policies influencing enrolment in YPs. In total, the sample consist of 192 students, 85 HODs and the provincial youth training officer.

3.5 Research Instruments

In collecting data, two instruments were used: the questionnaires and interview schedules. Questionnaires were used because they guarantee the uniformity of data. They were appropriate instruments because all the respondents were literate and capable of answering the items written in simple English language. Questionnaires were administered to the Head of Department (HODs) and the finalist students. Both the students and HODs questionnaires had been designed to consist of structured items. Also, unstructured items were used in order to allow in-depth responses and give insight in the respondents' feelings, hidden motives, interests and decisions, which shall also give room for qualitative analysis (Mugenda and Mugenda, 1999).

The interview schedule for Provincial Youth Training Officer was designed to contain items that deal with matters relating to the adequacy of government policies on enrolment. Interview schedule allowed the researcher to obtain in-depth data which is not possible to get using a questionnaire. The researcher used unstructured questions to seek out for the relevant information. The researcher took notes during the interview.

3.5.1: Validity of the Research Instruments

The instrument to be used in data collection need to be validated to ensure they measure what they purport to measure. The research instruments were validated by the researcher's supervisors. They reviewed and analysed the contents of the questionnaires and interview schedule to ascertain that the instruments were suitable for the purpose for which they were set. The researcher used their suggestions to make the necessary corrections and improvements on the instruments.

3.5.2 Reliability of the Research Instruments

Reliability is the measure of the degree to which a research instrument yields consistent result or data after repeated trials (Mugenda and Mugenda, 1999). The test re-test technique was used which involves administering the same instruments twice. The researcher administered questionnaires to students and HODs in 2 YPs. According to Orodho (2009), the number in the pre-test should be 10 per cent of the sample. Thus, out of 17 YPs, 2 YPs were selected. After two weeks interval the same questionnaires were administered in the same way to the same groups. The two scores were then correlated to establish whether the contents of questionnaires were consistent in eliciting the same responses every time the instruments were administered. The coefficient of reliability was calculated using the Pearson product moment correlation using the formula below

$$R = \frac{N \sum xy - (\sum x)(\sum y)}{\sqrt{N \sum x^2 - (\sum x)^2} [N \sum y^2 - (\sum y)^2]}$$

Where,

$\sum x$ = sum of scores in x distribution

$\sum y$ = sum of scores in y distribution

$\sum x^2$ = sum of squared scores in x distribution

$\sum y^2$ = sum of squared scores in y distribution

$\sum xy$ = sum of the product of point x and y scores

N = the number of point x and y scores ;

3.6: Data Collection Procedure

A research permit was obtained from the National Council of Science and Technology (NCST) before embarking on data collection in the field. The researcher sought permission to administer research questions from the District Youth Training Officer. The students' and HODs' questionnaires were administered personally by the researcher. The researcher assured the respondents the confidentiality of their identity. To facilitate high rate of return, the questionnaires collected the same day. However, those that could not fill the questionnaire on the same day, arrangements for another day convenient to both the researcher and the respondent were set.

The researcher contacted the PYTO earlier on to book for the interview appointment. The interview schedule was then carried out on the appointed day. The researcher personally administered the instrument and took notes during the interview session. Enough time was given to the respondent to respond to all items.

3.7 Data Analysis Techniques

Questionnaires administered to the students and HODs were first checked to ensure completeness. Qualitative and quantitative data were collected to provide for a balanced assessment and interpretation. The answered questionnaire copies were first grouped manually according to categories of respondents. Qualitative data was derived from the interview schedule with the PYTO, and also from the open-ended items in the students' and HODs' questionnaires. To analysis qualitative data, data were coded according to themes and then keyed in the Statistical Package for Social Sciences (SPSS) computer package. This programme was used to analyse the data. The analysed data were presented through descriptive statistics using frequency distribution tables and percentages. Being a descriptive study, descriptive statistics in the form of frequencies, tables and percentages were used to analyse the quantitative data.

CHAPTER FOUR

DATA ANALYSIS, INTERPRETATION AND DISCUSSION OF THE FINDINGS

4.1 Introduction

This chapter highlights the findings of the study based on the data collected from respondents. The chapter is organized under sub-sections guided by the research questions. Section one deals with administration of the questionnaires while section two deals with demographic information. Section three presents information on analysis pertaining to college related factors that influence enrolment in youth polytechnics. Section four presents the findings pertaining to government policies that enhance enrolment in youth polytechnics, section five present the extent to which home-based factors influences enrolment of youth polytechnics.

4.2 Data Presentation

In this study the focus was to investigate the determinants of enrolment in technical and vocational training in Youth polytechnics in Nyeri County. The research questions on which the data analysis was based were; what are the college's related factors that influence enrolment in YPs? What are the government policies that enhance enrolment in YPs? To what extent do home-based factors influence enrolment in YPs?

The analyzed research findings were presented in frequencies, tables and percentages.

