**FACTORS INFLUENCING TRAINEES' COMPLETION RATE IN PUBLIC VOCATIONAL TRAINING CENTRES IN KENYA: FOCUS ON NATIONAL VOCATIONAL CERTIFICATE OF EDUCATION AND TRAINING CURRICULUM**

**BY**

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# DECLARATION

**Declaration by the Student**

This PhD thesis is my original work and no part of this work has been presented for another degree or diploma in this University or elsewhere for the purpose of examination or otherwise. No part of this thesis may be reproduced without the prior permission of the author and/or the University of Eldoret.

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**Declaration by the supervisors**

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

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## DEDICATION

This PhD thesis is dedicated to my Supervisors Prof. Patrick Kafu and Dr. Ahmed Ferej, my wife Abigael and our children Emmanuelah, Maryanne, and Victoria, who through their inspiration gave me the needed professional and moral support throughout the research process. Special dedication goes to my Senior Pastor, Bishop Dr. George Gichana for the spiritual role he played throughout my PhD programme.

# ABSTRACT

The main objective of this study was to investigate the factors that influenced completion rate of trainees in Vocational Training Centres (VTCs) in Kenya. In order to achieve the main objective of the study, four specific objectives were addressed: firstly, to determine the influence of trainee-based factors on trainees' completion rate in VTCs, secondly, to explore the influence of family-based factors on trainees' completion rate in Vocational Training Centres, thirdly, to examine the influence of institution-based factors on trainees' completion rate in Vocational Training Centres, and fourthly, to establish community-based factors that influenced trainees' completion rate in Vocational Training Centres. This study was guided by the Theory of Student Departure, advanced by Tinto in 1993 (Long, 2012). The study was conducted in four counties namely: Baringo, Elgeyo Marakwet, Nandi and Kakamega. In Baringo, data was collected from Mogotio VTC; in Elgeyo Marakwet, from Iten VTC; in Nandi, from Mugen VTC and in Kakamega, from Lugala and Mautuma VTCs. The five sites were selected because they had implemented the NVCET curriculum and were also Kenya National Examination Council (KNEC) centres. The four counties were selected with an aim of getting a larger and a more representative sample for this study. This study adopted explanatory sequential mixed methods design. Data was collected using two sets of questionnaires and interview schedules. Survey data was collected first from 37 purposively selected instructors, 170 simple randomly selected second year, 9 purposively selected third year, and 3 conveniently selected 4th year trainees. Interviews were organized with the four County Directors of Youth Training and five Vocational Training Centre Managers who were purposively selected to participate in the study since they were expected to possess valuable information for this study due to their respective positions. Structured observation and document analysis was also used to enrich data collection. Quantitative data was analyzed descriptively and presented using frequency, percentage and mean distribution tables. Scatter graphs were also used. The responses from the interview schedule, observation checklist and open-ended questions in the questionnaire were qualitatively analyzed. The findings of this study revealed that early pregnancies and marriages, cases of indiscipline such as drug abuse, low entry qualification of trainees, trainee finding employment in the course of study, destabilized family structures, and low family status in terms of income, education and occupation of parents greatly influenced trainee low completion rates. Other factors that influenced trainee low completion rates include; inadequate teaching and learning resources, inadequate and unqualified instructors, too demanding NVCET curriculum which also lacked certification, inadequate handling of guidance and counseling issues, negative attitude of the community towards VTCs and few role models. Based on these findings, the study recommends the following; firstly, VTCs in collaboration with the parents should enhance guidance and counseling programs, and develop linkage with industry  and higher TVET institutions, secondly, the National government, the County governments and VTCs should provide more funding to VTCs for fees, employment of additional instructors, development of instructional materials and infrastructure, and building capacity of its Boards of Management, thirdly, the National government should urgently review the NVCET curriculum, and fourthly, the communities should be sensitized on the need to support VTCs and also on their benefits to trainees.

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## ACRONYMS

| | |
|---|---|
| **AIDS** | Acquired Immunodeficiency Syndrome |
| **APHRC** | African Population and Health Research Center |
| **BOM** | Board of Governors |
| **BOMs** | Boards of Management |
| **DANIDA** | Danish international Development Agency |
| **DIT** | Directorate of Industrial Training |
| **GoK** | Government of Kenya |
| **HIV** | Human Immunodeficiency Virus |
| **ICT** | Information and Communication Technology |
| **IGAs** | Income Generating Activities |
| **ILO** | International Labour Organization |
| **ITs** | Institutes of Technology |
| **KCPE** | Kenya Certificate of Primary Education |
| **KCSE** | Kenya Certificate of Secondary Education |
| **KICD** | Kenya Institute of Curriculum Development |
| **KIE** | Kenya Institute of Education |
| **KNBS** | Kenya National Bureau of Statistics |
| **KNEC** | Kenya National Examination Council |
| **MOEST** | Ministry of Education, Science and Technology |
| **MOHEST** | Ministry of Higher Education, Science and Technology |
| **MOYA** | Ministry of Youth Affairs |
| **MSE** | Micro and Small Enterprise |

**NACOSTI**    National Council for Science, Technology and Innovation

**NVCET**    National Vocational Certificate of Education and Training

**NPs**    National Polytechnics

**RoK**    Republic of Kenya

**SAGAs**    Semi-Autonomous Government Agencies

**SPSS**    Statistical Package for the Social Sciences

**SYPT**    Subsidized Youth Polytechnic Tuition

**TIVET**    Technical, Industrial, Vocational and Entrepreneurship Training

**TTI**    Technical Training Institute

**TTIs**    Technical Training Institutes

**KTTC**    Kenya Technical Teachers College

**TVET**    Technical and Vocational Education and Training

**TVETA**    Technical and Vocational Education and Training Authority

**UNESCO**    United Nations Educational, Scientific and Cultural Organization

**US**    United States

**VP**    Village Polytechnic

**VPs**    Village Polytechnics

**YP**    Youth Polytechnic

**YPs**    Youth Polytechnics

**VTC**    Vocational Training Centre

**VTCs**    Vocational Training Centres

## ACKNOWLEDGEMENTS

**CHAPTER ONE**

**INTRODUCTION TO THE STUDY**

## 1.1    Introduction

This chapter deals with the preliminaries of this study. These are the background of the study, the statement of the problem, the purpose, the objectives and the research questions of the study. The chapter also discusses the justification, significance, assumptions, scope and limitations of this study. This chapter has further defined the operational terms of this study.

## 1.2    Background of the study

Technical and Vocational Education and Training (TVET) may be defined as the study of technologies and related sciences, and acquisition of practical skills, attitudes, understanding and knowledge relating to occupations in various sectors of the economy and social life (UNESCO and ILO, 2002). TVET was also earlier defined as education and training that prepares persons for gainful employment (Finch and Crunkilton, 1999). According to Nyerere (2009), Technical, Industrial and Vocational Education and Training (TIVET) institutions in Kenya encompasses Technical Training Institutes (TTIs), Micro and Small Enterprise (MSE) training and demonstration centres, Youth Polytechnics and national youth service skills development centres. The acronym TIVET has been replaced by TVET which was adopted in 2013 in Kenya through the Ministry of Education, Science and Technology circular on the sector titles and amendments (KICD, 2013).

Court (1976) observes that academic achievement or completion is a criterion for advancement in any educational system and it is measured by its ability to enable a person gain access to higher levels of learning or training. The author further observes that this desire may not be true with many of TVET institutions globally, since most of them do not offer opportunities for progress to higher levels of training. This has led to reduction in enrolment in some regions of the world.

According to Maclean and Wilson (2012), over 50 million students worldwide were enrolled in TVET institutions in 2012. In Europe and East Asia, TVET enrolment accounted for 50% and 30% respectively. In Africa and South America, their share was less than 20% and in North America and West Asia, less than 10% and 4% respectively. The findings demonstrate uneven variations in TVET enrolment. Looking at the Kenyan case, official data (RoK, 2014) indicated that TVET enrolment at all levels was 36,586 and 89,670 in 2009/2010 and 2013/2014 respectively. On Vision 2030 second Medium Term Plan (2013-2017), (RoK, 2013), observed TVET institutions had increased to 813 of which 493 were fully registered in 2012. The plan further indicated that there were two National Polytechnics, 24 TTIs, fourteen Institutes of Technology, 817 YPs, one technical teachers training college and 706 Private TVET institutions. The data displays a positive increase in TVET enrolments and institutions in Kenya.

It is, however, critical to point out that, besides increase in TVET enrolments, there has been a small percentage of students transiting from Primary school to Youth Polytechnics. Atchoarena and Delluc (2001) observed that enrolment in TVET as a percentage of secondary school enrolment in Africa has been from 0.3% to 0.5% since

1990. To address the low enrolment rates in TVET education policy makers in Africa agreed that effort should be directed towards TVET (Hamilton and Asiedu, 1987). The negative effects towards TVET institutions in Africa have continued to affect enrolment rates negatively. For instance, there has been a perception that TVET is a reserve for those who failed to pursue general education (Atchoarena and Delluc, 2001).

In the Kenyan system of education, more students pursue formal education at primary school, secondary school and university levels. All these levels are characterized by very competitive selection processes. As a result of this, transition rates from primary to secondary school levels in 2012 and 2013 were 66.9% and 73.3% respectively (RoK, 2014). Table 1.1 shows student enrolment in 2010-2013 by type of educational, training institution and sex.

**Table 1.1:** *2010-2013 Student enrolment by type of institution and sex*

|  | 2010 | | 2011 | | 2012 | | 2013 | |
|---|---|---|---|---|---|---|---|---|
|  | Boys | Girls | Boys | Girls | Boys | Girls | Boys | Girls |
| Primary School '000 | 4,751.9 | 4,629.3 | 4,977.7 | 4,880.2 | 5,026.5 | 4,968.7 | 5,149.1 | 5,033.4 |
| Secondary School '000 | 885.5 | 767.8 | 948.7 | 819.0 | 1,019.0 | 895.8 | 1,127.7 | 976.6 |
| Universities[1] '000 | 107.7 | 69.9 | 117.7 | 80.6 | 135.4 | 105.1 | 193.2 | 131.4 |
| Other institutions[2] '000 | 56.4 | 54.7 | 68.5 | 65.3 | 92.5 | 66.0 | 106.1 | 79.0 |

[1]Includes students in National Universities and accredited Private universities and unaccredited universities
[2]Includes students in Teacher training colleges, polytechnics, TTIs & Institutes of Science and Technology

*Source: Kenya Facts and Figures 2014*

However, with annual increase in TVET enrolments in Kenya, it is also important to note that school completion of the same students enrolled, with focus on VTC trainees may not be guaranteed especially with a developing country like Kenya. As reported in African Population and Health Research Center (APHRC) (2013, p. 3), causes of dropout (reduced completion rate) in developing countries are related to three main factors;

   i   School-related factors (ineffective teaching, insufficient qualification of teachers, absence of relevant text books and inappropriate learning assessment)

   ii   Student-characteristics (Poor motivation, learning difficulties, health and nutrition status, and behavioral problems)

   iii   Family-related factors (illiteracy or low education of parents, income of family).

It was assumed that the above mentioned causes of dropout in developing countries such as Kenya, might impact negatively on the completion rates in Vocational Training Centres. Also, Gondwe (2011), in a study conducted in Mozambique, reported that in 2010, as many as 92% of Secondary school-goers did not complete their full secondary education. The stake-holders interviewed during the study, mentioned the following possible factors for low completion rates: large-student-teacher ratios, the timing of examinations, teaching efficiency, examination methodology, teacher quality, social issues (family and societal pressures), career guidance and school fees. The study further highlighted that drop-out was also common in TVET institutions. The TVET reforms in Mozambique were considering introducing career guidance to help students link the usefulness of the material they were learning to their future lives, career prospects and participation in the labour market. This study implied that career guidance, which was an institution-based factor may be lacking in TVET institutions with focus on VTCs in

Kenya. Lack of such a component may cause trainees not to accelerate higher or even complete the current level they are in.

Vocational training offered in Village Polytechnics was introduced to provided rural youth with skills that could be used in the local economy (ILO, 2001). The YP training over the years after its conception in 1960s was transformed mainly to theory and the trainees viewed it as a way of getting certification which in turn could give one employment in the urban setting (Stabler, 1979). The Kenyan experience today is that a small fraction of the youths get a meaningful employment in their rural areas after they graduate from the YPs. Youth polytechnic graduates are not employable because they lack both appropriate skills for employment and resources, and entrepreneurial skills to start their own business (Kamau, 2013).

The government of Kenya introduced 8-4-4 system of education in 1985, where the students would take 8 years in Primary school, 4 years in secondary education and 4 years at the university. The system was intended to inculcate knowledge, skills and attitudes, which would develop positive attitudes of the youths towards skilled careers and prepare them for the world of work (Obura, 2006). It is reported that TVET at Primary school education does not exist, while at secondary level, few students take options for technical subjects due to negative attitude and the cost burden (RoK, 2006).

The YPs which were initially referred to as Village Polytechnics (VPs) were introduced as a partial solution to Primary school leavers who could be absorbed directly in the labor market because of lack of relevant practical skills. This initiative was taken up by churches, communities and cooperatives and directly by any government initiative

(Gould, 1989). The increase in the number of YPs and its enrollment has been positive since the government started providing financial support. In 1972 there were 53 YPs (Gould, 1989) and as of 2013, there were 817 YPs across the country (RoK, 2013). This growth is positive, especially for a growing economy like Kenya. Despite this expansion for an alternative avenue for basic training, it was observed by Keriga and Burja (2009) that only 0.36% of the students who did not make to secondary school, enrolled in YPs.

In 2005, the government of Kenya created a Ministry of Youth Affairs to focus on youth development (MOYA, 2006). The government of Kenya embarked on a process to revive Youth Polytechnics countrywide to enable those who dropped out of school, for various reasons to acquire appropriate skills to earn a decent livelihood (Presidential Press Service, 2007). The rehabilitation was done on infrastructure, provision of tools and equipment, introduction of the new (NVCET) curriculum a year later (2008), Subsidized Youth Polytechnic Tuition (SYPT) fees and employment of instructors.

RoK (2011) skills gap analysis report observed that the buildings and other teaching and learning resources in public Youth Polytechnics were in poor condition compared to other public learning institutions. This implied that YPs were of less importance compared to other training institutions.

However, despite government support, there has been a drop in the completion rate. The report of NVCET results of 2010 indicated that results from national and carpentry tests had majority of students enrolled in 63 Youth Polytechnics failing. The report further revealed that the number of students who sat for NVCET also dropped by 20% from the figure of 1,040 in 2009 to 839 in 2010. A government official alluded to the fact that the

drop was largely caused by negative perception of Youth Polytechnics by thousands of class eight leavers who fail to secure secondary school places (Wangari and Karanja, 2011). The statement may be true but it is important that an in-depth study be done to establish the causes of this development, since there may be other factors that influence the drop-out rates in VTCs. According to the preliminary study conducted by the researcher in Elgeyo Marakwet County in one of the Vocational Training Centres that has implemented the NVCET curriculum, the findings in Table 1.2 indicate a reduction in the trainees' completion rate.

**Table 1.2:** *Percentage of trainees who completed the NVCET course in level 1*

| Course | Year Enrolled | Number of trainees enrolled | No of trainees who did exam | % of trainees who did exam |
|---|---|---|---|---|
| Food processing Technology | 2012 | 21 | 10 in 2013 | 47.6 |
| " | 2013 | 21 | 16 in 2014 | 76.2 |

*Source:* Field data, 2015

In the above study, the management of the VTC pointed out the following as factors causing reduction in the number of trainee completing the course;

   i   Trainee-based factors (pregnancy, indiscipline)

   ii   Institution-based factors (inadequate counseling services)

   iii   Family-based factors (fee payment problems)

Figure 1.1 shows the completion rate of trainees enrolled in Trade Test courses. In VTCs, trade courses take a duration to 2 years to completion. The completion rate in trade test courses is relatively high as compared to trainees enrolled into NVCET courses at the end of year two. The sampled information is for the trainees who had completed trade test

courses in Mogotio and Iten VTCs from Baringo and Elgeyo Marakwet Counties respectively.
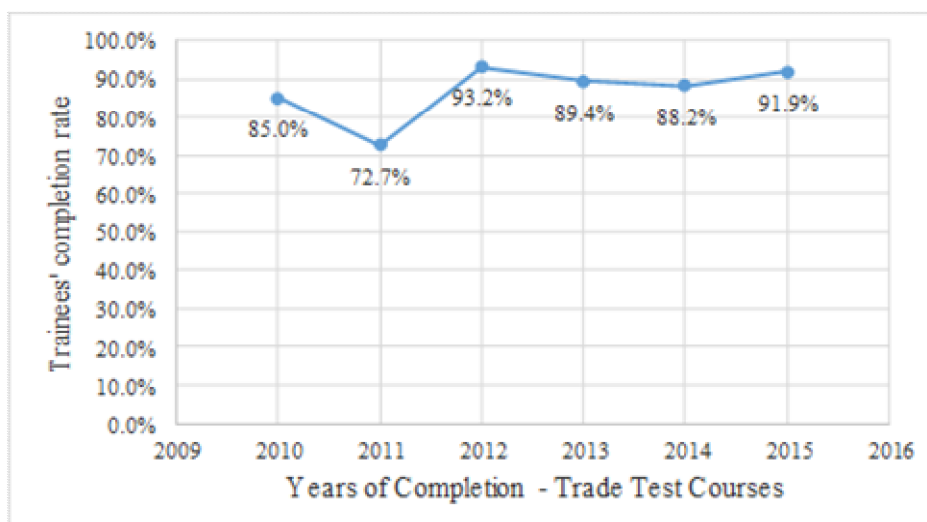


*Figure 1.1.* **Trainees' completion rate for Trade Test Courses from 2010 – 2015**

*Source:* MoEST, County Governments' Departments of Education and Training, 2016

For the realization of a sustained development in the education sector, it is important that the government monitors keenly how learners complete each level of education, including VTCs and how they transit to the next level or exit to the world of work.

## 1.3    Statement of the problem

Studies done generally within the field of education reveal that drop-out or non-completion of an education system is more of a process than an event, a situation that for some students begin in earlier levels of education. Poor academic achievement earlier in education is one of the strongest predictors of dropping out of a school system (Neild and Balfans, 2006, Rumberger and Lim, 2008).