4.3 Questionnaires Return Rate

The questionnaires were returned as shown in the table below.

Table 4.1 Questionnaires Return Rate

	Targeted Respondents	Actual Respondents	
Sample	N	R	Percentage
Heads of department/Teachers	85	68	80
Students	192	170	88.5

N=Sample size R=Respondents

The response rate achieved for the two sets of questionnaires were as follows, Heads of department recorded a response of 80% while students' had a response rate of 88.5%. The return rate was considered adequate in providing valid and reliable presentation of the targeted population. This was attributed to the fact that the researcher administered the questionnaires personally.

4.4 Demographic Information of Respondents

In this part, general information of respondents on sex was analyzed.

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In this part, general information of respondents on sex was analyzed.

4.4.1 Distribution of Teachers by Gender

Table 4.2 Distribution of Teachers by Gender

Gender	Frequency	Percentage
Male	36	52.94
Female	32	47.06
Total	68	100

The study established that the majority of polytechnics teachers in Nyeri County are men. The difference is not significant and the researcher deduced that there as many men instructors as women.

4.4.2 Demographic Information on Students

The gender of students was sought during the study. This was important in establishing gender representation in youth polytechnics.

Table 4.3 Distribution of Students by Gender

Gender	Frequency	Percentage
Male	113	66.47
Female	57	33.53
Total	170	100

The finding suggests that there are twice as many males enrolled by youth polytechnics as female. The implication of the findings is that the youth polytechnics seem to be helping males than female in Nyeri County.

4.5 Qualifications and Adequacy of Training Instructors

4.5.1 Qualifications of Training Instructors

From the study, it was established that the heads of departments are the only teachers in the departments. The professional qualifications of teachers were an area of interest. This aspect was important because the quality of training being offered in youth polytechnics requires qualified trainers.

Table 4.4 Qualifications of Teachers/Heads of Departments

Qualifications	Frequency	Percentage
Diploma	25	36.76
Certificate	30	44.12
Grades	13	19.12
Total	68	100

The study indicated that the majority of polytechnics teachers or instructors in Nyeri County were certificate holders. These findings implied that the majority of instructors were of low academic qualifications and therefore may have challenges with their duties in terms of professional work ability and

performance. This finding concurs with Koech commission report (1999) who noted that the majority of instructors in YPs are not trained in pedagogy and are also inadequately trained in technical trade areas.

4.5.2 Adequacy of Training of Instructors

This study sought to find out the adequacy of instructors in youth polytechnics.

This aspect was important because it determined the enrolment of students in the education cycle.

Table 4.5 Students' Responses on Adequacy of Instructors

Responses	Frequency	Percentage
Strongly Agree	11	6.47
Agree	18	10.59
Undecided	19	11.17
Disagree	25	14.71
Strongly disagree	97	57.06
Total	170	100

The study established that the majority of students strongly disagreed that there are adequate training instructors. This implies that some courses may be discontinued due to lack of instructors.

4.5.3 Information on In-Service Training for Instructors

From the study, training instructors do not attend in-service training as indicated 77.94% of respondents. This implies that training instructors in YPs lack updates of necessary industry-based technological skills through industrial attachment. This finding concurs with Nyerere's study (2009) who noted that teachers in the TVT institutions rarely go for refresher courses.

4.6 Relevance of Courses Offered

4.6.1 Information on Students' Enrolment by Courses

Table 4.6 Students Enrolment by Courses

Courses	Frequency	Percentage
Garment making	42	24.71
Motor-vehicle mechanics	42	24.71
Carpentry	23	13.53
Hairdressing	37	21.76
Masonry	20	11.76
ICT	6	3.53
Total	170	100

From table 4.6, the study has established that the most popular courses with the highest enrolments were; garment making, motor vehicle mechanics and hairdressing and beauty therapy. The study established that masonry and ICT

courses were the least in enrolment. However there is a need to create awareness among students joining the courses on the need to acquire ICT skills which seems to be unpopular in the County.

4.6.2 Relevance of Courses to the Labour Market

Table 4.7 Students' View on Relevance of Courses

Responses	Frequency	Percentage
Strongly Agree	26	15.29
Agree	18	10.59
Undecided	19	11.18
Disagree	38	22.35
Strongly disagree	69	40.59
Total	170	100

From table 4.7, the findings indicated that majority of students felt that the most of the courses offered are not relevant to the labour market. This implies that YPs may produce graduates whose skills are not in demand leading to wastage. YPs should identify skills that are really needed and useful before they mount their training. This finding is in agreement with the report on rapid appraisal of technical and vocational education and training (2003) which showed that there is a mismatch of skills taught and skills demanded in the industry.

4.6.3 Information on Industrial Attachment

Majority of students indicated that they underwent industrial attachment as indicated by 70.59% of the students. However, majority of students who underwent attachment do not seem to benefit from the skills offered as indicated by 82.35%. This implies that youth polytechnics have not been able to access relevant opportunities for industrial attachment for students. This is despite the fact that it has been acknowledged that TVT and labour market should be closely related and as such should have a formal link.

4.6.4 Information on Discontinuation of Courses

The study established that there have been cases of discontinuation of courses as indicated by 80.88% of instructors. Reasons for discontinuation of courses are shown in Table 4.8.

Table 4.8 Instructors' Responses on Reasons for Discontinuation of Courses

Responses	Frequency	Percentage
Expensive to run	18	26.47
Not marketable	4	5.88
Lack of instructors	36	52.94
No students' enrollment	10	14.71
Total	68	100

The study has established that in majority of cases the discontinuation of the courses is caused by lack of instructors, courses being expensive to run, lack of students for some of these courses and that some courses were not marketable.

4.7 Provision of Physical Facilities

4.7.1 Availability of Modern and Functional Equipment

Table 4.9 Instructors' Responses on Availability of Modern and Functional Equipment

Responses	Frequency	Percentage
Strongly Agree	4	5.88
Agree	8	11.76
Undecided	3	4.41
Disagree	15	22.07
Strongly disagree	38	55.88
Total	68	100

The majority of youth polytechnics instructors strongly disagreed that the youth polytechnics have modern and functional equipment. Modern and functional equipment are essential features in a sound and vibrant TVT system. This finding is consistent with Kenya National Development Plan 2002-2008 which reported that inadequate and outdated tools and equipment has led to more theoretical teaching at the expense of practical skills in TVT institutions.

4.7.2 Information on whether the available Workshop Space is Adequate

Table 4.10 Instructors' Responses on the Adequacy of Workshop Space

Responses	Frequency	Percentage
Strongly Agree	4	5.88
Agree	5	7.35
Undecided	2	2.94
Disagree	18	26.48
Strongly disagree	39	57.35
Total	68	100

Majority of polytechnics instructors strongly disagreed with the statement that the workshop space is adequate. This implies the quality of training in YPs is adversely affected by inadequate facilities.

4.7.3 Information on Adequacy of Physical Facilities

Table 4.11 Students' View on Adequacy of Physical Facilities

Statement	Frequency	Percentage
Inadequate	144	84.71
Adequate	26	15.29
Total	170	100

From table 4.11, the finding indicates that there are inadequate physical facilities for training in youths polytechnics as indicated by 84.71% of the respondents. The

finding concur with the national development plan (2002), reported that some TVT institutions offer courses for which they have no adequate equipment thus greatly affecting the quality of training and risking public confidence.

4.8 Government Policies on the Enrolment of Students

4.8.1 Information on Student's Enrolment Trend

Table 4.12 Instructors' Views on Student Enrolment Trend

Responses	Frequency	Percentage
Strongly Agree	3	4.41
Agree	5	7.35
Undecided	3	4.41
Disagree	19	27.95
Strongly disagree	38	55.88
Total	68	100

The study established that the student enrolment in youth polytechnics is not on an upward trend as indicated by 55.88% of the instructors. This implies that YPs cater for a tiny fraction of the unemployed primary school leavers. This finding is in agreement with Owano's study (1988) who noted that enrolment in most YPs was far below capacity despite the apparent high demand for the training.

4.8.2 Minimum entry Qualification for Male and Female Students

The study established that entry qualifications for courses in youth polytechnics are the same for males and females as indicated by all the respondents.

Table 4.13 Instructors' Responses on Student Enrolment

Responses	Frequency	Percentage
More males than female	49	72.06
More female than male	19	27.94
Total	68	100

Despite having similar entry qualifications for joining youth polytechnics there are more males than females enrolled as depicted by Table 4.13. This implies that the courses offered in youth polytechnics favours male students. This finding concurs with a report of Sessional Paper No. 1 of 2005 which acknowledged that despite the rapid expansion of higher education, challenges of access and equity still exist.

4.8.3 Information on Course Enrolment by Gender

Table 4.14 Students' Responses on Course Enrolment by Gender

Courses	Males		Females	
	Frequency	Percentage	Frequency	Percentage
Garment making	6	7.49	15	24.06
Motor-vehicle mechanics	68	38.50	4	1.60
Carpentry	11	8.02	4	1.60
Welding	66	36.36	0	0
Hairdressing	6	3.74	37	49.20
Masonry	13	4.28	4	1.60
ICT	3	1.60	7	9.63

The study established that the most popular courses for male students were motor vehicle mechanics while the most popular courses for female students at youth polytechnics were hair dressing and beauty therapy, garment making. This finding is in agreement with Ngware's study (2002) who noted that data on course enrolment showed that females were concentrated in business oriented courses and males in manual skill-based courses.