To date, courses leading to assessment by trade tests have mainly been taught in Vocational Training Centres in Kenya. These courses are eighty five percent practical-based and fifteen percent theory-based. In 2008-2010, the Government of Kenya, through the Ministry of Youth Affairs and Sports, introduced and piloted a new National Vocational Certificate of Education and Training (NVCET) curriculum, which was meant to offer an alternative avenue for those who do not qualify for secondary school admission. The new curriculum was intended to give the youth a chance to advance their education up to the highest level. The curriculum is modular and competency-based, and it covers the following areas: Agri-business (Modern methods of Agriculture), Appropriated Carpentry and Joinery, Building Technology, Electrical and Electronics Technology, Fashion Design and Garment Making Technology, Food Processing Technology, Hair Dressing and Beauty Therapy Technology, Information and Communication Technology, Leatherwork Technology, Metal Processing Technology, Motor Vehicle Technology, and Refrigeration, Air Conditioning and General Education Subjects (Entrepreneurship Education, Communication Skills, Life Skills, Information and Communication Technology, and Technical Drawing), (MOHEST, 2012). This curriculum has been implemented partly by some of the Vocational Training Centres in Kenya. Hence, this study was designed and conducted to investigate factors that influence completion rates of trainees in VTCs in Kenya, who had undertaken their training based on the NVCET curriculum.

The students who sat for 2014 Kenya Certificate of Primary Education (KCPE) examinations were 880,487. Approximately 200,000 of these students scored less than 200 marks out of 500. During the release of these results, the Cabinet Secretary for

Education stated that learners who scored less than 200 marks out of 500 were free to join Youth Polytechnics, which were operational in almost every village across the country. The VTCs in Kenya offer mainly Trade test courses and NVCET courses. Artisan courses are taught in VTCs, though not very popular.    Trade test courses are examined through trade tests and the graduates are graded from level III lowest to level I highest while NVCET curriculum is assessed in two parts; level I and level II. These programmes provide avenues for pupils who do not qualify for secondary school admission. With this statement, it is important to take note of the issues raised by Kerre (2010) on limited technical competence of primary education and also consider the entry qualification (low marks) of the learners.

While there may be several factors, the reviewed literature demonstrates that student-based, family-based, institution-based and community-based factors influence the completion levels of a learner. Kerre (2010) observed that Primary school education in Kenya is limited when it comes to learning and performance at higher level technical responses. The author further observed that the Primary school education was not sufficient for one to learn business or entrepreneurial skills required to perform in a modern enterprise.

This study was conducted to investigate factors which influenced the completion rates of trainees undertaking NVCET curriculum in Vocational Training Centres in Kenya. The variables in the present study were largely informed by the findings of Rumberger and Lim (2008), in a study of why students drop out of school. The authors did a review based on 203 published studies of 25 years of research on multiple factors influencing

students to drop out of school. The research reviewed identified individual, family, school and community characteristics as factors that predict whether students drop out or graduate from school. The purpose of this study was to use these variables and see if they can apply to the Kenyan context.

## 1.4 Purpose of the study

The purpose of this study was to examine factors that influenced trainees' completion rate in Vocational Training Centres in Kenya with focus on National Vocational Certificate of Education and Training (NVCET) curriculum.

## 1.5 Objectives of the study

### 1.5.1 Main Research objective

The main objective of the study was to investigate factors that influenced trainees' completion rate in Vocational Training Centres in Kenya

### 1.5.2 Specific objectives

The specific objectives of this study were;

i.   To determine the influence of trainee-based factors on trainees' completion rate in Vocational Training Centres in Kenya

ii.  To explore the influence of family-based factors on trainees' completion rate in Vocational Training Centres in Kenya

iii. To examine the influence of institution-based factors on trainees' completion rate in Vocational Training Centres in Kenya

iv.  To establish community-based factors that influenced trainees' completion rate in Vocational Training Centres in Kenya.

**1.6     Research questions**

To address the above specific objectives, the following research questions were formulated;

   i.    How did trainee-based factors influence trainees' completion rate in Vocational Training Centres in Kenya?

  ii.    How did family-based factors influence trainees' completion rate in Vocational Training Centres in Kenya?

 iii.    How did institution-based factors influence trainees' completion rate in Vocational Training Centres in Kenya?

 iv.    What community-based factors influenced trainees' completion rate in Vocational Training Centres in Kenya?

**1.7     Justification of the study**

It has been observed that trainees' completion rate in Vocational Training Centres are lower than enrolment rates. Therefore, this study was necessary to determine factors that influenced the trainee low completion rates in Vocational Training Centres in Kenya. Non-completion may result to economic related issues such as; wasted resources put up by the government and other stakeholders at large expense not efficiently used, not meeting skills development of a nation, not stemming the rural urban migration, lost opportunities to gain skills for self-employment, among others.

**1.8     Significance of the study**

It is anticipated that the findings and the recommendations of this study will provide data to guide the Ministry of Education, Science and Technology, VTCs Management

Committees and other stakeholders such as sponsors in formulating policies and strategies to address trainee low completion rates in VTCs in Kenya. If relevant issues are addressed then completion rates will be enhanced which will result in a big turn-over for the world of work and also create opportunities for upward progression in training. This study will also contribute to the understanding of the various factors that influence low trainees' completion rate. Therefore, appropriate policies and strategies will be formulated to address low trainees' completion rate in Vocational Training Centres in Kenya. The findings of this study will form a basis for further research in the same area in other counties in Kenya.

## 1.9    Assumptions of the study

This study was based on the following assumptions;

    i.    That the respondents had adequate knowledge of the factors that influenced trainees' completion rate in Vocational Training Centres

    ii.    That no similar study had been done in the selected study sites

    iii.    That the respondents voluntarily participated in this study without any intimidation

    iv.    That the respondents gave sincere and honest responses during data collection

    v.    That the researcher was accorded support from the County Departments of Education and Training, and the managements of the VTCs selected for this study

## 1.10    Scope and limitations of the study

This section describes the scope and limitations of the conducted study.

**1.10.1  Scope of the study**

Though a vast majority of the Vocational Training Centres offer Trade Test courses, this study was delineated to National Certificate of Education and Training (NVCET) curriculum. On this new curriculum, this study focused on the factors that influenced trainees' completion rate in Vocational Training Centres. The study was confined to the public VTCs in Baringo, Elgeyo, Nandi and Kakamega Counties that the then Ministry of Youth Affairs and Sports identified to pilot and subsequently implement the NVCET Curriculum in 2008 and 2010 respectively. The selected VTCs were deemed to possess valuable information for this study due to their longer experiences in the implementation of the new curriculum as compared to other VTCs in the selected counties.

**1.10.2  Limitations of the study**

The main limitation in this study was the size of the sample and generalization of the findings. There are about 47 registered VTCs in the selected four Counties. Though few of them have implemented the NVCET curriculum, the 5 selected sites attempted to maximally highlight the factors that influence trainees' completion rate in VTCs. The challenges of the smaller sample size were addressed by the rich inputs from VTC Managers and the County Directors of Youth Training on this study. Another challenge which was foreseen was the time available for the study. This was addressed by training research assistants for this study. The expansiveness of the selected sites posed a challenge during data collection. This was addressed by familiarizing oneself with the research sites before commencement of the actual study. Adequate literature for this study was a challenge. However, literature generally in the field of education and on the field of study was sought.

## 1.11    Theoretical Framework

This study is guided by the Theory of Student Departure advanced by Tinto in 1993 (Long, 2012). He argued that students depart college or university without earning a certificate or a degree because of the nature and quality of their interactions with college or university. The theory further claims that students enter an educational institution with unique and individual characteristics ranging from socioeconomic circumstances, family support, clarity of purpose for education, and cultural and social values. Tinto argues that colleges and universities, too, are composed of unique individual characteristics. The characteristics of students and colleges or universities they attend may not match and therefore may bring students into conflict with the college or university. Therefore, the students may depart, or drop out, if the sources of conflicts are not resolved. Tinto proposed that the sources of student departure are primarily in three specific areas; academic problems, failure to integrate socially and intellectually with culture of the college or university, or a low level of commitment to the college or university. He argued that colleges and universities must integrate students deliberately in all areas to decrease departure. Tinto's integration framework (1993) is commonly used to examine student persistence in the four (4) year sector. The Vocational Training Centre NVCET curriculum in Kenya has two levels, each having two years; hence Tinto's framework will be appropriate for this study. Tinto's theory is further cited in Scethre (2013), which states that there are many different factors that together make a student leave. The knowledge and experiences students bring with them, is in many cases crucial to their success. The author states that the psychosocial learning environment where students will actually learn is very important. The author further notes that external factors such as

parents, friends and society have an impact on the students' choices, participation and effort through their studies. This theory was appropriate for this study since it sought to investigate the factors that influenced trainees' completion rate in Vocational Training Centres in Kenya.

## 1.12 Conceptual Framework

The conceptual framework shown in Figure 1.2 illustrates the factors influencing completion rates in VTCs. The trainee-based factors are defined by the individual's past and present performance, one's own behaviour, attitude and background. The family-based factors are defined by family structure, family resources and family practices such as social capital. On the other hand, the institution-based characteristics are defined by resources and facilities, nature of administration, qualifications of instructors, curriculum and evaluation, teaching methods, school policies and practices among others. Based on the literature reviewed, community-based factors are defined by role modeling, support and attitude of the neighborhood towards the VTCs. The framework assumed that the factors directly influenced trainee completion levels in Vocational Training Centres in this study. However, the relationship between the independent and the dependent variables may be altered by government policies.

**Independent Variables**                    **Intervening Variables**

| **Trainee-based factors** |
|---|
| • Educational performance |
|   o Test scores & grades at YP |
|   o Academic achievement previously |
| • Trainee behaviour |
|   o Trainee engagement in academic work |
|   o Discipline |
| • Attitudes |
|   o Level of educational expectations |
| • Background |
|   o Trainee demographics & past experience |

| Government policies and laws on Education and Training |
|---|

| **Family-based factors** |
|---|
| • Family structure |
| • Family resources |
| • Family practices |

**Dependent Variable**

| Trainees' completion rate in Vocational Training Centres |
|---|

| **Institution-based factors** |
|---|
| • Composition of student body |
| • Structural features |
| • Resources and facilities |
| • School policies and practices |
| • Curriculum implementation and evaluation |
| • Qualification of trainers |
| • Adequacy of trainers |
| • Effectiveness of administration |
| • Effectiveness of guidance and counseling |
| • Methods of teaching |

| **Community-based factors** |
|---|
| • Role modeling |
| • Community support |
| • Community attitude |

*Figure 1.2:* **A conceptual frame-work of the factors influencing trainees' completion**

       **rate in VTCs in Kenya**

*Source***:** Author, 2015

**1.13    Operational definition of terms**

**Completion** – This is when a trainee undertakes and finishes a course within the designed time frame, usually 4 years

**Completion rate** – The number of trainees completing a full time course over the total number of trainees enrolled in the first year of the same course

**Community-based factors -** These are factors within the surrounding communities and they predict trainees' completion rates

**Factors** – These are predictors that influence trainees' completion rate in VTCs

**Family-based factors –** These are factors that emanate from the trainees' families and they predict trainees' completion rates

**Institution-based factors -** These are Vocational Training Centres' characteristics that predict trainees' completion rates

**National Vocational Certificate of Education and Training (NVCET) curriculum** – It is the new curriculum offered in VTCs in Kenya. It is modular-based and it is offered at two (2) levels of 2 years each. It is also competency-based curriculum

**Public Vocational Training Centres** – Government owned TVET institutions implementing NVCET curriculum and duly registered by the Ministry of Education and receiving government support.

**Public Youth Polytechnics –** This are the government of Kenya owned TVET institutions that are currently referred to as Public Vocational Training Centres

**Trainee** – Any person enrolled in VTC and pursuing a given NVCET curriculum course

**Trainee-based factors** - These are trainees' characteristics that influence their completion rates in Vocational Training Centres.

**Technical and Vocational Education and Training (TVET)** – It refers to the Education and Training undertaken by the VTCs trainees studying the technologies and related sciences, and acquisition of practical skills, attitudes, understanding and knowledge relating to occupation in various sectors of the economy and social life.

**Technical and Vocational Education and Training Authority (TVETA) –** It is the government agency that regulates and coordinates Technical and Vocational Education and Training in Kenya

## 1.14 Summary

This chapter has presented the background, statement of the problem, the purpose of the study and objectives of the study which have been drawn from the four identified independent variables. The research questions addressing the objectives, justification, significance, assumptions, scope and limitations of this study have also been presented in this chapter. This chapter has also defined some operational terms used in this study.

## CHAPTER TWO

## LITERATURE REVIEW

### 2.1    Introduction

This chapter discusses the surveyed literature related to the factors influencing youth completion rates in Vocational Training Centres. Particularly, it focuses on investigating the extent to which the trainee-based, family-based, institution-based and community-based factors contribute to trainees' completion rate in Vocational Training Centres. Prior to these, the chapter presents literature on the TVET system in Kenya and the concept of Youth Polytechnics which is currently referred to Vocational Training Centres.

### 2.2    TVET System in Kenya

The TVET System in Kenya is characterized by multiple providers. Majority of these providers fall under the Ministry of Education, Science and Technology; TVET at primary and secondary schools, Institutes of Technology, Technical Training Institutes and National Polytechnics. Other Providers are Ministry of Labour and Human Resource Development (Youth Polytechnics, Industrial Training Centres), Ministries of Agriculture, Water, Health, Transport and Industrialization. Further other providers are private institutions and Semi-Autonomous Government Agencies (SAGAs) (Nyerere, 2009; Wanjala, 1995). The Vocational Training Centres are currently under the Ministry of Education, Science and Technology, but their management has been devolved to Counties. The former YPs are currently adopting the name Vocational Training Centers (VTCs) and shall offer courses up to Artisan Certificate (RoK, 2013). In Kenya, the acronym TVET was adopted to replace TIVET in 2013 through the Ministry of

Education, Science and Technology and it was released in a circular on the sector titles and amendments (KICD, 2013).

Turning back to the findings of Nyerere (2009) and Wanjala (1995) on TVET multiple providers, Ngerechi (2003) argues that delivering a standardized curricular in such an environment was a challenging task. The situation even worsened when legal instruments to administer TVET programmes appeared to have duplicating functions. The Technical and Vocational Education in Kenya is currently governed by TVET Act 2013. The Act established Technical and Vocational Education and Training Authority (TVETA), whose functions include; regulating and coordinating training, determining the national technical and vocational training objectives, establishing a training system which meets the needs of both the formal and informal sectors, among others (RoK, 2013).

Technical and Vocational Education and Training in Kenya today still exist in three areas, namely; formal, informal and non-informal. Formal TVET, training is undertaken in established institutions with clearly rationalized qualifications based on set syllabi, training schedules and procedures. The informal dimension takes place at work all the time and is used to translate TVET skills into quantifiable and relevant job performance, while, non-formal TVET does not have set qualification targets based on a standard curricula, it focuses in transferring some form of skill, and is mainly found in Youth Polytechnics, with emphasis on trade courses (Wanjala, 1995). With the introduction of the NVCET curriculum, VTCs are expected to provide pathways for attaining higher education through technical and vocational education and training.

According to Ferej, Kitainge and Ooko (2012), it is estimated that the informal sector provides training to more youth than all the formal systems put together. The informal apprenticeship system in Kenya was born with the Indian craftsmen imported by the British Colonial Government to construct the railway line linking the seaport of Mombasa with the interior of the country (King, 1977).

Since 1984, the TVET formal system of education in Kenya has consisted of eight years of Primary School education, four years of Secondary School and four years of tertiary education. The 8-4-4 system replaced the 7-4-2-3 structure and it was meant to introduce a broad-based curriculum that would provide learners with pre-vocational skills and technical education. The 8-4-4 system has undergone several reviews from time to time through various reports by committees and commissions established by the government. The objectives of TVET in Kenya as stated by Ngerechi (2003) are:

i. Development of appropriate skills at all levels through practical training and work experience.

ii. Provision of adequate skilled manpower at all levels of the economy.

iii. Active and continuous transfer of technology through collaborative approach between TIVET institutions and the relevant industries.

iv. Promotion of dignity of labour and more particularly manual work.

v. Provision of increased training opportunities for the increasing school leavers.

vi. Provision of continuous upgrading of skills and knowledge at the pace and ability of the trainees.

vii. Provision of a dynamic curriculum responsive to the manpower need of a dynamic economy.

Ngerechi (2003) and separately Atchoarena and Delluc (2001) observed that TVET in Kenya was offered at the following four levels;

i.   Artisan level in Youth Polytechnics and on-the-job training in the formal sector and informal sector (*Jua Kali* apprentices).

ii.  Craft level in Technical Training Institutes (TTIs) and Institutes of Technology (ITs).

iii. Technician level in National Polytechnics (NPs) and a few selected TTIs and ITs.

iv.  Technologist in National Polytechnics and University.