4.9 Home Based Factors

4.9.1 Information on the Highest Level of Education attained by Parents

Table 4.15 Students' View on Parents' Education Levels

Parents' education levels	Frequency	Percentage
Primary	108	63.53
Secondary	51	30.00
Tertiary	11	6.47
Total	170	100

The findings indicated that the majority of parents who have enrolled students at youth polytechnics have primary education. This implies that parental level of education has a bearing on students' enrolment in YPs. This agrees with the findings of Lockheed (1991) who noted that educational levels of parents' influence enrolment in education institutions.

4.9.2 Information on the Occupation of the Parents

Table 4.16 Students' View on Occupation of Parents/Guardian

Occupation	Frequency	Percentage
Employed	11	6.47
Unemployed	37	21.76
Farmer	104	61.18
Business	18	10.59
Total	170	100

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Total	170	100

From table 4.16, the findings show that the majority of parents and guardians who have enrolled their children for youth polytechnics are farmers. This implies that parents are able to meet the costs of training in YPs. This finding contradicts with Lockheed's study (1991) who noted that children of poor families are less apt to enroll in school than children of better-off families.

4.9.3 Information on Parent's Economic Background

The study established that the majority of parents as indicated by 70.65% have problems in paying fees for their children who are enrolled in the youth polytechnics, only 29.35% indicated that they do not have a problems in paying school fees. This finding is in agreement with Mukundi's study (2004) who noted that students cannot meet the direct and indirect costs of education and this affect enrolment of students in YPs. The finding established that majority of students 68.98%, indicated that government subsidy is inadequate. Only 31.02% indicated that the financial assistance is adequate. Although the Government of Kenya has subsidized TVT education to a tune of Ksh. 15,000 for each student per year, there are direct and indirect costs met by the parents and this may affect the enrolment of students in YPs.

4.9.4 Information on Parents' failure to enroll their Children in Youth

Polytechnics

Table 4.17 Students' Views on why Parents' fail to enroll their Children in Youth Polytechnics

Reasons	Frequency	Percentage
Lack of fees	15	8.82
Parents think that youth polytechnics are inferior	114	67.07
Parents not aware of the available courses	26	15.29
Lack of exposure on how courses can improve their children welfare	15	8.82
Total	170	100

When students were asked to state the reasons why their parents fail to enroll their children in youth polytechnics 67.07% indicated that they believe that youth polytechnics are inferior, 15.29% indicated that they are not aware of the available courses, 8.82% indicated lack of fees as well as lack of exposure on how the courses can improve the welfare of children. Youth polytechnics should be seen as a valid passport to a good job and not as a second best choice or the only educational route for the academically less endowed. This finding concurs with Mureithi's study (2008) who noted out that parents believe that only those who fail to make it to the secondary schools should be admitted to YPs. The situation is

further worsened by the low level of wages earned by vocationally trained graduates.

4.9.5 Information on who encouraged the Student to enroll in Youth Polytechnics

Table 4.18 Students' Responses on who influence their Enrolment in YPs

Persons	Frequency	Percentage
My parents	62	36.47
My friend	8	4.71
Myself	97	57.06
Other	3	1.76
Total	170	100

The study established that majority of students were encouraged to join the youth polytechnics by themselves as indicated by 57.06%, followed by parents at 36.47%, then friends by 4.71% and others by 1.76%. It is interesting to note that students were self-driven in seeking knowledge and skills in polytechnics.

4.10 Information on problems faced by Instructors in implementing TVT programmes

Table 4.19 Problems faced by instructors

Problems	Frequency	Percentage
Little pay and fringe benefits	26	38.24
Few polytechnics and personnel	11	16.18
Lack of enough tools and equipment	17	25.00
Students not taking courses seriously	14	20.58
Total	68	100

Majority of instructors indicated that the biggest challenge they face in implementing vocational/technical training programmes in youth polytechnic is low remuneration and benefits, lack of enough tools and equipment, students not taking courses seriously as well few polytechnics and personnel. These findings are in agreement with Koech report (1999) who noted that instructors in YPs have no schemes of service and are paid extremely low wages and consequently very low working morale.

4.11 Measures to Increase Enrolment in Youth Polytechnics

4.11.1 Suggestions from Instructors on what the Government can do to Increase Enrolment

Table 4.20 Government Measures

Government measures	Frequency	Percentage
Equip polytechnics with equipment and personnel	39	57.35
More youth polytechnics	17	25.00
Bursary for needy students	12	17.65
Total	68	100

Majority of teachers/instructors suggested that the government should construct more youth polytechnics indicated by 25%, 57.35% suggested that the government can equip polytechnics with equipment and personnel and finally 17.65% suggested that the government should increase bursary to needy students. This finding concurs with Rao's study (1996) who noted that the poor and outdated facilities and equipment was attributed to the low investment by the government towards the TVT sector.

4.11.2 Suggestions from instructors on what can be done to Parents to encourage upward enrolment of more students in the Youth Polytechnics.

Table 4.21 Parents' measures

Parents' measures	Frequency	Percentage
Change the negative attitude towards polytechnics	33	48.53
Regular seminars, barazas to inform parents on available courses	24	35.29
Support their children by fees and other help needed	11	16.18
Total	68	100

The study established that in order to encourage parents to take their children to the youth polytechnics that measures must be taken to change the parents' negative attitude towards youth polytechnics as indicated by 48.53% of the respondents, 35.29% indicated that regular seminars and barazas are vital to inform parents on the available courses and their benefits, while 16.18% indicated parents can be encouraged to give adequate financial support to their children.

4.11.3 Suggestions from Instructors on what can be done to Instructors to encourage upward Enrolment of more Students in the Youth Polytechnics.

Table 4.22 Instructors' Measures

Instructors' measures	Frequency	Percentage
Improve remuneration	36	52.90
Provides tools and equipment	19	27.94
More personnel	13	19.16
Total	68	100

Many instructors suggested that the best way to improve enrolment of students for youth polytechnics in Nyeri County is to improve their remuneration which will improve their motivation level as well as providing more tools and equipment and personnel.

4.11.4 Suggestions from instructors on what can be done to students to encourage upward enrolment of more Students in the Youth Polytechnics.

Table 4.23 Students' Measures

Students' measures	Frequency	Percentage
Job oriented courses	35	51.48
Enlighten students on available courses and their benefit	19	27.94
Give students tools and help them with self-employment	8	11.76
Lifting entry level to higher grades	6	8.82
Total	68	100

Many students suggested that the best way of increasing student enrolment in youth polytechnics is by making the courses more job oriented so that it may give them employment opportunities and also enlighten students on available courses and their benefits.

4.11.4 Suggestions from instructors on what can be done to students to encourage upward enrolment of more Students in the Youth Polytechnics.

Table 4.23 Students' Measures

Students' measures	Frequency	Percentage
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Many students suggested that the best way of increasing student enrolment in youth polytechnics is by making the courses more job oriented so that it may give them employment opportunities and also enlighten students on available courses and their benefits.

CHAPTER FIVE

SUMMARY, CONCLUSION AND RECOMMENDATIONS

5.1 Introduction

The chapter presents the summary of the study, study findings, conclusions drawn from the findings, recommendations and suggestion for further research.

5.2 Summary of the Study

The purpose of the study was to investigate the determinants of enrolment in technical and vocational training in Youth polytechnics in Nyeri County. Three research questions were developed to guide the collection of the required information; what are the college's related factors that influence enrolment in YPs? What are the government policies that enhance enrolment in YPs? To what extent do home-based factors influence enrolment in YPs?

The study adopted descriptive design and utilized questionnaires and interview schedule as methods of data collection. The study targeted a sample size of 192 finalists' students, 85 heads of departments and the provincial youth training officer. The sample was selected through random and stratified sampling designs. The Statistical Package for Social Sciences (SPSS) was used for data analysis. The data was presented in descriptive format using frequencies, tables and percentages.

5.3 Findings of the Study

The findings of the study are based on the research objectives.

5.3.1 College Related Factors

5.3.1.1 Physical Facilities

The study established that the majority of youth polytechnics instructors as indicated by 55.88% strongly disagreed that the youth polytechnics has modern and functional equipment. This translated into more theoretical teaching at the expense of practical skills.

The study also established that there are inadequate physical facilities for training in youths polytechnics as indicated by 84.71% of the students. Some TVT institutions offer courses for which they have no adequate equipment thus greatly affecting the quality of training and risking public confidence in YPs. The provision of better equipped workshops, adequate supply of training materials and greater emphasis on practical skills would improve the attractiveness of YPs and result to increased enrollment.

5.3.1.2 Relevance of Courses to Labour Market

The findings indicate that most of students feel that the courses offered are not relevant to the labour market as indicated by 40.59% of the respondents. It has been acknowledged that TVT and labour market should be closely related and as such should have a formal link. Labour market requires individuals with skills

which are acquired through training. Due to this, the labour market demands should determine the kind of skills being offered to trainees.

Most of students indicate that they undergo industrial attachment as indicated by 70.59% of the students. However, the skills offered during attachment as indicated by 82.35% of the students do not provide the relevant skills related to the course enrolled in. The study also established that there have been cases of discontinuation of courses. Several reasons for discontinuation of the courses were given; expensive to run, not marketable, lack of instructors and no student enrolment.

5.3.1.3 Training Instructors

The study indicated that most of youth polytechnics teachers or instructors in Nyeri County were certificate holders indicated by 44.12%, followed by diploma holders 36.76%, grades follows with 19.12%. These findings implied that the majority of instructors were of low academic qualification and therefore may have challenges with their duties in terms of professional work, ability and performance. The delivery of quality TVT is dependent on the competence of the trainer. The academic qualifications and professional training are key contributors of the quality education and training. Omulando and Shiundu (1992) noted that teachers without proper and adequate academic professional qualifications fail to do justice to the subject they teach. Moreover, adequate qualification of the trainers instils self-confidence in the trainer and serves as an inspiration to the

trainee. TVT trainees should therefore be exposed to trainers who have the necessary academic qualifications and professional skills.