Ngerechi (2003), further pointed out that the present education system provided opportunity for one to reach the level of technologist using one of at least six alternative routes. The following system (Figure 2.1) extracted from UNESCO-IBE (2010) and also in Nyerere (2009), sourced from the Ministry of Education document of 2005, showed that provisions had been made by the Kenyan Government for a through path for TVET till the level of Technical Doctorates.
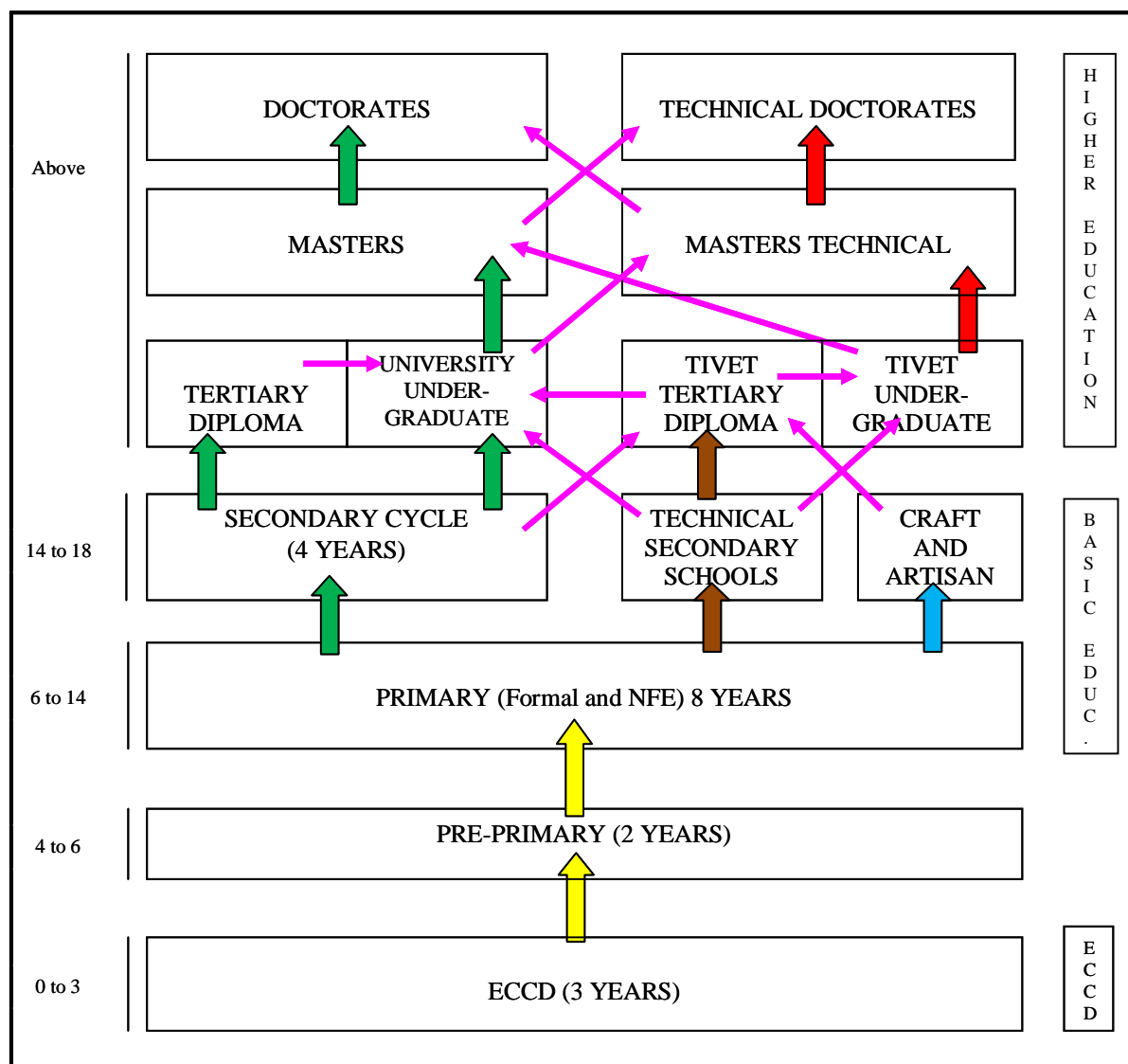
*Figure 2.1:* **Kenya's TVET career path**

*Source:* UNESCO-IBE, 2010

## 2.3    The Concept of the YPs

The idea of the YPs, which was earlier referred to as Village Polytechnics (VPs), and now Vocational Training Centres was developed and popularized in the mid-1960s by the National Christian Council of Churches (NCCK). This was aimed at solving the problem of education and employment of Primary school leavers. The YPs were to provide the

rural youth with skills that could be used in the local economy. The established institutions were meant to provide practical training, linked with production, and so assist in the formation of a cadre of trained artisans and other self-employed workers (Ngware, Wekesa, and Wasike, 1999).

The concept of VPs was concurrently taken up by communities and co-operatives but not directly by the government (Gould, 1989). The government of Kenya started to support VPs in 1971 when it recognized the critical role these institutions played in bridging education and employment gap (Kiplagat, Kitainge and Wosyanju, 2010).

The emergence of Youth Polytechnics in Kenya was informed by the ballooning number of primary school leavers who could not attain the required grades to proceed with Secondary School education and also the fact that the Primary School education had not equipped them with the necessary skills to be absorbed into the labour market (Stabler, 1979). Through establishment of the VPs, it was anticipated that the trainees would be equipped with the appropriate skills required in the world of work. It was observed that the Kenya basic education system (Primary and secondary) did not prepare students adequately with the required skills for the labour market. Over the years, YPs have created avenues for primary school leavers, secondary school drop-outs and form four leavers to acquire the necessary labour market skills.

In the 1970s and 1980s, the government of Kenya was regulating and controlling the affairs of the VPs, for instance approving the instructors and management of finances (Kinyanjui, 2007). The support of the VPs from the government was impressive between 1972 and 1985. The VPs that received government aid in 1972 were 53 as compared to

321 in 1985 (Gould, 1989). This was a positive step taken by the government to improve the state of the VPs in the country.

The introduction of the 8-4-4 system in Kenya made the government loose support of the VPs. The new system led to the near collapse of the VPs in 1980s (Kiplagat, Kitainge and Wosyanju 2010). According to Kerre (1998), the curriculum of YPs was too narrow and the skills in some vocational training were not in high demand in the rural areas. The training in business skills was inadequate for those considering entering into self-employment. In fact in the early 1980s, less than a quarter of the Village Polytechnic (VP) trainees were found to have become self-employed. Due to lack of clear policies to govern TVET programmes in Kenya, Village Polytechnics (VPs) were regarded as avenues for primary school leavers and drop-outs (Dubois *et al*, 2010).

In 2005, the government of Kenya established a new Ministry, which was to look into the affairs of the youth. The newly created Ministry of Youth Affairs and Sports embarked on a programme to revitalize the VPs across the country (Dubois *et al*, 2010). This may have been necessitated by the poor image by the communities, which saw VPs as catering only to school drop-outs who were generally considered as failures in school education system (Danish International Development Agency, 1998). The newly created Ministry started re-registering the VPs in 2007 and also renamed these institutions as Youth Polytechnics (YPs). The earlier name was perceived to be localized.

According to the RoK (2012), there were over 697 registered YPs supported by the Kenya government across the country. The number of VTCs across the Counties is not evenly distributed. For instance, in Baringo and Uasin Gishu Counties, there were only

ten and five registered VTCs respectively (KenyaPlex, 2012). There were 10 registered VTCs in Elgeyo Marakwet County (Elgeyo Marakwet PSB, 2014). Fifteen (15) VTCs have been registered in Kakamega County (RoK, 2013).

The government has further continued to improve the image of the VTCs. This has been demonstrated when the government piloted National Vocational Certificate in Education and Training (NVCET) curriculum between 2008 and 2010. According to The Standard (2011), this curriculum was aimed at equipping the youths with better skills to meet the requirements of the labour market.

Before 2007, the training in YPs followed an artisan curriculum that was examined by the Kenya National Examinations Council (KNEC) and trade test based courses that were examined by the then Directorate of Industrial Training (DIT). These courses, now referred to as the old curriculum, include trades such as, tailoring and garment making, welding and fabrication, carpentry and joinery, general fitting, panel beating, cabinet making, leatherwork, electrical installation, plumbing, masonry, upholstery, machine turning, sheet metal aligning, sign writing, brick laying and motor vehicle mechanics (RoK, 2011). Youth Polytechnics were designed to provide rural youths with skills that could be used in the local economy. They could provide practical training, linked with production and assist in the formation of a cadre of trained artisans for self-employment (ILO, 2001).  The Trade test-based courses were meant to train workers to enter the job market, whereas the artisan curriculum was designed for advancement to the next level (GoK, 2008). Even with the introduction of artisan curriculum, the YP sector up to

2007/2008 was still not properly linked with the rest of the education and training system in Kenya (RoK, 2011).

To address the above challenge, the then Kenya Institute of Education (KIE) developed the new YP sector TVET based curriculum referred to as National Vocational Certificated of Education and Training (NVCET) in 2007. The curriculum was implemented in 2010 after its introduction and piloting in 2008. The curriculum include courses in the following 12 trade areas; Metal processing technology, Electrical and electronics technology, Motor vehicle technology, Building technology, Refrigeration and air conditioning technology, Appropriate carpentry and joinery, Information communication technology (ICT), Leatherwork technology, Fashion design and garment making technology, Hair dressing and beauty therapy, Agri-Business (Modern Methods of Agriculture) and Food processing technology. Besides the trade area, the trainees are supposed to be taught General Education subjects which include; Entrepreneurship Education, Communication Skills, Life Skills, Information and Communication Technology and Technical Drawing (MOHEST, 2012).

This NVCET curriculum is a four-year programme with levels I and II. Some of its features are; firstly, it is a competency-based modular approach that is flexible to accommodate the diverse interest groups of youth, secondly, it allows for vertical and horizontal mobility thereby enabling the YP graduates to exit into the labour market after the 2-year level I or progress to level II and to higher levels of training up to university, and thirdly, it is 70% practical and 30% theory (RoK, 2011).

**2.4    Factors influencing trainees' completion rate in Vocational Training Centres in Kenya**

Completion is a quantifiable representation of students completing an educational programme in an institution in a given time. Completion is a critical measure of any educational system; at primary school level, secondary school level, tertiary level or any other level of education. Completion rates in institutions of learning are dependent on a number of factors. In discussing the factors that influence completion rates, trainee-based factors, family-based factors, institution-based factors and community-based factors are perceived to influence the completion rates in educational institutions.

According to Ngerechi (2003), Technical and Vocational Education in Kenya is offered at four (4) levels namely;

    i.   Artisan level in Youth Polytechnics and on-the-job training in formal sector and informal sector (*Jua Kali* apprentices)

    ii.   Craft level in Technical Training Institutes (TTIs) and Institutes of Technology (ITs)

    iii.   Technician level in National Polytechnics (NPs) and a few selected TTIs and ITs

    iv.   Technologist in National Polytechnics and University

In any of the levels listed above and in any other form of education, some costs must be attached to. Subsequent studies show that home-based factors touching on family resources, such as finances, social capital input influences the ability of many school going children or students to afford education, hence may affect their ability to complete their programmes. In this chapter, literature search on the information focusing on trainee-based factors, family-based factors, institution-based factors and community-

based factors that influence trainees' completion rate was done. The studies researched provided a better understanding and wider perspective of this study.

### 2.4.1    Trainee-based factors

Individual characteristics of the trainees may influence completion of an educational programme. Rumberger and Lim (2008), in a study involving reviewing previous 25 years of research on drop-outs or school incompletion, established that individual characteristics of students were some of the factors that influenced school completion levels. This study categorized the students' characteristics into four areas, namely;

i.  **Educational performance**. The performance focused on the test scores and grades in the course of learning, academic achievement previously, repetition of classes and admission qualification.

ii.  **Student behaviour**. This area pointed out the students' active engagement in both academic and co-curricular activities. The study observed that absenteeism was associated with high drop-out or incompletion of school. The area further focused on the discipline, drug or alcohol abuse, teenage parenting and childbearing, peer or friends influence, and entry behaviour such as age as some of the characteristics that cause a student to drop out of school.

iii.  **Attitudes**. This focused on how far in a school a student expects to go. Higher levels of educational expectations are associated with lower dropout rates.

iv.  **Background.** The area highlighted the student demographics and his/her past experiences.

A report cited in Ibuathu and Kubaison (2013), on the release of NVCET examination results by the Ministry of Youth Affairs and Sports in March 2010 stated that 58% of students who sat national Carpentry and Joinery test in 63 YPs failed; while 6% were given referrals. The report added that the total number of trainees in the Public YPs who sat NVCET examination dropped by 20% compared to 2009 candidates. The report indicated that this drop was caused by negative perception by class eight and form four leavers about YP vocational training. According to Morara and Chemwei (2013), student-based factors can lead to school drop out. The study reported that students drop out of school due to peer influence, indiscipline and chronic absenteeism, pregnancy, work, early marriages and poor performance in school. A study by Murithi (2013) revealed that the age of the trainees in YP also influences the methods of teaching. This emphasizes the need for the selection and use of appropriate teaching methods based on the age of the learners, hence facilitates clear understanding of the content taught.

### 2.4.2   Family-based factors

Family resources may greatly affect the level of support towards a child's education. According to Ahmed, Andaleeb and Arif (2004), economic status is a measure of how poor or rich a person is. The views of the authors tend to link economic status or level of resources to a person's living standard based on income earned, occupational status, living conditions and the education attained. It implies that families that are endowed with adequate resources will increase chances of their children completing an education programme. The findings of this study agree with those of Rumberger and Lim (2008), which observed that three aspects of families predict whether students drop out or graduate. The aspects are;

i.    **Family structures.** The study established that students living with both parents have lower drop-out rates and higher graduation rates. Changes in family structure, along with other potentially stressful events (such as a family move, illness, death, marital disruption) increase rates of dropouts

ii.   **Family resources.** The study further established that students in homes with more family resources as measured by parental education, parents' occupational status and family income are less likely to drop out of school

iii.  **Family practices.** A number of parenting practices (social resources or social capital) have shown to reduce odds of dropping out include; having a high aspirations for children, monitoring children's school progress, communicating with the school and knowing the parents of their children's friends. The study further observed that students are likely to drop out if they have a sibling who dropped out.

Muthui and Mugambi (2010) described poverty as the inability of households to meet basic needs which include education and training. In the present study, the family resources will be equated to the ability of households or individuals to meet their basic needs such as shelter, food, clothing, education and training. In a separate study, Chimombo (2005) reported that other costs of education such as uniforms, transport and lunch often results in the exclusion of poor children or students from school. Further, Morara and Chemwei (2013) observed that parental negligence, death of parents, instability at home, poverty and large family sizes caused students to drop out of school. Family income and education of parents are the predictors of school completion for the learners (Lacour and Tissinton, 2011). This means that lack of resources and low level of

parents' education can negatively affect school completion levels of learners. Another study by Mandina (2013) observed that low socioeconomic family backgrounds was a major cause of the phenomenon of dropping out with students dropping out due to poverty and financial constraints.

The reviewed studies have demonstrated how family characteristics can affect completion of learners in school.

### 2.4.3 Institution-based factors

Most countries in Africa have a parallel system for Technical and Vocation Education and Training in the education sector with its own institutions, programmes and teachers (African Union, 2007). This kind of autonomy was seen as having a negative effect on the management of TVET institutions since there was no policy that governed quality of education and training within them. These resulted in their unattractiveness on the part of the trainees.

The legal frame-work governing TVET institutions in Kenya was under various legislations and legal instruments until 2013 TVET Act was operationalized to govern and co-ordinate all activities of the TVET. All the TVET activities including institutions such as VTCs are now regulated by the Technical and Vocational Education and Training Authority (TVETA). This study investigated the institution or school-based factors such as management with a view to establishing how they can influence the completion rates.

Previously, the management of the YPs was under communities and co-operatives, and indirectly by the government initiatives (Gould, 1989). The implication was that, decisions on management issues were being made by the community. It further implied

that the issues touching on courses, nature of instruction, handling of finances, and other management aspects were performed by the community through established management committees. In the Kenya's Education Act (2013), the management of VTCs was devolved to county level.

Educational reforms require effective management (UNESCO, 2004). A study by Abagi (2009) observed that there was inefficient school management practice which made teachers to lax in Kenya. It noted that poor institutional leadership may be one of the institution-based factors influencing completion rates in YPs. The Managers supervise Youth Polytechnics as is the case of head-teachers in schools as reported in Syomwene (2003). Administration is the co-ordination of human and material towards the attainment of pre-determined goals and objectives (Onyeukwu, Ukoha and Hogan, 2012). Effective administration is, therefore, characterized by the processes of planning, organizing, directing, co-ordinating and controlling human materials and processes.

According to Ndiritu (2012), institution-based factors such as out-dated facilities, irrelevant courses, and low academic qualifications of trainers influenced enrolment of trainees in YPs in Nyeri County. Further, Moturi, Onderi and Mwebi (2015) argue that low qualification of instructors in YPs was one of the major challenges facing Youth Polytechnics in the provision of quality education and training. A study by Yungungu, Maleche, Ndurumo and Ogolla (2014) revealed that the YPs studied had irrelevant curriculum, inadequate and unqualified instructors, limited teaching and learning resources, lacked clearly defined starting entry point criteria based on class eight results, secondary school drop-outs and Form four leavers. Related study by Mandina (2013)

revealed that students may be pushed out of school because of curriculum factors. It was noted that lack of education programs that meet the individual's vocational and intellectual needs of the students ultimately lead to drop out while an irrelevant, complex, rigid and congested curriculum puts learners off and predisposes them to dropping out. In addition to these studies, Gakio (2012) reported that the courses that were taught in Youth Polytechnics were not applicable to the world of work. The same study further established that the teaching methods used could impart learners with the appropriate skills. This implied that the methods of teaching greatly impacts on the quality and competence of the trainees when they complete the programme.

Instructors are a critical component of the training requirements in an educational institution. The GoK (2005) emphasized on the need for adequate staffing for effective education at all levels of training. A study by Sang, Muthaa and Mbugua (2012), established that trainers were not adequate and also did not possess the required qualifications. The findings were consistent with those of Aduda (2003) which revealed that majority of the trainers in Kenya Polytechnic in 1996 held an ordinary diploma qualification. The author further observed that the trainer should have a higher qualification to effectively execute the training functions.

Murithi (2013) established that the trainees were not happy with the instructors' teaching methods since it could not prepare them adequately to engage in self-employment. The study further revealed that lectures and demonstrations used obsolete tools and equipment. The study also reported that instructors taught courses or subjects that they were not specialized in. Methodologies that encourage education are not only a means to

foster youth entrepreneurship but at the same time equip young people with entrepreneurial attitude and skills. Entrepreneurship education has to be transmitted in a form of codified knowledge and entrepreneurial skills through formal and non-formal education (Schoof, 2006). Kamalawati (2012) argues that the appropriate pedagogical methods to facilitate and strengthen interest in entrepreneurial careers include real-life activities outside the classroom.

According to Ismail (2010), complementing entrepreneurship courses or classroom modules, require the polytechnic department in collaboration with appropriate bodies, organize various entrepreneurship activities. To improve quality of teaching, instructors should not only practice appropriate teaching methods but encourage application of skills in a practical programme or live work on campus. This kind of approach will allow students to be more independent; it will foster appropriate attitudes and entrepreneurial thinking.

Such a magnitude of institution-based factors discussed above call for an urgent action from those responsible with the management of learning institutions including VTCs, both at local level and national level. It was perceived that the factors highlighted in these studies would influence the trainees' completion rate in this study.

UNESCO (2004) further reported that Technical and Vocational Education and Training institutions were grossly underfunded making them difficult to acquire modern and relevant modern facilities to provide quality education. Majority of the learning institutions in Kenya have inadequate facilities such as classrooms, workshops and laboratories. UNESCO (2006) equally reported that there was poor school infrastructure

in most Primary schools in Kenya. Kenya lacks proper road network and access to modern communication facilities such as internet. According to UNESCO (2004), few schools and colleges in Kenya have access to computers, internet and e-mail facilities which are essential for research and learning process. It may be difficult to access electronic materials, especially with the introduction of the NVCET curriculum. Most institutions in Kenya are lacking facilities such as those of health, resulting to students seeking for medical attention elsewhere. This sometimes may lead to school drop-out feature, hence influencing completion rate.