The study also established that in some cases the discontinuation of the courses is caused by lack of instructors. The finding indicates that training instructors are not adequate as indicated by 57.06% and this influences enrolment in YPs.

The study also established that teachers do not attend in-service training. Hence, they lack updates of necessary industry-based technological skills. It has been observed that teachers in the TVT institutions rarely go for refresher courses (Nyerere, 2009). The Koech commission (1999) noted that the majority of instructors in youth polytechnics are not trained in pedagogy and are also inadequately trained in technical trade areas.

5.3.2 Government Policies on Students' Enrolment

The study established that entry qualification in youth polytechnics is the same for males and females as indicated by 100% of the respondents. Despite having similar entry qualification for joining youth polytechnics there are more males than females as indicated by 72.06% of the respondents. The study also established that the popular courses for male students were motor vehicle mechanics 38.50%, welding 36.36% and for female students were hair dressing and beauty therapy with 49.20%, garment making with 24.06%. Females are yet to penetrate the male-dominated courses (Ngware, 2002).

5.3.3 Home-Based Factors

The findings indicated that majority of parents who have enrolled students in youth polytechnics highest educational level of education is primary school 63.53%, followed by secondary school 30.00% and finally tertiary 6.47%. The findings show that the majority of parents and guardians who have enrolled their children for youth polytechnics are farmers indicated by 61.18%, 21.76% indicated that they are unemployed, 10.59% are in business while 6.47% are in formal employment. The findings of the study therefore report that parents' education and occupation have bearing on student enrolment in YPs.

When students were asked to state the reasons why parents fail to enroll their children in the youth polytechnics, 67.07% indicated that they believe that youth polytechnics are inferior, 15.29% indicated that they are not aware of the available courses, 8.82% indicated lack of fees as well as lack of exposure on how the courses can improve the welfare of children.

The study also established that majority of students are encouraged to join the youth polytechnics by themselves as indicated by 57.06%, followed by parents at 36.47%, then friends by 4.71% and others by 1.76%.

5.4 Conclusion of the Study

The potentiality of youth polytechnics in Nyeri County is being hindered by the inadequate and outdated physical facilities and equipment. There is more

theoretical teaching at the expense of practical skills leading to trainees lacking proficiency in their chosen fields of specialisation. The provision of better equipped workshops, adequate supply of training materials and greater emphasis on practical skills would improve the YPs attractiveness resulting to increased enrolment. The courses offered by YPs are irrelevant to the labour market. This implies that graduates from youth polytechnics may not have the relevant skills needed in the labour market. The study concluded that training instructors in youth polytechnics in Nyeri County lack necessary industry-based technological skills. This can have a very negative impact in the quality of the graduates from these institutions since the delivery of quality TVT is dependent on the competence of the trainer. From the finding, females were concentrated in business-oriented courses (hairdressing and garment making). While male trainees registered evenly in manual skill-oriented courses (Motor vehicle mechanics and welding). This implies that females are yet to penetrate the male-dominated courses. The study also came into conclusion that the parents have negative attitudes towards youth polytechnics. The parents' belief that only those who fail to make it to the secondary schools should be admitted in youth polytechnics. The study also found that majority of parents who have enrolled their children in the youth polytechnics are primary school graduates. Parent's educational levels seem to play a great role on students' enrolment in youth polytechnics. The study also found that many of the youths who enrol for the

courses do not seek advice from their parents probably because they perceive them incapable of offering them the right advice.

5.5 Recommendations

In view of the findings and conclusions, a number of recommendations are suggested:

1. In order to improve the enrolment of youth polytechnics, there is need for the government to provide adequate and modern equipment and tools.
2. The researcher recommends that the courses offered in youth polytechnics should suit the labour market demands. The government should involve organisations in the formulation of the curricula.
3. Attainment of pedagogical skills by trainers who had not been professionally trained should be made a requirement to enable them offer quality training which may improve YPs attractiveness.
4. The researcher recommends affirmative action to encourage female students to enrol in male dominated courses.
5. The government need to sensitize the parents to change their negative attitudes towards the YPs.

5.6 Suggestions for Further Research

The study was limited only to investigation on determinants of enrolment in youth polytechnics in Nyeri County. Further researcher should be conducted in the following areas.

1. Replication of this study to find out other factors that influence enrolment of students in youth polytechnics in Nyeri County.
2. A similar study in other counties in the country to find out whether it can yield similar findings to the current study.