The school characteristics that contribute to drop out include; composition of the student body, resources and facilities, structural features, and policies and practices (Rumberger and Lim 2008). The study further elaborated on the school factors;

i.  **Composition of the student body**. Research reveals that the levels of dropping out of school are lower in schools with more advantaged students.

ii.  **Structural features**. The study revealed that attending a Catholic School or religious sponsored school improved the levels of completion.

iii.  **Resource**s. The study found significant effects of school resources on dropout and completion rates.

iv.  **Policies and practices.** Policies and practices in institutions mattered. Students were less likely to drop out if they attended schools with stronger academic climate. On the other hand, students were more likely to drop out in schools with poor disciplinary climate, as measured by student disruption in class or in school.

A study by Osodo (2015) further demonstrates how negative school characteristics can cause learners to drop out of school. The study revealed that crowded curriculum, difficult curriculum, unavailability of learning resources, many curriculum related levies and irrelevant curriculum to job market contributed to non-completion of school. This study supports an earlier study by Mandina (2013) which revealed that, school dropout was primary grounded in irrelevant curriculum that failed to meet the individual's vocational and intellectual needs. Perhaps that was the reason why Deya, Oloko and Orwa (2015) argued that there was need to review and develop the curriculum that addresses the emerging issues of our society in order to enable the learners to acquire and develop the desired knowledge, skills, values and attitudes for life in the emerging knowledge society.

The findings of the above reviewed studies clearly show how the characteristics of a learning institution can influence the completion rate of the learners. The same variables were applied to this study to establish their effects on trainees' completion rate in VTCs in Kenya.

### 2.4.4   Community-based factors

The surrounding community has a great influence on the institutions of learning. Syomwene (2013) reported that majority of the communities in Kenya were of middle income. World Bank (2015) reported that Kenya had joined the team of lower-middle income countries. Kenya effectively joined the ranks of middle income countries on 30th September 2014, sixteen years ahead of schedule which was projected to be the year 2030. This level of income becomes a hindrance in a situation where an educational

programme requires support from the surrounding community. Syomwene (2013) further reports that when 8-4-4 was introduced in 1985, there were increased costs in putting up classrooms, workshops, home science rooms and laboratories. Many members of the surrounding community including parents could not withstand the costs. This led to regional and gender disparities and decline in enrolment ratios.

According to Rumberger and Lim (2008), communities play a crucial role in adolescent development along with families, schools and peers. Living in an affluent environment or community is beneficial to the school success. The study suggested that affluent or well to do neighborhoods provided more access to community resources and positive role models from affluent neighbours. Simiyu and Sambu (2014) reported that the community played a key role in provision of Technical and Vocational Education and Training facilities and equipment in primary schools in Eldoret Municipality, Kenya. To further highlight the need for supportive communities surrounding the VTCs, South, Baumer and Lutz (2003) argue that students in low socioeconomic neighbourhoods are more likely to drop out of school than students in more affluent neighbourhoods. Therefore, this means that well to do neighbourhoods provided more access for material support to learning institutions such as VTCs. The three studies reveal a very critical role performed by the communities surrounding a learning institution.

On the other hand, communities can also negatively affect a learning institution. Kinyanjui (2007) reports that a negative attitude towards vocational education not only existed among the community members, but also manifested among instructors and learners as they felt inadequate academically. To further demonstrate how communities

affect negatively Vocational Training Centres, Moturi, Onderi and Mwebi (2015) acknowledge that community's negative attitude towards Youth Polytechnics was one of the major challenges facing youth polytechnics in the provision of quality education and training in Kenya. Also, Morara and Chemwei (2013) assert that negative traditional and cultural practices, and lack of role models in the communities caused learners to drop out of school. In a study by Ngerechi (2005) cited in Kamau and Ngumbu (2013), the author argues that for Kenya to cater for the changing technological systems and economic development, a change of attitude by the government and other stakeholders towards vocational education must be addressed. He further suggests that TVET system should not create inequalities in the education system. Instead it should provide good quality vocational education and training comparable to general academic education to avoid suspicion on the quality by the society and raise the public appeal. Kamau and Ngumbi (2013) observed that there is need for active community involvement in the management and curriculum issues in YPs to increase a sense of ownership and understanding of vocational training programmes. Perhaps this approach will assist in the progressive growth of VTCs in Kenya.

## 2.5    Summary

The review of literature examined the factors that influence the completion rates in educational institutions so as to determine the extent to which independent variables may influence the rates of completion in Vocational Training Centres. The studies revealed that no single factor could completely influence a student's decision to continue in school until completion. The literature has also shown that the decision to drop out of school was not only influenced by school-based factors such as resources, policies and practices,

effectiveness of the administration, qualification of the instructors, among others but could also be influenced by factors emanating from the trainees or students, family and the community. This study investigated factors that may influence trainees' completion rate in VTCs with focus on NVCET curriculum. Despite the curriculum being formally implemented, there are challenges that impact on trainees' completion rate. The reviewed literature focused on various variables that may influence students' or trainees' completion rate through an educational process such as high school. The variables reviewed in this study have not been tested with completion rates in VTCs. Hence, a study was necessary to establish whether the variables applied to other studies concur or differ with the present study. The valuable information gathered will guide in the formulation of appropriate strategies and policies that will address the issue of low completion rates in Vocational Training Centres in Kenya.

**CHAPTER THREE**

**RESEARCH DESIGN AND METHODOLOGY**

**3.1     Introduction**

This chapter deals with the procedure of how this study was conducted. It describes the research paradigm, research design, the study area, the target population, sample size and the sampling procedure, the study variables, data collection instruments, validity and reliability of instruments, administration of research instruments, data analysis and ethical considerations.

**3.2     Philosophical research paradigm**

The ways in which research studies are conducted vary from one study to another. While conducting a research study, there are certain standards or rules that guide a researcher's actions and beliefs. Such standards and rules can be referred to as a paradigm. According to Taylor, Kermode, and Roberts (2007, p. 5), a paradigm is "a broad view or perspective of something". Further, Weaver and Olson (2006, p. 460) state that, "paradigms are patterns of beliefs and practices that regulate inquiry within a discipline by providing lenses, frames and processes through which investigation is accomplished".

Since this study adopted a mixed research approach, there was no single paradigm that could have been used to adequately deal with all of the required methodological aspects. Hence, pragmatism paradigm was considered as an appropriate philosophical underpinning for this study. Pragmatism focuses attention on the research problem in social science research and uses pluralistic approaches to derive knowledge about the problem (Creswell, 2003; Morgan, 2007; Patton, 1990; and Tashakkori and Teddlie,

2010). Pragmatism is not committed to any one system of philosophy and reality (Morgan, 2007 and Creswell, 2014). Also, Mackenzie and Knipe (2006) argue that pragmatism may include tools from both positivist and interpretivist paradigms. Therefore, this study combined the quantitative/positivist paradigm with the qualitative/interpretivist paradigm. Besides other aspects, positivist view employs quantitative methods while interpretive view utilizes qualitative methods (Harwell, 2011).

The positivist paradigm is based on rigid rules of logic and measurement, truth, absolute principles of logic and prediction (Halcomb and Andrew, 2005; Cole, 2006; Weaver and Olson, 2006). Such inflexible beliefs did not have capacity to accommodate in-depth input from the various target groups on the phenomenon being investigated. As a result, qualitative methodologies were also incorporated into the research process. The blending of both paradigms provided the study with both the objective and subjective data which were analyzed to better understand the factors influencing trainees' completion rate in Vocational Training Centres in Kenya with focus on NVCET curriculum.

## 3.3    Research design

This study adopted explanatory sequential mixed methods design. This design is one in which the researcher first conducts quantitative research, analyzes the results and then builds on the results to explain them in more detail with qualitative research (Creswell and Plano, 2011 and Terrell, 2011). The authors argue that in this design, the initial quantitative data results are explained further with the qualitative data. The purpose of this design was to investigate in detail the factors influencing trainees' completion rate in

Vocational Training Centres in Kenya. Generally, mixed methods research uses two or more methods in a research project to yield both qualitative and quantitative data (Teddlie and Tashakkori, 2009). Creswell (2014) claims that mixed methods research combines or integrate both quantitative and qualitative research and data in a study. According to Koller and Sinitsa (2009), applying a mix of various methods enables researchers to draw a more holistic picture of the topic under scrutiny. The authors further claim that mixed-methods design incorporates both the combination of methodologies (qualitative and quantitative) as well as different methods of data collection. Creswell (2013) argues that using mixed methods design allows for multiple perspectives or more complete understandings of research findings. The author further maintains that this design helps to confirm quantitative measures with qualitative experiences.

## 3.4    Study area

The study was conducted in VTCs based in four counties; Baringo, Elgeyo Marakwet, Nandi and Kakamega. Mogotio, Iten and Mugen VTCs were selected in Baringo, Elgeyo Marakwet and Nandi counties respectively, while Mautuma and Lugala VTCs were selected in Kakamega County.

Baringo County is located in the heart of the former Rift Valley Province of Kenya. The administrative headquarters of the county is Kabarnet town. The county has a population of 555,561 (KNBS, 2010). Baringo borders Turkana to the North and North East, Samburu and Laikipia to the East, Nakuru to the South, Kericho and Uasin Gishu to the South West, Elgeyo Marakwet to the West, and West Pokot to the North West.

Elgeyo Marakwet is also located in  the former Rift Valley province and it borders West Pokot to the North, Baringo to the East, South East and South, Uasin Gishu to the South West and West, and Trans Nzoia to the North West. The county has a population of 369,998 (KNBS, 2010). Iten town is the administrative headquarters of the county.

Nandi County is also located in the Rift Valley region and it boarders Uasin Gishu to the North and East, Keircho to the South East, Kisumu to the South, Vihiga to the South West, and Kakamega to the West. The county headquarters and the largest town is Kapsabet. The county has a population of 752,965 (KNBS, 2010).

Kakamega County is located in the former Western Province of Kenya. Kakamega town is the headquarters of the county. The county has a population of 1,660,651 (KNBS, 2010). The county is located in Western Kenya bordering Bungoma to the North, Trans Nzoia to the North East, Uasin Gishu and Nandi counties to the East, Vihiga to the South, Siaya to the South West and Busia to the West.

The five sites from the four counties were selected for this study because they were among those identified by the Ministry of Youth Affairs and Sports to pilot NVCET curriculum from 2008 – 2010. The five Vocational Training Centres were also KNEC centers for NVCET exams. The sites were selected because of diversity and also to enrich the sample for this study. The two sites were in Western region while the other three were in Rift Valley region. Majority of the Counties in Kenya had at least one VTC being used to pilot the NVCET curriculum.  It is important to note that other counties were not disregarded despite the fact that they have VTCs with similar characteristics as those of

the selected five for this study. Therefore, these study sites were appropriate to investigate the factors that may influence completion rates in VTCs with focus on the NVCET curriculum. Appendix I shows the 47 counties of Kenya. The four (4) counties for this study are located on the left side of the map.

## 3.5    Target population

A population or a target population consists of all elements; individuals, items or objects which its characteristics are being studied. The target population for this study was comprised of 4 County Directors of Youth Training, 5 Managers of Vocational Training Centres, 37 Vocational Training Centre Instructors and 299 VTC trainees ($2^{nd}$, $3^{rd}$ and $4^{th}$ years). The distribution of the target population is shown in Table 3.1.

**Table 3.1:** *Target Population*

| Target Population | Total number |
| --- | --- |
| County Directors of Youth Training | 4 |
| Managers of Vocational Training Centres | 5 |
| Instructors of Vocational Training Centres | 37 |
| Trainees of Vocational Training Centres | 299 |
| Total | 345 |

## 3.6    Sampling procedure

The study employed two sampling approaches. Firstly, non-probability sampling using purposive sampling was used in selecting the County Directors of Youth Training, Vocational Training Centre Managers, the Instructors that teach NVCET Courses, and $3^{rd}$ year NVCET trainees because of their small number and longer time at VTC. Convenient sampling was used to select $4^{th}$ year NVCET trainees who were readily available during

data collection. This is because the $4^{th}$ year trainees were out on industrial attachment during data collection. The few $4^{th}$ years who were doing their industrial attachment around the VTCs under study were requested to participate in the study. It was assumed that these groups that formed part of the target population possessed the required characteristics for this study. Secondly, probability sampling utilizing simple random sampling was used to identify $2^{nd}$ year trainees taking NVCET courses implemented by each VTC in this study.

## 3.7    Sample size

It is a requirement that where possible, a study should use as big a sample as possible to increase the confidence level of the findings. Mugenda and Mugenda (2003) stated that if the target population is less than 10,000, then the final sample estimate (nf) will be found by using the following formula;

$$nf = \frac{n}{1 + n/N}$$

Where: nf = the desired sample size (if the target population is less than 10,000)

n = the desired sample size (if the target population is greater than 10,000)

N = the estimate of the population size

Therefore, the study had trainee sample size of;

$$nf = \frac{384}{1 + 384/270}$$    the minimum trainee sample size (n) for this study = 159

**Table 3.2:** *Sample size of respondents*

| Respondents | Total number | Sample size | Percentage |
|---|---|---|---|
| County Directors of Training | 4 | 4 | 100% |
| Managers of VTCs | 5 | 5 | 100% |
| Instructors of VTCs | 37 | 37 | 100% |
| 4th year trainees | 20 | 3 | 15% |
| 3rd year trainees | 9 | 9 | 100% |
| 2nd year Trainees | 270 | 170 | 63% |
| Total | 345 | 228 | |

## 3.8 The study variables

This study was guided by two major variables namely; the independent and dependent variables. The independent variables were the predictors of this study, which included trainee-based factors, family-based factors, institution-based factors and community-based factors. The dependent variable attempted to indicate the influence caused by the independent variables. Hence, the completion rates defined the dependent variable of this study. However, the relationship between the two sets of variables may be influenced by the intervening variables such as government policies on education and training.

## 3.9 Data collection instruments

These are the tools that were adopted by this study during the data gathering stage. The study used; questionnaire, interview schedule, observation check list and documents as tools. The use of more than one instrument, which is commonly known as triangulation enabled the study to gain an indication of why a particular behavior pattern that the researcher observed actually occurred (Burgess, 1981). Triangulation is a process of verification that increases validation by incorporating several viewpoints and methods

(Yeasmin, 2012). Triangulation approach that this study adopted did not merely aim at validation but to deepen and widen understanding of particular behavior pattern (Olsen, 2004). According to Denzin (1970) there are four forms of triangulation: data triangulation (retrieve data from a number of different sources to form one body of data), investigator triangulation (using multiple observers instead of a single observer in the form of gathering and interpreting data), theoretical triangulation (using more than one theoretical position in interpreting data) and methodological triangulation (using more than one research method or data collection technique). More than one type of 'triangulation' can be used in the same study. This study used both data triangulation and methodological triangulation. The use of the four instruments maximized the realization of the stated objectives for this study. Both quantitative and qualitative data were collected in this study.

### 3.9.1   Questionnaire

This study used two sets of questionnaire for the trainees and the instructors. Ngechu (2006) argues that a questionnaire makes it possible to collect potential information form a large portion of a group. The questionnaire had closed-ended and open-ended questions that were administered by the researcher. The items developed were able to address the objectives of this study. The questionnaire comprised 5 sections namely; general or demographic information, trainee-based factors, family-based factors, institution-based factors and community-based factors.

### 3.9.2    Interview schedule

Structured and semi-structured questions were administered by the researcher to the respondents. Interviews assist in attainment of highly personalized data and also create opportunities for probing respondents (Gray, 2004). Interviews were arranged with both the VTC Managers and County Directors of Youth Training. The use of interviews provided the researcher with useful and insightful information and also clarified questions obtained in survey component which had been conducted earlier. The researcher organized for prior visits to the respondents in all the sites to establish a good relationship before administering the questions.

### 3.9.3    Observation checklist

The direct observation technique was adopted in this study. The observer plays a passive role by merely recording what occurs. This technique provides an opportunity to document activities, behaviour and physical aspects without having to depend upon people's willingness and ability to respond to questions (Powell and Steele, 1996). Gorman and Clayton define observation studies as those that "involve the systematic recording of observable phenomena or behaviour in a natural setting" (2005, p. 40) This technique was used to observe and verify the availability of various facilities and resources, documents, human resource and various operations or activities expected in the Vocational Training Centre. This was carried out in the selected research sites.

### 3.9.4    Document analysis

According to Kothari (2004), documents are original or official printed or written materials providing specific materials providing specific information or used as a proof of

certain issues. Relevant information for this study was gathered from annual reports, term/annual calendar, time tables, examination results, records of enrolment, and VTC rules or regulations, NVCET curriculum, among others. The documents for analysis were mainly provided by the Managers of the selected VTCs.

## 3.10    Validity and reliability of the instruments

The trustworthiness of this study was established through provisions of validity and reliability of the selected and used research instruments

### 3.10.1  Validity of the Instruments

Kothari (2004) defines validity as the extent to which a test measures what it is actually intended to measure. Similarly, Twycross and Shields (2004) defines validity as the ability of a tool to measure what it sets out to measure. The validity of the research instruments was enhanced through consultation with the experts (supervisors and lecturers) in the School of Education, University of Eldoret. The validation of the instruments focused on content validity which ascertained the quality of the content and availability of all the required information, construct validity which looked at the framing of the instruments and considered aspects of length in relation to the target population, and face validity which checked the appearance of the instrument such as alignment, organization, among others. The suggestions from the experts were incorporated in the preparation of the final questionnaires.

### 3.10.2  Reliability of the Instruments

Reliability is a measure of the degree to which a research instrument yields consistent results after repeated trials (Mugenda and Mugenda, 2003). Orodho (2005) adds that

reliability as a measure of the degree to which a particular measurement procedure gives consistent results or data after repeated trial. The aim of reliability is to minimize random error and, therefore, increase the reliability of the data generated. Mehrens and Lehman (1991) observes that factors that affect reliability include little or no variability in questions within the instrument, too many difficult items in the instrument, imposed time limits in the testing situation, excessively broad content area of measure and poorly written items or questions. In order to enhance the reliability of the research instruments, a test-retest method of the questionnaire for both the trainees and instructors was piloted at Sogorik Vocational Training Centre in Uasin Gishu County, which had similar characteristics as the five VTCs selected for this study. Trochim (2007) argues that pilot testing aims at reducing errors in the research instruments. The scores from both the tests were correlated. When the instruments were correlated, the trainee questionnaire gave Cronbach's alpha (α) coefficient of 0.83 and that of instructors was 0.70, implying an acceptable internal consistency of the instruments which are said to yield data that has high test-retest reliability. To support this coefficient values, DeVellis (2003) argues that acceptable values of alpha range from 0.70 to 0.95.