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APPENDICES

APPENDIX 1

STUDENT ENROLMENT IN TVT INSTITUTIONS IN KENYA, 2006-2010

Year	2006		2007		2008		2009		2010	
	M	F	M	F	M	F	M	F	M	F
NP	12914	2581	13189	8095	13822	9098	4224	2774	9743	6224
TTI	9925	8721	10818	9817	12132	9876	12514	9923	12908	6224
Its	4961	4104	5407	4473	5807	4768	5920	4813	6035	4858
YPs	8741	14210	9528	15489	12154	17543	13222	18122	14384	18720
Total	71167		76516		85200		89023		82843	

Source: Economic survey, 2010/11

APPENDIX 11

INTRODUCTION LETTER

Ndiritu Jane

University of Nairobi

P. O. BOX 30097,

NAIROBI.

Dear respondents,

**RE: REQUEST FOR ASSISTANCE OF FILLING IN RESEARCH
QUESTIONS**

I am a student of the University of Nairobi undertaking a Master's Degree in Education Administration -Registration No. E55/74833/09. As part of the requirements, I am carrying out a research entitled, determinants of enrolment in technical and vocational training in youth polytechnics in Nyeri County.

I therefore kindly request you to respond to my questionnaires to enable me obtain data for my study. I will highly appreciate the contribution you will make towards the success of my study.

Thank you.

Yours faithfully,

Ndiritu Jane

APPENDIX III

QUESTIONNAIRE FOR STUDENTS

This questionnaire is part of research project attempting to examine the factors that influence enrolment in Youth Polytechnics in Nyeri County. Please answer the questions sincerely and honestly.

Instructions: Do not write your name anywhere on this paper.

1) Name of course enrolled in _____

2) What is your gender?

Male () Female ()

3) Have your parents or guardian ever attended school?

a) Father Yes () No ()

b) Mother Yes () No ()

c) Guardian Yes () No ()

4) If yes, what is the highest educational level attained?

Father a) Primary () b) Secondary () c) Tertiary ()

Mother a) Primary () b) Secondary () c) Tertiary ()

Guardian a) Primary () b) Secondary () c) Tertiary ()

N.B Tertiary level refers to any training college or university

5) Is the minimum entry qualifications different for males and females?

Yes () No ()

6) What is the occupation of your parents or guardian? (Please, tick appropriately)

- a) Employed () b) Unemployed () c) Farmer ()
d) Business ()

7) Does your parent or guardian have problems in paying school fees?

Yes () No ()

8) In your opinion, is the government subsidy (financial assistance) adequate?

Yes () No ()

9) Who encouraged you to enrol in the institution (tick appropriately)

- a) My parent ()
b) My friend ()
c) Myself ()
d) Any other (please specify) _____

10) In your opinion, how are the physical facilities in your college?

Adequate ()

Inadequate ()

11a) Have you been involved in industrial attachment? Yes () No ()

b) If yes, were the activities carried out relevant to your course?

Yes () No ()

13) Kindly give any comment you think is helpful in strengthening enrolments in youth polytechnics in Kenya.

(i) _____

(ii) _____

(iii) _____

14) Read carefully each statement and tick any of the numbers 1 2 3 4 5 that represents your opinion on how important the factors below are in influencing your decision to enrol in Youth Polytechnics. Please, tick any of the numbers that best represent your opinion about how applicable the variable is, in your rating.

The numbers on the scale are weighted as follows:

- 1) Strongly agree
- 2) Agree
- 3) Undecided
- 4) Disagree
- 5) Strongly disagree

	1	2	3	4	5
Relevant courses to labour market					
Qualified training instructors					
Adequate training instructors					
Adequate and modern physical facilities					
Parent's positive attitude towards youth polytechnics					

THANK YOU FOR YOUR CO-OPERATION

APPENDIX IV

QUESTIONNAIRE FOR HEADS OF DEPARTMENTS (HODs)

This questionnaire is part of research project attempting to examine the factors that influence enrolment in Youth Polytechnics in Nyeri County. Please answer the questions sincerely and honestly.

1) Name of the department you head _____

2a) What is your gender? Males () Females ()

b) What is your staff establishment?

Male _____ Female _____

3) In the table below, please indicate the number of teachers with the following academic qualifications in your department.

Academic qualification	Number of teachers
Master's degree	
Degree	
Diploma	
Certificate	
Any other? Specify	

4) Do teachers in your department attend in-service training? Yes ()

No ()

5a) How is the student enrolment trend in your department? _____

b) How is the enrolment of males and females? _____

6) Are the minimum entry requirement for course enrolment different for males and females?

Yes ()

No ()

7a) Has any of the courses originally offered by this college discontinued?

Yes ()

No ()

b) What reasons were there for discontinuing the course? Tick appropriately.

i) Expensive to run

ii) Not marketable

iii) Lack of instructors

iv) No student enrolment

v) Don't know

8) Do you send your students for attachments?

Yes ()

No ()

9) Does your college have enough facilities commensurate to the total number of students enrolled? Yes () No ()

10) What reasons do you think influence parents fail to enrol their children in your college?

(i) _____

(ii) _____

(iii) _____

11) What problems do your training instructors face in implementing vocational/technical training programmes in this Youth Polytechnic?

(i) _____

(ii) _____

(iii) _____

12a) What measures can the government undertake to increase enrolment in youth polytechnics?