## 3.11    Data collection procedures

After the proposal of this study was approved by the School of Education, the researcher applied for a research permit from National Council for Science, Technology and Innovation (NACOSTI). For other protocol procedures, the researcher sought permission from the County Commissioners and Chief Officers, Departments of Education in the selected counties for consent to conduct the study in the selected VTCs. The researcher then visited the study sites for familiarization with the target population. After

familiarization, data was collected by adopting mixed research approach. This is the combination of both quantitative and qualitative forms of data to provide a better understanding of a research problem than either quantitative or qualitative data by itself (Creswell, 2012). The survey component was conducted first so as to enrich or facilitate in-depth inquiry during interview or qualitative sessions.

Prior to data collection, five research assistants were trained by the researcher. This ensured that they were familiar with the objectives of the study, instruments and to clarify statements where applicable. The research assistants assisted in the distribution, administration and collection of questionnaires from the respondents. The research assistants also assisted in speeding up the process of data collection. The completed instruments were collected and checked for inconsistencies to verify that data was reliable or reasonable.

## 3.12    Data Analysis

This study sought to investigate the extent to which independent variables influenced the dependent variable, hence the need for descriptive analysis of data. The verified data was edited, collated, coded and summarized using descriptive statistics. Kothari (2004) observes that descriptive statistics provides for meaningful distribution of scores using statistical measures of central tendencies, dispersion and distribution. Quantitative data was analyzed using Statistical Package for the Social Sciences (SPSS). Responses from interviews and open-ended questions on the questionnaire were qualitatively analyzed. Data analysis and findings were reported in chapter four. Data was presented using frequency, percentage and mean distribution tables. Scatter charts were also used.

Relevant documents for this study were looked into and themes related to the study identified and interpreted.

## 3.13    Ethical considerations

This refers to the rules and regulations and conventions that governed the conduct of this study. The researcher requested for an introductory letter from the School of Education to be used to seek permission from various authorities to conduct the study. The researcher applied for a research permit from National Council for Science, Technology and Innovation (NACOSTI).  Consent, permission and approval were sought from the County Commissioners, Chief Officers of Departments of Education at the counties and the Managers of the selected VTCs. The researcher sought for informed consent from the respondents after they had clearly understood the purpose and methods to be used in the study, the risks involved and the demands placed upon them. This study ensured that no respondent was subjected to any risk of unusual stress, embarrassment or any loss of self-esteem. The study further ensured that the subjects remained anonymous and the information provided had the right to confidentiality which was guaranteed by the transmittal letter. The summary of the findings were to be shared with the respondents later.

## 3.14    Summary

This chapter described various aspects of research design and methodology and how they are interrelated to each other. It clearly described research paradigm and research design which were adopted in this study, the study area, the target population, the sampling procedure, the study variables, the reliability and validity of the research instruments

used. The chapter further described the data collection procedures, how data was analyzed and the ethical considerations in this study.

**CHAPTER FOUR**

**DATA PRESENTATION, ANALYSIS, INTERPRETATION AND DISCUSSION**

**4.1     Introduction**

This chapter focuses on presentation, analysis, interpretation and discussion of the collected data. It also discusses the results of this study. This study examined the factors influencing trainees' completion rate VTCs in Kenya with focus on the National Vocational Certificate of Education and Training curriculum. The descriptive statistics were used in this study in which data was presented using frequency, percentage and mean distribution tables. Scatter charts were also used. This chapter involves triangulation of both quantitative and qualitative data and methods so that diverse viewpoints cast light on the factors influencing trainees' completion rate in Vocational Training Centres in Kenya. The chapter begins by presenting questionnaire response rate, demographic information of the respondents and discussion of the results based on the objectives of the study.

**4.2     Response Rate**

The results in Table 4.1 shows questionnaire response rate of the trainee respondents from the five institutions selected for the study. In this study, a trainee response rate of 100% was realized. This was possible because the researcher had made appropriate prior plans with the selected institutions and the research assistants. The researcher administered all the copies of questionnaire with the help of the research assistants together with support from the managements of the institutions selected.

**Table 4.1:** *Response rate on trainee questionnaire*

| Name of the Vocational Training Centre | Number of Questionnaires | | Response |
|---|---|---|---|
| | Issued | Returned | Rate (%) |
| Iten | 40 | 40 | 100 |
| Lugala | 30 | 30 | 100 |
| Mautuma | 3 | 3 | 100 |
| Mogotio | 99 | 99 | 100 |
| Mugen | 10 | 10 | 100 |
| Total | 182 | 182 | 100 |

**Table 4.2:** *Response Rate on Instructor Questionnaire*

| Name of the Vocational Training Centre | Number of Questionnaires | | Response |
|---|---|---|---|
| | Issued | Returned | Rate (%) |
| Iten | 4 | 4 | 100 |
| Lugala | 9 | 9 | 100 |
| Mautuma | 2 | 2 | 100 |
| Mogotio | 17 | 14 | 82 |
| Mugen | 5 | 5 | 100 |
| Total | 37 | 34 | 92 |

The response rate for the instructors as illustrated in Table 4.2 indicates that out of the five Vocational Training Centres selected for the study, only instructors from one polytechnic did not meet 100% response rate. This variation for Mogotio was attributed to the fact that the institution had implemented the highest number of NVCET courses and also had the highest number of trainees enrolled into the programme as compared to the other institutions. It was, therefore, necessary to give instructors more response time to consult and fill the issued questionnaire on matters relating to trainees. Nevertheless, the overall response rate of 92% was realized for the instructors. The response rates for

both the trainees and the instructors were rated as excellent. Though the percentages of responses differ according to the type of study, Mundy (2002) confirms this when he argued that 60% response rate would be marginal, 70% is reasonable, 80% would be good, and 90% would be excellent. Higher response rates tend toward findings that have greater credibility among key stake-holders (Rogelberg and Stanton, 2007). Low response rates jeopardize any attempt to generalize findings in an adequate way" (Pinsonneault and Kraemer, 1993: 94). Hence, it is essential that academic studies consider response rate because it is an important factor in assessing the value of research findings (Baruch and Holton, 2008).

Furthermore, this study realized a response rate of 100% from the organized interviews. All the four County Directors of Youth Training from the four counties and the five Vocational Training Centres Managers responded to the questions that guided the interviews. The success of the interview sessions were as a result of the early contacts made with the respondents, presenting research permit documents, explaining the purpose of the study and booking of appointments in good time with the respective officers.

## 4.3    Demographic Information of the Respondents

This section of the results presents the demographic characteristics of the respondents such as sex, age, level of education, trainees' years of study, instructors' years of teaching experience and courses taught.

## 4.3.1   Distribution of Respondents by Sex

The respondents of this study were both male and female for the trainees and the instructors across the five institutions. Table 4.3 indicates there were 182 trainees of

whom 139 (76.4%) were male trainees while 43 (23.6%) were female trainees. This shows a huge sex disparity which may be as result of high number of traditionally male inclined courses in Vocational Training Centres (VTCs). Simiyu (2015) observed that majority of the courses in YPs were those that culturally favoured male trainees in their choice. These courses include electrical engineering, plumbing, metal work, motor vehicle engineering, carpentry and masonry. The author further observed that the fewer courses that are left to be selected by female trainees are mainly garment making and fashion design.

**Table 4.3:** *Sex Distribution of Trainees*

| Sex of Trainees | Frequency | Percent |
| --- | --- | --- |
| Male | 139 | 76.4 |
| Female | 43 | 23.6 |
| Total | 182 | 100.0 |

As indicated in Table 4.4, the results show that the percentage of male instructors exceeded that of female instructors by a big margin. This may be attributed to the majority (64.7%) of male instructors handling courses deemed to be the preserve of males as observed during data collection. The finding of this study agrees with the report of Ndegwa (1991) that observed that in the 1980's the unemployment rate among females was more than double (24.1%) than that of males (11.7%). This was partly attributed to the lack of training among girls and women. This situation perhaps has led to few female instructors in VTCs in Kenya. To further support the current finding, there was a study done by Dasmani (2011) on the challenges facing technical institutes' graduates in practical skills acquisition in the Upper East Region of Ghana. The study established that

there were 79% male teacher respondents against 21% female male respondents. The author argued that female teachers were underrepresented in technical institute programmes. The few female respondents were teaching Catering and Fashion Designing. According to Masinde (1992), poor female career orientation by the conditioning agents (family, school and society) has compounded the problem of female participation in technical training, and in particular in the fields that have hitherto been the preserve of men. Historically, as asserted by Mgau (1999), female accessibility to educational opportunities has been very low, and worse in science and technological education. The poor orientation and low accessibility of female trainees to science and technical courses may yield fewer female VTC instructors as the case in Kenya today.

The present scenario on the smaller number of female instructors in VTCs as established in this study may be attributed to the reasons argued by Keino (1985). According to the author, the differentiation in course selection is rooted in sex stereotyping world over. Firstly female trainees may be presumed unprepared to cope with science and technical subjects or lack confidence in pursuing masculine courses. Secondly, the school structure and attitudes in co-education institutions may not be supportive of females taking high-tech subjects. Thirdly, lack of female teachers to act as role models in the fields of high-tech training such as mechanical engineering, electrical engineering, building construction, wood and metal technology, motor mechanics and plumbing, may discourage the few who have the interest and aptitude to venture into any of them. Fourthly, due to the fact that there are very few women in technical training institutes, those who wish to venture into the male-dominated courses may become discouraged when they find they are the only one or two female(s) in the course. The arguments of

this author are based on the training point of female trainees. If the input is negatively affected, definitely there will be few female graduates at the output of an educational process which will translate to fewer instructors in VTCs. Therefore, there is need for gender sensitization to all stakeholders in the education sector in order to address the current issue.

**Table 4.4:** *Sex Distribution of instructors*

| Sex of instructors | Frequency | Percent |
|---|---|---|
| Male | 22 | 64.7 |
| Female | 12 | 35.3 |
| Total | 34 | 100.0 |

A male dominated management was observed during the interview sessions with the Vocational Training Centre Managers. All the Managers in the five Vocational Training Centres were male. This finding is consistent with that of Mgau (1999) that revealed that all the Principals of all the seven institutes studied were male. Perhaps lack of female managers in Vocational Training Centres might be a cause for high gender disparities between male and female trainees. There may be need for an urgent action by those in the management of Vocational Training Centres both at county and national levels to look into this issue. This could be done through implementation of the constitutional two-thirds gender rule as entrenched in Kenya's Constitution of 2010, (RoK, 2010). The constitution ensures that not more than two-thirds of members of the elective or appointive bodies shall be of the same gender. The present study also revealed that there was sex disparity among the County Directors of Youth Training interviewed. The three out of the four directors interviewed were males. According to Mueller and Mulinge

(1998), gender inequality is a global concern, and as indicated by the 1995 4th World Conference on Women in Beijing, gender inequalities in developing nations had received much of the attention. The author further argued that throughout colonial era, women in Kenya experienced considerable social, economic and political inequalities relative to men. The author also argued that the previous Kenya's constitution of 1963 did not provide equality for men and women. Despite implementation of Kenya's constitution of 2010 which ensures gender equality, issue of gender inequality still persists in many sectors of the government such as education among others. According to Kibui and Mwaniki (2014), the facts and statistics still indicate that the Kenyan women form a minority of the country's decision making mechanism in all areas including the management of the country's education system and that gender disparity continues to restrain the achievement of gender equity particularly in education development even with the enhanced accessibility since that only forms one part of educational opportunities. Therefore, there is need to government and other stake-holders to continually put more emphasis on the implementation and monitoring of the laws and policies developed to address the issue of gender inequality between men and women.

### 4.3.2    Distribution of respondents by age

This section focuses on the age bracket distribution of both the trainees and the instructors. It also reports the findings on the age brackets of the Managers and the County Directors of Youth Training interviewed.

Table 4.5 shows that majority (45.1%) of the trainee respondents were aged between 15-19 years and 20-24 years (47.3%). Others were aged between 25-29 years (4.9%), 30-34 years (1.6%) and below 15 years (1.1%).

**Table 4.5:** *Distribution of Trainees by age*

| Age distribution | Frequency | Percent |
|---|---|---|
| Below 15 years | 2 | 1.1 |
| 15 - 19 years | 82 | 45.1 |
| 20 - 24 years | 86 | 47.3 |
| 25 - 29 years | 9 | 4.9 |
| 30 - 34 years | 3 | 1.6 |
| Total | 182 | 100.0 |

On the other hand, Table 4.6 indicates that majority (32.4%) of the instructors had their age bracket between 30-34 years while 2.9 % were aged between 55-59 years, 5.9% were aged between 40-44 years and 50-54 years, 14.7% aged between 45-49%, 17.6% aged between 35-39 years and 20.6% were aged between 25-29 years.

**Table 4.6:** *Distribution of Instructors by age*

| Age bracket | Frequency | Percent |
|---|---|---|
| 25 - 29 years | 7 | 20.6 |
| 30 - 34 years | 11 | 32.4 |
| 35 - 39 years | 6 | 17.6 |
| 40 - 44 years | 2 | 5.9 |
| 45 - 49 years | 5 | 14.7 |
| 50 - 54 years | 2 | 5.9 |
| 55 - 59 years | 1 | 2.9 |
| Total | 34 | 100.0 |

Data from the interview with Managers and County Directors of Youth Training shows that two (40%) of the Managers were aged between 35-39 years while each of the other three had their age brackets between 30-34 years, 40-44 years and 45-49 years respectively. Three (75%) of the County Directors had their age bracket between 35-39 years while one (25%) was aged between 50-54 years.

### 4.3.3 Level of study of trainees at Vocational Training Centres

As indicated in Table 4.7, the study revealed that 170 (93.4%) of the trainees sampled were at level 1 of study while 12 (6.6%) were at level 2 of study. The NVCET curriculum in Vocational Training Centre is offered at two levels, each taking 2 years.

**Table 4.7:** *Distribution of Trainees by Level of Training*

| Level of study | Frequency | Percent |
|---|---|---|
| Level 1 | 170 | 93.4 |
| Level 2 | 12 | 6.6 |
| Total | 182 | 100.0 |

### 4.3.4 Year of study of the trainees

The results in Table 4.8 show that 170 (93.4%) of the trainees were at $2^{nd}$ year of study while 9 (4.9%) at $3^{rd}$ year of study and 3 (1.6%) were at $4^{th}$ year of study respectively. The findings to be presented later in sub-section 4.4.10 of this chapter will show that trainees tend to reduce greatly at level 2 of study. This is due to factors such as pregnancy, early marriages, trainee indiscipline cases, lack of fees and basic needs, community's negative attitude towards VTCs, inadequate training facilities, lack of certification at the 2 levels of NVCET, inadequate trained and qualified instructors, too much NVCET content to be covered, among others. These factors emanate from trainees

themselves, trainees' families, the surrounding communities and the VTCs. These findings support those of Yao *et al* (2013) in a study of exploring dropout rates and causes of dropout in upper secondary vocational schools. The study established that low student achievement, low education of parents and financial constraints were the strong determinants of student dropout in TVET.

**Table 4.8:** *Distribution of Trainees by year of study*

| Year of study | Frequency | Percent |
|---|---|---|
| Year 2 | 170 | 93.4 |
| Year 3 | 9 | 4.9 |
| Year 4 | 3 | 1.6 |
| Total | 182 | 100.0 |

### 4.3.5    Highest Academic Qualifications of Instructors

From Table 4.9, the data revealed that majority (52.9%) of the instructors had attained Diploma certificate level while 20.6% had Craft certificate, 14.7% had Artisan certificate and a small number (11.8%) had Degree certificate. These findings differ with those of Ngumbao (2012) in a study of factors influencing youth enrolment levels in public youth polytechnics in Mombasa County, Kenya. The study revealed that 40% of the instructors had Diploma and 33.3% had craft certificate. Perhaps the need for more qualified instructors could have resulted in current results differing with those of the previous study.

**Table 4.9:** *Highest Academic Qualifications of Instructors*

| Academic Qualifications | Frequency | Percent |
|---|---|---|
| Artisan Certificate | 5 | 14.7 |
| Craft Certificate | 7 | 20.6 |
| Diploma | 18 | 52.9 |
| Degree | 4 | 11.8 |
| Total | 34 | 100.0 |

At least 50% of the instructors had obtained a Diploma in Technical Education and 35.3% a certificate in Technical Education. Those who had obtained a Bachelor of Technical/Technology Education were 11.8% while 2.9% had attained Higher National Diploma in Technical Education (Table 4.10). These findings partly agree with those of Metto (2015) who established that 71 % of instructors had Certificate, Trade Test III and above, 18 % had Diploma and 11% had attained degree in Youth Polytechnics in Nandi County. The present study findings disagree with those of Ngumbao (2012) since the study revealed that at least 53.3% of the instructors had a certificate in Technical Education and 6.7% had diploma in Technical Education as their highest professional qualification and the remaining 40% did not have professional qualifications. The improved professional qualifications witnessed in the current study may be due to the need to have more professionally qualified instructors.

**Table 4.10:** *Highest Professional Qualifications of Instructors*

| | Professional Qualifications | Frequency | Percent |
|---|---|---|---|
| i | Certificate in Technical Education | 12 | 35.3 |
| ii | Diploma in Technical Education | 17 | 50.0 |
| iii | Higher National Diploma in Technical Education | 1 | 2.9 |
| iv | Bachelor of Technical/Technology Education | 4 | 11.8 |
| | Total | 34 | 100.0 |

Table 4.11 shows that majority (55.9%) of the instructors had worked for a period ranging between 5-9 years while 5.9% had each worked between 10-14 years and 20-24 years, 11.8% ranged between 15-19 years and 20.6% worked below 5 years. On the interview sessions with VTC Managers and County Directors of Youth Training, the study revealed that all the managers and instructors had worked for a period ranging between 5-9 years.

**Table 4.11:** *Range of years of teaching experience for the instructors*

| Teaching experience | Frequency | Percent |
|---|---|---|
| Below 5 years | 7 | 20.6 |
| 5 – 9 years | 19 | 55.9 |
| 10 – 14 years | 2 | 5.9 |
| 15 – 19 years | 4 | 11.8 |
| 20 – 24 years | 2 | 5.9 |
| Total | 34 | 100.0 |

### 4.3.6 Trade areas currently taught by instructors in VTCs

Table 4.12 shows that majority of the instructors were teaching in the area of Motor Vehicle Technology (17.6%). This percentage will also be translated to the high number

of trainees in this trade area as opposed to other trades. Fashion Design and Garment Making and Electrical and Electronics Technology, each had 14.7% instructors while Metal Processing Technology, Building Technology and Food Processing Technology each had 11.8% instructors. Appropriate Carpentry and Joinery each had 5.9% while Agri-business, Hair Dressing and Beauty Therapy Technology, ICT and Refrigeration and Air Conditioning, each had 2.9%.

**Table 4.12:** *Trade areas currently taught by instructors in VTCs*

| | Trade areas taught | Frequency | Percent |
|---|---|---|---|
| i | Agri-business (Modern methods of Agriculture) | 1 | 2.9 |
| ii | Appropriate Carpentry and Joinery | 2 | 5.9 |
| iii | Building Technology | 4 | 11.8 |
| iv | Electrical and Electronics Technology | 5 | 14.7 |
| v | Fashion Design and Garment Making Technology | 5 | 14.7 |
| vi | Food processing Technology | 4 | 11.8 |
| vii | Hair Dressing and Beauty Theurapy Technology | 1 | 2.9 |
| viii | Information and Communication Technology | 1 | 2.9 |
| ix | Metal Processing Technology | 4 | 11.8 |
| x | Motor Vehicle Technology | 6 | 17.6 |
| xi | Refrigeration and Air Conditioning | 1 | 2.9 |
| | Total | 34 | 100.0 |

The interviews with the Managers established that each of the VTC had not implemented the 12 NVCET courses. For instance, Mogotio had implemented 10, Iten 4, Mugen 3, Lugala 8 and Mautuma 2. The success of Mogotio was attributed to the institution having adequate (72 acres) land for expansion which was initially donated by the community,

good political will from the national and community leadership, donations, for example, computers and water project, effective Board of Management, availability of plans to regularly improve the institution and a cordial working relationship among the administration, instructors and the trainees. The interviews with the County Directors revealed that Baringo had implemented 11, Elgeyo Marakwet 5, Nandi 3 and Kakamega 10 courses. Leatherwork Technology had not been implemented in all the five counties as it was perceived to be a course meant for disabled people. It was observed during the survey that some courses implemented had very few trainees sometimes as low as one. Managers attributed lack of implementation of all the courses due to the following reasons;

i   Lack of trained and qualified instructors

ii  Lack of trainees to enroll in some courses due to stereotypes or negative perception, for instances, Leather work Technology was perceived to be for the disabled people and Appropriate Carpentry and Joinery for a certain community

iii Lack of facilities or infrastructure to implement the course

iv  Transfer of instructors stops implementation of some courses

v   Some courses implemented are demand driven

vi  NVCET courses are expensive to implement. High cost of material fee and change of examination materials every year.

vii Majority of the students prefer practical oriented courses, for example, Trade tests

viii Poor remuneration of instructors hired by Board of Managements

ix  Instructors discourage students because of more work involved in NVCET courses

x   Trainees prefer short courses without continuity such Trade Test Grades 1, 2 and 3

The County Directors gave the following as reasons for lack of implementation of all the courses. Majority of the responses agrees with those of the Managers;

i   Lack of trained and qualified staff

ii   Negative attitude towards some courses, e.g. leather work for the disabled

iii   Lack of modern equipment and facilities to implement some courses such as leather work and refrigeration and other courses

iv   Lack of capacity to sustain some programmes like Agri-business due to intensive capital investment and recurrent costs

v   Insufficient sensitization of available courses and their benefits

vi   Generally NVCET is expensive to implement, high cost of material fee and examination fee

vii   Poor perception of VTCs as second class education

viii   Some courses such as refrigeration and air conditioning require strong background in sciences

Both the Managers and County Directors said that some courses had very few trainees because expectation of the trainees beyond NVCET was not very clear and also lack of facilities and equipment to support many trainees through the programme. Other reasons given by the County Directors include;

i   Some instructors not sure of what they are teaching, and

ii   Some courses not meeting the trainees' expectation of being easy or practical oriented.

These observations could be due to lack of clear understanding of the NVCET curriculum by some of the stakeholders.

Some of the reasons given above agree with previous studies. According to Kigwilu and Githinji (2015), teacher factors such as teacher qualifications, teaching experience and teacher levels of motivation had a high influence on the implementation of Artisan and Craft curricular. Furthermore, poor implementation of TVET curriculum is largely due to inadequacy of experts, irrelevant text books, ineffective teaching methods, scarcity of learning tools for practical-oriented exercises and poor funding of institutions (Gabadeen and Raim, 2012).

### 4.3.7 Support subjects currently taught by Instructors in VTCs

On the teaching of support subjects, which is extra work besides teaching the trade areas, the study, as shown in Table 4.13, revealed that majority of the instructors 32.4% and 29.4% are teaching Entrepreneurship Skills and Technical Drawing respectively. Others were teaching Life Skills (20.6%), Communication Skills (11.8%) and the minority (5.9%) were teaching ICT studies. Given that majority of the instructors in VTCs selected are the ones handling NVCET curriculum together with the trade tests, while the others handle trade tests only, it is evident that some of the instructors are overloaded in handling support subjects besides their trade areas. The cases of overloading are seen in Communication skills, Life Skills and ICT since they are taught to all students. The few instructors available have to teach many hours per week to cover all the students taking NVCET courses. The study further established that there are instructors who are teaching two or even more support subjects.

**Table 4.13:** *Support subjects currently taught by instructors in VTCs*

| NVCET Support subjects in VTCs | | Frequency | Percent |
|---|---|---|---|
| i | Communication Skills | 4 | 11.8 |
| ii | Entrepreneurship Skills | 11 | 32.4 |
| iii | Life Skills | 7 | 20.6 |
| iv | ICT Studies | 2 | 5.9 |
| v | Technical Drawing | 10 | 29.4 |
| | Total | 34 | 100.0 |

**4.3.8    Trade areas that the instructors trained in before becoming instructors in VTCs**

The study in this item as shown in Table 4.14 revealed that the instructors had trained in the areas similar or related to their areas of teaching as shown in Table 4.12. The study also established on the qualitative response on the instructors' questionnaire that some instructors had done other courses besides their trade areas. For instance, an instructor who had attained Bachelor of Food Technology Science had also done a course in Industrial Management. Further, an instructor who had attained Artisan Certificate in Motor Vehicle Technology had also done Guiding and Counselling Course. Some of these extra courses enabled some instructors to handle well their trade areas as well as general education or support subjects in the VTCs.

**Table 4.14:** *Trade area you trained in before you became an instructor in VTC*

| Trade areas trained in by instructors | Frequency | Percent |
|---|---|---|
| i Agri-business (Modern methods of Agriculture) | 1 | 2.9 |
| ii Appropriate Carpentry and Joinery | 2 | 5.9 |
| iii Building Technology | 4 | 11.8 |
| iv Electrical and Electronics Technology | 5 | 14.7 |
| v Fashion Design and Garment Making Technology | 5 | 14.7 |
| vi Food processing Technology | 4 | 11.8 |
| vii Hair Dressing and Beauty Therapy Technology | 1 | 2.9 |
| viii Information and Communication Technology | 1 | 2.9 |
| ix Metal Processing Technology | 4 | 11.8 |
| x Motor Vehicle Technology | 6 | 17.6 |
| xi Refrigeration and Air Conditioning | 1 | 2.9 |
| Total | 34 | 100.0 |

## 4.4 Trainee-based factors and trainees' completion rate in VTCs in Kenya

The first objective was to determine the influence of trainee-based factors on trainees' completion rate in Vocational Training Centres in Kenya with focus of the NVCET curriculum. The following sub-sections focus on how trainee-based factors such as entry qualification, pregnancies, early marriages, drug and substance abuse, employment in the course of study, among others can influence trainees' completion rate.

**4.4.1   Highest level of academic qualification of trainees before enrolling in VTCs**

Table 4.15 revealed that majority (64.3%) of the trainees who enrolled in VTCs had attained KCPE at Primary school level while 26.4% had KCSE qualification and 9.3% had dropped out of secondary school. Therefore, this study revealed that majority of the trainees in VTCs are primary school leavers. These findings agree with those of Okwemba (2014), who found out that more than half of the students who enroll in YPs in Kakamega County are primary school graduates. In Okwemba's study, 57% were class eight graduates, 25% were form four graduates, 13% were students who had dropped out of secondary level of education and about 6% were students who had dropped out of primary school level of education. However, the present findings disagree with those of Luyali, Olel and Othuon (2015. The study established that 45.45 % of trainees enrolled in YPs in West Pokot County were secondary school drop outs, 27.27 % were primary school drop outs, 18.18 % were *Jua Kali* Artisans and 9.08 % were Trained Artisans. The high number of trainees who dropped out of secondary school in the county and joined YPs was attributed to ignorance and retrogressive cultural practices like cattle rustling, early marriages and Female Genital Mutilation.

**Table 4.15:** *Highest level of trainees' academic qualifications before enrolling in VTCs*

| Academic Qualifications | Frequency | Percent |
|---|---|---|
| Primary Education (K.C.P.E.) | 117 | 64.3 |
| Dropped out of Secondary School | 17 | 9.3 |
| Secondary Education (K.C.S.E.) | 48 | 26.4 |
| Total | 182 | 100.0 |

**4.4.2   Number of trainees and their qualification before enrolling in VTCs**

The high number (77%) of standard eight leavers joining VTCs to do NVCET programme as compared to other qualifications is further revealed in Table 4.16 from 2008 to 2015. The statistics in Table 4.16 were collected from the institution for the last eight years with the use of questionnaire for VTC instructors. These findings agree with those of Okwemba (2014) which established that majority (57%) of the trainees who joined Youth Polytechnics in Kakamega County were Class eight leavers, 25% were Form four leavers, 13% were trainees who dropped out of Secondary level of education and 6% were those trainees that dropped out of Primary school level of education.

Since 2008, the VTCs have provided an avenue for Class 8 leavers, Form four leavers and those who dropped out of secondary school to pursue their careers. This is an indication that the programmes offered in VTCs are relevant for different levels of age groups of youths and any other category of people who want to further their education and training.

**Table 4.16:** *Number of trainees and their qualification before enrolling in VTCs*

| Highest Level of Qualification | Year of Enrolment | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| i  Secondary Education (KCSE) | 9 | 24 | 21 | 31 | 30 | 41 | 30 | 32 | 218(12%) |
| ii  Dropped out of Secondary School | 11 | 26 | 25 | 30 | 33 | 18 | 27 | 36 | 206(11%) |
| iii Primary Education (KCPE) | 60 | 125 | 131 | 169 | 227 | 203 | 244 | 248 | 1407(77%) |

**4.4.3 Range of marks scored in KCPE by trainees who participated in the study**

This study revealed that a high number of trainees (37.9% and 36.3%) scored marks ranging between 201-250 and 251-300 respectively in KCPE as shown in Table 4.17. Others had scored between 000-050 (0.5%), 051-100 (0.5%), 351-400 (1.6%), 101-150 (2.7%), 301-350 (7.7%) and 151-200 (12.6%). This study has revealed that a bigger percentage of trainees who scored more than 200 marks in KCPE are admitted to VTCs. The choice of trainees to pursue training in VTC could be due to the need for them to acquire basic skills for meaningful employment or lack of adequate fees to pursue secondary education.

**Table 4.17:** *Range of marks for the trainees when completed primary education*

| Range of marks | Frequency | Percent |
|:---:|:---:|:---:|
| 000 - 050 | 1 | .5 |
| 051 - 100 | 1 | .5 |
| 101 - 150 | 5 | 2.7 |
| 151 - 200 | 23 | 12.6 |
| 201 - 250 | 66 | 36.3 |
| 251 - 300 | 69 | 37.9 |
| 301 - 350 | 14 | 7.7 |
| 351 - 400 | 3 | 1.6 |
| Total | 182 | 100.0 |

**4.4.4 Range of marks scored by trainees in KCPE from 2008 to 2015**

Based on the instructors' responses on trainee range of marks in KCPE for the last eight years (Table 4.18), majority (42.6%) of the enrolled trainees had scored marks ranging from 201-250 while 33.9% had scored marks between151-200. Other scores were 000-050 (0.3%), 301-350 (0.6%), 051-100 (2.3%) and 251-300 (6.1%). These observations

indicate that trainees enrolled with marks between 201-250 and 251-300, increased steadily up to 2014. This could be because of the need by the VTCs to have trainees with better qualification to be able to pursue NVCET courses to completion.

**Table 4.18:** *Range of marks scored by trainees in KCPE from 2008 to 2015*

| Range of Marks | Year of Enrolment | | | | | | | | Total |
|---|---|---|---|---|---|---|---|---|---|
| | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | |
| 451 – 500 | | | | | | | | | 0(0%) |
| 401 – 450 | | | | | | | | | 0(0%) |
| 351 – 400 | | | | | | | | | 0(0%) |
| 301 – 350 | | | | 1 | 2 | 1 | | 5 | 9(0.6%) |
| 251 – 300 | 4 | 7 | 2 | 5 | 12 | 20 | 26 | 15 | 91(6.1%) |
| 201 – 250 | 57 | 69 | 63 | 78 | 86 | 91 | 113 | 81 | 638(42.6% |
| 151 – 200 | 8 | 17 | 42 | 51 | 98 | 88 | 89 | 114 | 507(33.9%) |
| 101 – 150 | 11 | 25 | 27 | 29 | 30 | 45 | 27 | 18 | 212(14.2%) |
| 051 – 100 | 7 | 10 | 1 | 5 | 5 | 3 | 3 | 1 | 35(2.3%) |
| 000 – 050 | | | | 3 | | | | 1 | 4(0.3%) |

## 4.4.5   Courses currently taken by trainees in the selected VTCs

Majority (29.7%) of the trainees as shown in Table 4.19 were pursuing Motor Vehicle Technology course while Electrical and Electronics Technology were 19.2%, Building Technology 14.3%, Food Processing Technology 13.2%, Fashion Design and Garment Making 7.1%, Metal Processing Technology 6.6%, Appropriate Carpentry and Joinery 4.4%, Hair Dressing and Beauty Therapy 3.3%, Refrigeration and Air Conditioning 1.6% and minority Agri-business were 0.5%. These observations corroborate with those of Ngumbao (2012) in a study of factors influencing trainee enrolment levels in Mombasa County, Kenya. The study revealed that Automotive (41.5%) and Electrical (37.1%) were

the most popular courses in YPs in Mombasa County. Others were textile (7.8%) and Plumbing (6.8%). However, the findings of the present study differ with those of Maronga, Maroria and Nyikal (2015) in a study on critical survey on enrolment in Youth Polytechnics in Kisii Central Distict, Kenya. The study established that 35% of the trainees were enrolled in Tailoring and Dress making, 15% in Carpentry and Joinery, 14% in Masonry and 13% were enrolled in Motor Vehicle Mechanics. Further, a study by Luyali, Olel and Othuon (2015) also differs with the findings of the present study. This study investigated enrolment trends in Youth Polytechnics in West Pokot County, Kenya. The study revealed that Tailoring and Dress making had the highest enrolment (58.93%) among the youths in West Pokot County while Masonry was the second most popular course which accounted for 19.05% trainees, 11.31% were enrolled in Carpentry and Joinery, and Mechanics was the least popular course that accounted for 5.95% trainees.

The studies discussed have revealed that popularity of courses differed from one county to another. Some of the reasons as indicated in the reviewed studies were due to increased demand for unique services such as tailoring and dress making and the need for skilled carpentry and joinery personnel across the counties. Other reasons could be cultural and emerging local needs which are unique from one region to another.

**Table 4.19:** *Courses currently taken by trainees in the selected VTCs*

| Course currently taken by trainees | Frequency | Percent |
|---|---|---|
| i Agri-business (Modern methods of Agriculture) | 1 | 0.5 |
| ii Appropriate Carpentry and Joinery | 8 | 4.4 |
| iii Building Technology | 26 | 14.3 |
| iv Electrical and Electronics Technology | 35 | 19.2 |
| v Fashion Design and Garment Making Technology | 13 | 7.1 |
| vi Food processing Technology | 24 | 13.2 |
| vii Hair Dressing and Beauty Therapy Technology | 6 | 3.3 |
| viii Metal Processing Technology | 12 | 6.6 |
| ix Motor Vehicle Technology | 54 | 29.7 |
| x Refrigeration and Air Conditioning | 3 | 1.6 |
| Total | 182 | 100.0 |

As earlier indicated, Leather work Technology had not been implemented due to negative perception of the course, lack of facilities and also lack of trained and qualified instructors. Information and Communication Technology is not captured here since the first group of trainees are now in year one and did not form part of the selected trainees. Other courses such as Agri-business had very few trainees due to reasons given earlier which include lack of adequate sensitization on the courses offered and lack of clear employment prospects.

In one of the qualitative questions on the questionnaire, the trainees were asked to give reasons for taking any of the courses under NVCET curriculum at VTC. The trainees gave the following reasons;

   i   To acquire knowledge and gain technical skills

   ii   They liked the course due to personal interest

iii  They wanted to have a better life in future or earn a living

iv  To be self-employed after course completion

v  They were their career choices

vi  They were marketable and applicable

vii  They were within their abilities

viii To make them professional

ix  To be employed or look for a job

Another question asked the trainee respondents to highlight what they would do after completing courses at VTCs. These respondents highlighted the following based on the strength of responses as their future plans;

i  Open their own companies or workshops

ii  Look for jobs to be employed

iii  Further their education

iv  Be self-employed

v  Be professionals, for example, engineers

Based on the above responses, it is clear that the trainees are very aware of the many avenues that they can venture into after completing NVCET courses in VTCs. The most popular response was to open own companies or workshops, followed by look for jobs to be employed and the third was to further education. The findings of this study are closely related to those of Ngumbao 2012. Ngumbao's study revealed that majority (73.7%) of trainees expected to be employed after graduating from YP while 18.0% trainees expected to further their education. Further, the findings of the studies by Maronga,

Maroria and Nyikal (2015) and Luyali, Olel and Othuon (2015) also supported to some extent with the findings of the present study. These studies revealed that some courses such Tailoring and Dress making, Masonry, Carpentry and Joinery were very popular as demonstrated by the increased enrolment because of the rising demand for such services across the counties.

Therefore, looking for jobs to be employed by the trainees appears to be very popular option after completing courses in VTCs. Perhaps there is need to relook into the component of self-employment by all stakeholders because it appears not to be suggested by many trainees as an alternative option for trainees after completing courses in VTCs. This is because the paid jobs may not be able to guarantee job opportunities for all the graduates of Vocational Training Centres.