(i) _____

(ii) _____

(iii) _____

9) Does your college have enough facilities commensurate to the total number of students enrolled? Yes () No ()

10) What reasons do you think influence parents fail to enrol their children in your college?

(i) _____

(ii) _____

(iii) _____

11) What problems do your training instructors face in implementing vocational/technical training programmes in this Youth Polytechnic?

(i) _____

(ii) _____

(iii) _____

12a) What measures can the government undertake to increase enrolment in youth polytechnics?

(i) _____

(ii) _____

(iii) _____

b) Suggest what can be done to the following groups of people to encourage enrolment in Youth Polytechnics?

(a) Parents _____

(b) Instructors _____

(c) Students _____

13) Kindly tick the numbers 1 2 3 4 5 provided on your right hand side according to how you think the statement affects enrolments in Youth Polytechnics. The numbers are weighted as follows:

1) Strongly agree

2) Agree

3) Undecided

4) Disagree

5) Strongly disagree

	1	2	3	4	5
Student enrolment is on an upward trend					
Parents have positive attitude towards youth polytechnics					
High levels of parent's education					
Training instructors are adequate					
Training instructors are highly qualified					
Courses are relevant to labour market					
Workshop space is adequate					
Equipment and machines are modern and functional					

THANK YOU FOR YOUR CO-OPERATION

APPENDIX V

INTERVIEW SCHEDULE FOR PROVINCIAL YOUTH TRAINING OFFICER

1. How is the students' enrolment trend in youth polytechnics?
2. Please, comment on the enrolment of males and females in youth polytechnics.
3. In your opinion, what are the reasons for gender imbalance in student's enrolment in youth polytechnics?
4. What do you think are the strategies the government has put in place to deal with gender disparity in enrolment in youth polytechnics?
5. What efforts are being made by the government to enable female students enrol in male dominated courses in youth polytechnics?
6. What strategies have your office put in place to improve the facilities of youth polytechnics in order to make them gender friendly?
7. What other information, other than what we have discussed, would you like to add?

APPENDIX VI: IDENTIFICATION DETAILS FOR RESEARCHER

PAGE 2

THIS IS TO CERTIFY THAT:
Prof./Dr./Mr./Mrs./Miss/Institution
Jane Nyawira Ndiritu
of (Address) University of Nairobi
P.O.Box 30197-00100, Nairobi.
has been permitted to conduct research in

Location
District
County

Nyeri

on the topic: Determinants of enrolment in
Technical and Vocational Training in youth
Polytechnics in Nyeri County, Kenya.

for a period ending: 31st December, 2012.

PAGE 3

Research Permit No. NCST/RCD/14/012/697
Date of issue 13th June, 2012
Fee received KSH. 1,000



Applicant's
Signature

Secretary
National Council for
Science & Technology

APPENDIX VII: CONDITIONS FOR CARRY OUT THE RESEARCH

CONDITIONS

1. You must report to the District Commissioner and the District Education Officer of the area before embarking on your research. Failure to do that may lead to the cancellation of your permit
2. Government Officers will not be interviewed with-out prior appointment.
3. No questionnaire will be used unless it has been approved.
4. Excavation, filming and collection of biological specimens are subject to further permission from the relevant Government Ministries.
5. You are required to submit at least two(2)/four(4) bound copies of your final report for Kenyans and non-Kenyans respectively.
6. The Government of Kenya reserves the right to modify the conditions of this permit including its cancellation without notice



REPUBLIC OF KENYA

RESEARCH CLEARANCE PERMIT

GPK6055t3mt10/2011

(CONDITIONS—see back page)

APPENDIX VIII: RESEARCH AUTHORIZATION FROM NCST

REPUBLIC OF KENYA



NATIONAL COUNCIL FOR SCIENCE AND TECHNOLOGY

Telephone: 254-020-2213471, 2241349

254-020-310571, 2213123, 2219420

Fax: 254-020-318245, 318249

When replying please quote

secretary@ncst.go.ke

P.O. Box 30623-00100

NAIROBI-KENYA

Website: www.ncst.go.ke

Our Ref: **NCST/RCD/14/012/697**

Date: **13th June 2012**

Jane Nyawira Ndiritu
University of Nairobi
P.O.Box 30197-00100
Nairobi.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on "*Determinants of enrolment in Technical and Vocational training in Youth Polytechnics in Nyeri County, Kenya*," I am pleased to inform you that you have been authorized to undertake research in **Nyeri County** for a period ending **31st December, 2012**.

You are advised to report to **the District Commissioner and the District Education Officer, Nyeri County** before embarking on the research project.

On completion of the research, you are expected to submit **two hard copies and one soft copy in pdf** of the research report/thesis to our office.

DR. M. K. RUGUTT, PhD HSC
DEPUTY COUNCIL SECRETARY

Copy to:

The District Commissioner
The District Education Officer
Nyeri County.