### 4.4.6   Challenges associated with Entry Qualification of trainees

Majority (61.5%) of the trainees as shown in Table 4.20 indicated that entry qualification to VTCs did not give them challenges in the courses they are pursuing. Though 38.5% indicated that they had challenges in the courses enrolled in VTCs due to their entry qualifications, this is not a small number to ignore. Rumberger and Lim (2008) argued that poor academic performance in early schooling is one of the strongest predictors of dropping out. Therefore, there may be need for early interventions in early years of schooling so as to admit trainees with better qualifications to VTCs. Also, reviewing of the curriculum to take care of trainees with lower qualification might be another option.

**Table 4.20:** *Challenges associated with Entry Qualification of trainees*

| Challenges with Entry Qualification | Frequency | Percent |
|---|---|---|
| Yes | 70 | 38.5 |
| No | 112 | 61.5 |
| Total | 182 | 100.0 |

The next items show specifically which areas trainees had challenges and highlight possible solutions to them. One of the qualitative items asked instructors to give their own views on the challenges experienced by trainees in theory and practical in their trade areas. Majority (97.1%) of the instructors in Table 4.21 revealed that trainees with lower marks had challenges in the theory component of their courses. This shows that trainees admitted to VTCs with lower marks may have challenges in the theory components of their courses because of their low intellectual abilities.

**Table 4.21:** *Challenges associated with Entry Qualification of a trainee with low mark in theory*

| Challenges with Entry Qualification in theory | Frequency | Percent |
|---|---|---|
| Yes | 33 | 97.1 |
| No | 1 | 2.9 |
| Total | 34 | 100.0 |

The result in Table 4.22 shows that 85.3% of the instructors indicated that trainees with lower marks did not have challenges in practical work while 14.7% said that such trainees had challenges in practical. Perhaps given the low entry qualification of some trainees, it appears that majority of them do not find practical work more challenging as compared to theory work. Therefore, to increase chances of many trainees completing

their courses in VTCs, there could be need to put more emphasis on practical work than theory.

**Table 4.22:** *Challenges associated with Entry Qualifications of a trainee with lower*
*KCPE entry mark in practical*

| Challenges with Entry Qualification in practical | Frequency | Percent |
|---|---|---|
| Yes | 5 | 14.7 |
| No | 29 | 85.3 |
| Total | 34 | 100.0 |

To elaborate further on the challenges facing trainees with low marks in theory and practical, trainees and instructors were asked to state specific challenges. The trainees highlighted the following as some of the challenges associated with theory;

i   Difficulty in understanding symbols used, calculations, explanations during theory lessons, questions during examination, some topics

ii   Lack of adequate reading materials such as books, and

iii   Difficulty in reading materials including books and writing notes, assignments and examination

The instructors cited the following as some of the challenges experienced by trainees in theory;

i   Challenges in mastering the content level, understanding the technical language used and recalling what has been taught

ii   Difficulty in reading and understanding what has been taught

iii   Lack of expression in writing in English language. Inability to communicate in writing. The trainees had difficulty in sentence construction

     iv   Lack of understanding the questions or terms used during examination. Hence, the trainees will not be able to respond correctly to questions asked.

The following were the challenges in practical, as stated by the trainees;

     i   Lack of acquisition of some skills to be applied during practical lessons

     ii   Lack of adequate materials, tools and equipment to be used during practical lessons

     iii   Less or no practical lessons in VTCs or less explanations on practical work by the instructors

This perception by the trainees could be due to instructors not able to impart relevant skills to them. This could be as a result of lack of trained and qualified instructors and lack of adequate materials and equipment for training which led to no or less practicals.

Instructors indicated that the trainees experienced the following challenges in practical;

     i   Difficulty in interpreting drawings and measurements, and reading instructions

     ii   Not able to apply theory into practical, and

     iii   Lack of equipment such as lathe machine for practical lessons

The position taken by the instructors could be due to their perception towards trainees as not having higher cognitive abilities to be able to pursue NVCET courses. Also, the instructors viewed VTCs as not able to supply the necessary equipment such as Lathe machine for training.

One of the items asked the trainees and instructors to give possible solutions to the challenges faced by trainees in theory and practical lessons. The trainees gave the following as possible solutions to theory lessons;

i    There is need for more emphasis on learning theory, through reading more books and more emphasis on reading and writing. Instructors also need to give more explanations when teaching

ii    Use both English and local languages when teaching. Also use simple language when presenting the lessons.

iii    Have less theory in the curriculum

iv    The VTCs to provide more reading materials including books.

v    Improve on student-teacher relationship to easily address challenges faced by trainees in their courses. Good working relationship between trainees and instructors may yield positive results which may include improved trainees' completion rate because of support from the instructors

vi    Employ more instructors to handle both theory and practical lessons

The instructors' solutions to challenges related to theory work were closely related to those of the trainees and were as outlined below;

i    There is need for learners to have good foundations in areas such as languages at primary school level

ii    Vocational Training Centres should emphasize on teaching communication skills. This approach may improve both trainee verbal and written communication skills.

iii    Practicals should be enhanced in the curriculum. As indicated previously by the respondents on the challenges associated with theory with trainees with less marks, there is need for more practical when teaching

iv    There is need to use simple terms when writing books and setting examinations that target VTC trainees.

v    Vocational Training Centres should create extra time for revisions or remedial especially for slow learners

vi   Teach English and Kiswahili languages in VTCs. Reading and grammar should be emphasized when teaching these subjects.

vii  Use Kiswahili and local language during instruction or teaching. Use simple language, and

viii Admit students with better grades or high marks in national leaving examinations

On the suggested solutions to practical challenges faced by the trainees, the trainees suggested the following;

i    The VTCs need to emphasize on more practicals for the students to perfect their skills

ii   Provision of adequate materials, tools and equipment for practical lessons, and

iii  Provision of adequate human resource, labs and workshops to ease practical lessons

On the other hand, the instructors highlighted the following as possible solutions to challenges faced by trainees during practical lessons;

i    Instructors should spend more time on one practical lesson before introducing another

ii   Government should equip VTCs with materials, tools and equipment

iii  Trainees should be exposed to more drawings and plans to improve their interpretation

iv  There is need to emphasize more practical and less theory

**4.4.7    Views on the Entry qualification of Vocational Training Centre Trainees**

The study sought instructors' views on the entry qualifications of trainees into Vocational Training Centres (Table 4.23). When the items seeking the instructors views were analyzed, majority of the instructors strongly agreed that trainees with higher qualification find training easier and that trainees with higher qualifications under the content being taught understand faster than those with lower qualifications as shown by the mean scores of 4.44 and 4.18 respectively. Instructors also agreed that trainees with lower qualification find training difficult as indicated by the mean score of 3.32. However, instructors disagreed that entry qualifications of Vocational Training Centres' trainees influenced whether one will complete the course or not and that occasionally trainees with lower qualifications drop out of VTCs as shown by the mean scores of 2.74 and 2.62 respectively. These scores indicate that some trainees may drop-out of VTCs as a result of low scores at KCPE during enrolment.

**Table 4.23:** *Instructors' views on Entry Qualifications of VTC trainees*

| Instructors' views on trainee entry qualification | N | Mean |
|---|---|---|
| i    Entry Qualifications of Vocational Training Centre trainee influences whether one will complete the course or not | 34 | 2.74 |
| ii   Trainees with higher qualification find training easy | 34 | 4.44 |
| iii  Trainees with lower qualification find training difficult | 34 | 3.32 |
| iv   Trainees with higher qualification under the content being taught understand faster than those with lower qualification | 34 | 4.18 |
| v    Occasionally trainees with lower qualification drop out of VTCs | 34 | 2.62 |
| N | 34 | |

From the findings shown in Table 4.24, the respondents agree that trainees with higher qualification find training easy and that trainees with higher qualifications under the content being taught understand faster than those with lower qualifications as shown by the mean scores of 3.39 and 3.18 respectively. The respondents disagreed that entry qualifications of Vocational Training Centre trainees influences whether one will complete the course or not and that trainees with lower qualification find training difficult and that occasionally trainees with lower qualification drop out of VTCs as indicated by the mean scores of 2.89, 2.97 and 2.53 respectively.

The findings in Table 4.23 and 4.24 revealed that trainees with higher qualification find training easier and that trainees with higher qualification under the content being taught understand faster than those with lower qualification. The findings of this study agree with those of Alexander, Entwisle, and Olson (2001) and Lloyd (1978) who found out that academic performance plays a major role in the decision to leave school. The authors further noted that the relationship between poor academic achievement and early leaving was well established in the international literature. Therefore, from the findings of these authors and those of the current study, it can be concluded that trainees with higher qualification are more likely to remain in VTCs for a longer time because of understanding easily the content being taught.

**Table 4.24**: *Trainees' views on Entry Qualification of VTC trainees*

|     | Trainees' views on Entry Qualification of Trainees | N | Mean |
| --- | --- | --- | --- |
| i | Entry Qualification of Vocational Training Centre trainee influences whether one will complete the course or not | 182 | 2.89 |
| ii | Trainees with higher qualification find training easy | 182 | 3.39 |
| iii | Trainees with lower qualification find training difficult | 182 | 2.97 |
| iv | Trainees with higher qualification under the content being taught understand faster than those with lower qualification | 182 | 3.18 |
| v | Occasionally trainees with lower qualification drop out of VTCs | 182 | 2.53 |
|     | N | 182 | |

## 4.4.8    Suggestion on the Entry Qualification of a youth seeking training in VTCs

The results shown in table 4.25 show that majority (58.8%) of the instructors suggested that the trainee seeking enrolment in VTCs to take a NVCET course should score between 201-250 marks while others (11.8%) suggested that the trainee should score a mark ranging between 251-300. On the other hand, 8.8% suggested 101-150, each 5.9% of marks between 151-200 and 051-100, and 8.8% did not give a response. As reported in Okemba (2014), majority (89.4%) of standard eight graduates who joined YPs had scored below average mark at KCPE and very few (10.6%) of the trainees had scored average and above average mark. Given the high number of trainees who score marks below average at KCPE and as seen earlier from the field data that trainees at VTCs scored as low as marks between 0 to 50 (Tables 4.17 and 4.18), there is need to suggest a minimum entry mark for those applying to pursue NVCET courses. NVCET courses are more demanding as compared to other programmes such as Trade Tests. Otherwise, VTCs as seen in sub-section 4.7.1 show that they are institutions that are meant for failures, students who cannot score the minimum mark to be admitted to secondary school.

Therefore, there could be need to make NVCET curriculum more formal and with clear requirements for admission so as to improve image of VTCs in Kenya.

**Table 4.25:** *Instructors' suggestions on entry qualification*

| Suggested Entry Qualification | | Frequency | Percent |
|---|---|---|---|
| | 051-100 | 2 | 5.9 |
| | 101-150 | 3 | 8.8 |
| | 151-200 | 2 | 5.9 |
| | 201-250 | 20 | 58.8 |
| | 251-300 | 4 | 11.8 |
| | Total | 31 | 91.2 |
| Missing | System | 3 | 8.8 |
| | Total | 34 | 100.0 |

The findings of the study in Table 4.26 revealed that majority of the respondents suggested a mark of between 201-250 (26.4%) and 251-300 (22.5%). The current minimum requirement for one to do any course under NVCET curriculum is attainment of KCPE certificate without any specific mark. As suggested by majority of the respondents, the results in tables 4.25 and 4.26 clearly indicated that any trainee seeking admission into VTC should score a mark between 201 and 300 at KCPE. This is also corroborated with responses from the interview sessions with the Managers and the County Directors where some of them suggested that the trainees should score at least 200 marks before enrolling to VTCs.

**Table 4.26:** *Trainees' suggestions on entry qualification*

| Trainees' Suggested Entry Qualification | | Frequency | Percent |
|---|---|---|---|
| | 000-050 | 1 | .5 |
| | 051-100 | 6 | 3.3 |
| | 101-150 | 6 | 3.3 |
| | 151-200 | 21 | 11.5 |
| | 201-250 | 48 | 26.4 |
| | 251-300 | 41 | 22.5 |
| | 301-350 | 13 | 7.1 |
| | 351-400 | 1 | .5 |
| | 401-450 | 6 | 3.3 |
| | 451-500 | 3 | 1.6 |
| | Total | 146 | 80.2 |
| Missing | System | 36 | 19.8 |
| | Total | 182 | 100.0 |

## 4.4.9 Trainee enrolment, progression and completion levels in Vocational Training Centres

The number of trainees enrolled from 2008 to 2014 is shown in Figure 4.1. This figure shows that trainee enrolment has been increasing over the years in the selected VTCs. The total annual trainee enrollments for the period between 2008 and 2014 were as follows: 2008 (167), 2009 (198), 2010 (255), 2011 (303), 2012 (332), 2013 (309) and 2014 (393). The slight drop of trainees in 2013 may have been due to a drop in youths joining VTCs from Primary schools.
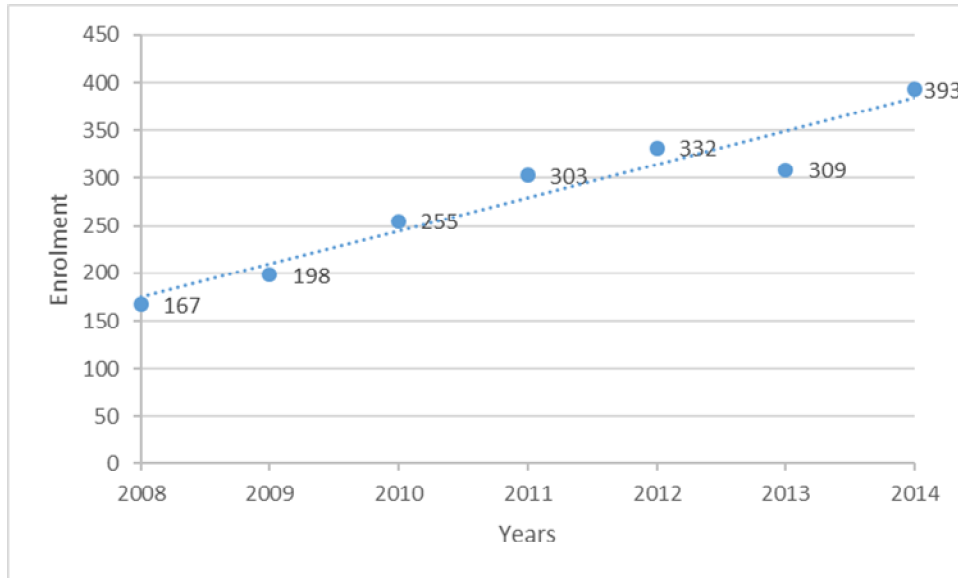
*Figure 4.1*. **Trainee enrollments annually from 2008-2014**

The completion rates of trainees at level 1 from 2009-2015 are presented in Figure 4.2. The findings show decrease in trainees' completion rate from 2009 to 2015. In 2009, 85.63% of the trainees completed level 1, 2010 (70.20%), 2011 (80.39%), 2012 (76.24%), 2013 (66.27%), 2014 (66.34% and 2015 (63.61%). This reduction in the completion rates was attributed to the trainee-based, family-based, institution-based and community-based factors as outlined by the trainees, instructors, Managers and the County Directors in following sub-section 4.4.10.
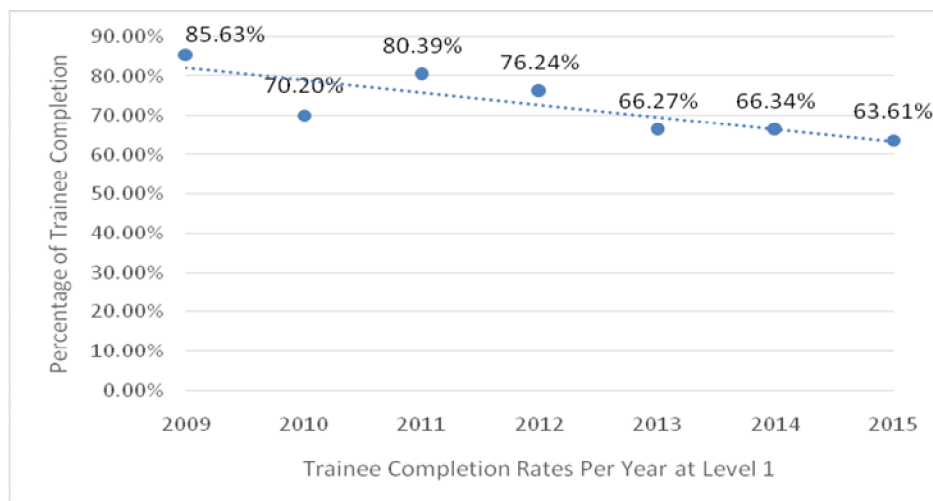
*Figure 4.2.* **Trainees' Completion rate annually at Level 1 from 2009-2015**

Figure 4.3 shows trainees' completion rate at level 2. The completion rates have been slightly improving over the years. However, this shows a huge number of wastage of the trainees who are enrolled into the NVCET curriculum. Completion rate in 2011 was 2.99%, 2012 (2.53%), 2013 (2.75%), 2014 (6.60%) and 2015 (8.73%). The slight improvement on completion was attributed to the awareness created by the instructors on the need to move to level 2 and get a certificate to be able to progress to other levels of education or get meaningful employment. The other reason for slight improvement was promising the trainees of the curriculum review to look into the course content and the duration of the programme as mentioned by some of the instructors.
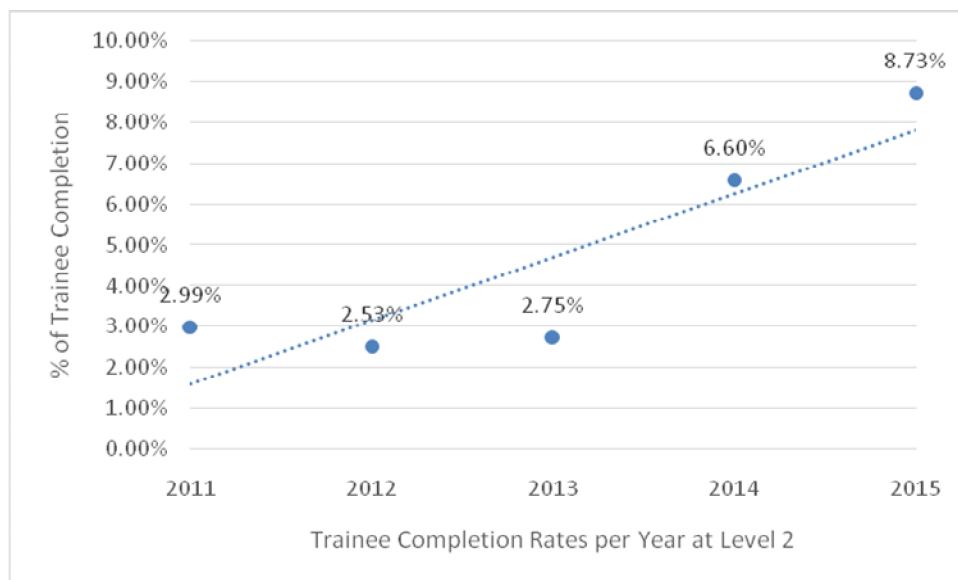
*Figure 4.3.* **Trainees' Completion Rate annually at Level 2 from 2011-2015**

**4.4.10  Reasons for trainee drop out in Vocational Training Centres**

The results in Table 4.27 revealed that female trainees dropped out of Vocational Training Centres because of pregnancy, indiscipline and lack of fees as shown by mean scores of 3.20 and 3.33 and 3.62 respectively. Respondents also agreed that male trainees dropped out of Vocational Training Centre because of indiscipline and lack of fees as indicated by mean scores of 3.47 and 3.63. The respondents disagreed that male trainees dropped out of the VTCs because of pregnancy (mean=2.21) and employment (mean=2.88). The respondents further disagreed that female trainees dropped out of the VTCs because of employment as indicated by a mean score of 2.72. These results relate to those of Morara and Chemwei (2013) who found out that pregnancy, early marriage, work, lack of money for uniform, peer influence, indiscipline, poor parental care, among others caused girls to drop out of primary schools in Kenya. These previous findings have demonstrated that challenges facing girls in primary schools are similar to those facing

female trainees in Vocational Training Centres. Therefore, this implies that similar solutions could be applied to different levels of educational institutions.

**Table 4.27:** *Trainees' views on the causes of trainee drop out from Vocational*

*Training Centres*

| Causes of trainee drop out | N | Mean |
|---|---|---|
| i  Female trainees drop out of this VTC because of pregnancy | 182 | 3.20 |
| ii  Male trainees drop out of this VTC because of pregnancy | 182 | 2.21 |
| iii  Female trainees drop out of this VTC because of indiscipline | 182 | 3.33 |
| iv  Male trainees drop out of this VTC because of indiscipline | 182 | 3.47 |
| v  Female trainees drop out of this VTC because of employment | 182 | 2.72 |
| vi  Male Trainees drop out of this VTC because of employment | 182 | 2.88 |
| vii  Some female trainees drop out of VTCs because of lack of fees | 182 | 3.62 |
| viii  Some male trainees drop out of VTCs because of lack of fees | 182 | 3.63 |
| N | 182 | |

Results on the causes of trainee drop out shown in Table 4.28 revealed that female trainees dropped out of VTCs because of pregnancy and employment as indicated by mean scores of 3.44 and 3.06 respectively. The study further revealed that male trainees dropped out of VTCs because of indiscipline and employment as shown by mean scores of 3.65 and 3.26 respectively. Respondents strongly disagreed that male trainees dropped out of VTCs because of pregnancy (mean=1.32) and that female trainees dropped out of VTCs because of indiscipline (mean=2.94). The respondents viewed male trainees not

affected mainly by the issue of pregnancy and that female trainees were not affected mainly by the indiscipline cases as compared to male trainees.

**Table 4.28:** *Instructors' views on the causes of trainee drop out from VTCs*

| Instructors' views on causes of trainee drop out | N | Mean |
|---|---|---|
| i   Female trainees drop out of this VTC because of pregnancy | 34 | 3.44 |
| ii   Male trainees drop out of this VTC because of pregnancy | 34 | 1.32 |
| iii  Female trainees drop out of this VTC because of indiscipline | 34 | 2.94 |
| iv  Male trainees drop out of this VTC because of indiscipline | 34 | 3.65 |
| v   Female trainees drop out of this VTC because of employment | 34 | 3.06 |
| vi  Male Trainees drop out of this VTC because of employment | 34 | 3.26 |
| N | 34 | |

The factors that respondents agree in Table 4.27 and 4.28 as causes of trainee drop out in VTCs are female trainee pregnancy and male trainee indiscipline. These findings are related to those of Omoteso and Semudara (2011) and Yahaya, *et al* (2009) who found that cases of indiscipline were more prevalent among male students than female students in schools. The results of this study on this item are further supported by the findings of Hallman and Grant (2003) who found out that both early school leaving and adolescent pregnancy are strongly associated with low economic status. As will be discussed later, majority of the trainees in VTCs in Kenya are from low income backgrounds. Therefore, it is evident from these studies that male trainees are more indiscipline than female trainees and that female trainees are affected mainly by cases of pregnancy than the male trainees.

A further analysis on the factors causing trainee drop out in VTCs was provided by the qualitative questions in the trainee and instructor questionnaires and also from the interviews with the Managers and the County Directors of Youth Training.

Other reasons as highlighted by the trainees included;

    i    Drug and substance abuse

    ii   Peer pressure or influence

    iii  Indiscipline

    iv  Family structure issues; Death of parents in the course of study, orphans

    v   Lack of general parental care

    vi  Harsh instructors

    vii Lack of motivation from parents and teachers

    viii Perception of VTCs as for failures

    ix  Persistent poor performance at VTC

    x   Lack of certification for those who have already finished programme

Other reasons provided by the instructors included;

    i    Lack of school fees

    ii   Early marriages

    iii  Lack of general parental support

    iv  Fear of competition from those who enrolled with higher marks at VTCs

    v   Long distance from home for day scholars

    vi  Inadequate training materials and facilities

The managers gave the following as factors that made trainees to drop out of VTCs;

*Trainee-based factors*

    i   Pregnancy

    ii  Employment, especially after industrial attachment

    iii Cases of indiscipline such drunkedness, drug abuse and theft

    iv Early marriages

*Family-based factors*

    i   Lack of fees due to low income families

    ii  Negatively affected family structure; orphaned children, children born out of wedlock

    iii Lack of basic needs

    iv Low aspirations of parents to their children

    v   Parents not monitoring their children progress at school

    vi  Forced interests. Children doing courses forced into and were not interested

    vii Low education of parents, hence cannot set high standards for their children

*Community-based factors*

    i   Negative attitude towards VTCs especially from leaders encouraging all failures to join VTCs

    ii  Discouragement from those in the informal sector. *Jua Kali* competition, that is, people get money without formal training

    iii Misinterpretation on the utilization of the SYPT, which make trainees not to pay extra fee. SYPT has clear vote heads of expenditure

    iv Cheap labour

    v   Peer pressure

*Institution-based factors*

  i    Lack of adequate, trained and qualified staff to handle various courses

  ii   Expensive curriculum to implement

  iii  Lack of equipped workshops and laboratories

  iv   Lack of trained and qualified staff to handle Guidance and Counseling matters

  v    Too much work for the trainees especially theory and support subjects

  vi   Poor remuneration of BOM instructors

Some of the reasons for trainee dropping out of VTCs given by the County Directors of Youth Training were closely related to those mentioned by the Managers. They are grouped into four main factors that guided the study. They include;

*Trainee-based factors*

  i.    Pregnancy

  ii.   Early marriages

  iii.  Cases of indiscipline e.g. drunkedness, drug abuse

  iv.   Lack of interest for studies. The trainee had no other option

  v.    Low entry qualification to VTCs

  vi.   Peer pressure

  vii.  Lack of guidance from the parents

  viii. Not given priority to fee payment

  ix.   Trainee expectation of easy course which turns to be very theoretical on enrolment

*Family-based factors*

  i    Biasness in fee payment. Parents give priority to other institutions in fee payment

ii  Negative attitude towards VTCs

iii  Lack or inadequate family income to support children education

iv  Low literacy levels hence cannot set high standards for their children

v  Low aspirations of parents towards their children

vi  Family structures negatively affected; broken families, sketchy family structures

*Community-based factors*

i  Negative attitude towards VTCs. Most people take their children to other levels of education

ii  Parents sending their children to well established VTCs

iii  Lack of community support, both moral and material

iv  Few role models

v  Negative statements for instance by primary school teachers who say, "if you fail, you will go to VTCs"

*Institution-based factors*

i  Low qualification of instructors

ii  Inadequate instructors

iii  Inadequate infrastructure; classrooms, workshops, labs, instructional materials, tools and equipment. Low investment in vocational training due to limited revenue streams from the government to support recurrent and development expenditures.

iv  NVCET content discourages trainees because of more theory than practicals

v  Lack of certification of trainees at level 1 and level 2

vi  Inadequate handling of guidance and counseling matters

vii   Low capacity of management boards

viii Too much work at ago, that is, trade and general education subjects

ix   Lack of clear  linkage policy with industry and higher TVET institution

x    Poor quality of instruction

xi   Low qualifications of managers (have diploma or craft certificate). They lack managerial skills

xii  Poor standard or state of the existing facilities.

To further support reasons for trainee dropping out of VTCs, the researcher's observation at the VTCs established that there was inadequacy of general physical facilities, tools and equipment for courses implemented, study rooms or libraries, workshops and labs, drawing rooms, among others.

Some of the reasons for dropping out of VTCs were similar across all the selected target groups; trainees, instructors, managers and County Directors of Youth Training. This included pregnancy, early marriages, trainee indiscipline cases, lack of fees and basic needs, community's negative attitude towards VTCs, inadequate training facilities, lack of certification at the 2 levels, inadequate trained and qualified instructors, too much NVCET content to be covered by trainees, among others. The findings of this study on causes of trainees drop out in VTCs are closely related to those of Ngangi (2012) in a study of determinants of drop-out rates in public Primary schools in Mutonguni Division, Kitui Sub-County. This study established that factors such as early marriages, early pregnancies, death caused by HIV/AIDs and stigma, herding of cattle or household chores, family problems like polygamy, divorce, poverty, child labour, negative peer influence, lack of feeding programs in school, overloaded curriculum, lack of role model

and instability in families were responsible for pupils' dropping out of school. In further support of these findings, Rumberger and Lim (2008) identified factors associated with student characteristics, and factors associated with the institutional characteristics of the students' families, schools and environment as predictors of whether students will drop out or graduate from high school.

Furthermore, the causes for drop out in the present study closely corroborates those of Joubish and Khurram (2011), in a study that investigated factors influencing drop out in government primary schools in Karachi, Pakistan. The study revealed that socio-economic factors (e.g. poverty, uncaring parents, child labour etc), personal factors (e.g. lack of interest, learning problem, health, failing in examination, absenteeism etc) and teacher related factors (e.g. uncaring and professionally less committed teachers, harsh attitude, sub-standard teachers, shortage of teachers etc) were the major factors that caused drop out in government primary schools in Karachi. Also, pedagogy and curriculum related factors (e.g. formal and traditional way of teaching, unattractive books, unpleasant class and school environment, less provision of sports and co-curricular activities, no use of instructional technology etc) and infrastructure related factors such as lack of basic physical facilities, among others, influenced drop out in schools. The reviewed studies have shown that trainee-based, institution-based, family-based and community-based factors may influence one to complete a course or drop-out of school.

**4.4.11  Trainees' Level of performance currently in VTCs**

This item sought to establish the trainee level of performance currently in VTCs in trade area-theory, trade area-practice and in general education subjects that include communication skills, entrepreneurship skills, life skills, ICT studies and technical drawing. The results in Table 4.29 show current trainee performance in trade area-theory. From Table 4.29, the performance of trainees in trade area-theory show that 24.2% of trainees were Average, 35.7% were Good and 35.2% were Excellent. Others were Below Average, 4.4% and Not Good, 0.5%. The findings show that majority of trainees' performance in theory was good.

**Table 4.29:** *Trainees' performance in trade area-theory*

| Performance in Theory | Frequency | Percent |
|---|---|---|
| i   Not Good | 1 | 0.5 |
| ii  Below Average | 8 | 4.4 |
| iii Average | 44 | 24.2 |
| iv  Good | 65 | 35.7 |
| v   Excellent | 64 | 35.2 |
| Total | 182 | 100.0 |

The study revealed as shown in Table 4.30 that majority of the trainees, 59.9% were Excellent in practical work while 26.9% were Good, 11% were average and 2.2% were Below Average. This shows that performance of trainees in practical in VTCs is skewed towards Excellent. This shows that trainees perform better in psychomotor skills than the cognitive skills as shown in Table 4.29.

**Table 4.30:** *Trainees' performance in trade area-practice*

| Performance in Practical | Frequency | Percent |
|---|---|---|
| i   Below Average | 4 | 2.2 |
| ii  Average | 20 | 11.0 |
| iii Good | 49 | 26.9 |
| iv Excellent | 109 | 59.9 |
| Total | 182 | 100.0 |

The trainee performance in General Education subjects is presented in Table 4.31. The results show that the performance in General Education subjects was closely related to performance in trade area-theory. The trainees with Average performance were 23.6%, Good were 41.8% while Excellent were 26.9%. Other trainees, 5.5% were Below Average 5.5% and 2.2% were Not Good. Majority of the trainees' performance was good as shown in Table 4.29.

**Table 4.31:** *Trainees' performance in General Education Subjects*

| Performance in General Subjects | Frequency | Percent |
|---|---|---|
| i   Not Good | 4 | 2.2 |
| ii  Below Average | 10 | 5.5 |
| iii Average | 43 | 23.6 |
| iv Good | 76 | 41.8 |
| v  Excellent | 49 | 26.9 |
| Total | 182 | 100.0 |

From Tables 4.29, 4.30 and 4.31, the study revealed that a majority (59.9%) of the trainees in VTCs were excellent in practical work. Besides teaching trade area-theory and General Education subjects, the results in this study demonstrate that practical work should be emphasized in the NVCET curriculum. This is because most of the trainees

enrolled in VTCs have lower cognitive abilities and would prefer being taught mainly practical work than theory work. This is demonstrated by high excellent performance in practical as shown in Table 4.30.

### 4.4.12 Trainees' recommendation of the NVCET curriculum to others

The study sought to establish whether the trainees would recommend anybody to seek training under the NVCET curriculum in Vocational Training Centres. As shown in Table 4.32, the findings indicate that the programme has a better future given that a high number of respondents (87.9%) agreed to recommend the programme to those seeking enrolment under NVCET curriculum in VTCs. The reasons for those who did not want to recommend the programme to others may be due to challenges such as lack of certification, too much work to be covered, among others. A positive future of the programme can be realized if challenges causing low completion rates mentioned earlier are addressed by all the stakeholders; trainees, families, communities and the institutions or the Vocational Training Centres.

**Table 4.32:** *Trainees' recommendation of the NVCET curriculum to others*

| Recommendation of NVCET curriculum | Frequency | Percent |
|---|---|---|
| Yes | 160 | 87.9 |
| No | 22 | 12.1 |
| Total | 182 | 100.0 |

There was a qualitative item on the trainee questionnaire which asked the trainees to give reasons for recommending and not recommending the curriculum to others. The reasons for recommending were summarized as shown below;

    i    It makes one to be knowledgeable and acquire technical skills

    ii   It makes one earn a better living in future

    iii  It facilitates self-employment

    iv  It enable one to get employment in future

    v   It enables one to get a certificate

Perhaps, these may be very positive out-comes of a programme that needs to be continuously evaluated and reviewed.

The trainees, who did not want to recommend the curriculum to other people, cited the following reasons;

    i    NVCET content is difficult to understand

    ii   Lack or inadequate practicals

    iii  Inadequate materials to support the VTCs

    iv  Not much skills are gained

    v    No issuance of certificates

    vi  Difficulty in language and reading

    vii Too much teaching and learning at ago. Should teach only one subject, for example, life skills besides the course enrolled into.

The reasons for not recommending the curriculum are valid and they touch mainly on the VTCs. The training institutions and the government ought to continuously appraise programmes and address problems that arise from time to time. The support towards VTCs by the government and other stake-holders ought to be viewed as an investment and not a burden so as to produce the youth that are more productive and independent as recommended by Gachathi commission report of 1976.

## 4.5     Family-based factors and trainees' completion rate in VTCs in Kenya

The second objective was to explore the influence of family-based factors on trainees' completion rate in Vocational Training Centres in Kenya with focus on the NVCET curriculum. The following sub-sections looked into the ways in which family-based factors influenced trainees' completion rate in VTCs.

### 4.5.1    Structure of the trainee family

The study investigated the type of family structures that the trainees come from. The results revealed that 75.3% of the trainees lived with their both parents while a total of all the other trainees (24.7%) lived in families that had other arrangements other than living with both parents (Table 4.33). Rumberger and Lim (2008) observed that students living with both parents have lower drop-out rates and higher academic graduation rates, compared to students living in other family arrangements. The authors further observed that changes in family structure, along with other potential stressful events (such as a family move, illness, death, adults entering and leaving the households, and marital disruptions) increase the odds of dropping out of study. Further, many studies have revealed that children who grow up in single-parent families are less likely to complete high school or even attend college than the children who grow up with both parents (Amato, 1987). A study by Anguiano (2004) revealed that, two-parent households were significant in students' decisions to complete high school. The positive association was because students received support from both parents who shared in the responsibilities of their children's educational success. Perhaps, based on the findings in VTCs on the family structure, there may be need to enhance trainee guidance and counseling to address some of the issues emanating from the family structures.

**Table 4.33:** *Structure of the trainee family*

| Family Structure | Frequency | Percent |
|---|---|---|
| i Living with both parents | 137 | 75.3 |
| ii Living with single parent | 30 | 16.5 |
| iii Living in a family with someone sick | 5 | 2.7 |
| iv Living in a family with marital challenges | 3 | 1.6 |
| v Living in a family with a guardian | 7 | 3.8 |
| Total | 182 | 100.0 |

### 4.5.2 Occupations of Trainee Parents

One of the qualitative items in the trainee questionnaire sought to establish occupations of trainees' parents. Majority of the trainees stated that their fathers were farmers while others herdsmen, policemen, drivers, teachers and peasant farmers. On the other hand, majority of the respondents indicated that their mothers were farmers while others were teachers, businesswomen, peasant farmers, housewives, and herdswomen. The findings indicate that majority of the parents of trainees were not of higher social status as regarded in Kenyan society, which include doctors, engineers, lecturers, high leadership positions, among others. The low levels of social status may negatively affect many children from going far in their lives since parents will be unable to set high aspirations for them. Previously, economic status of level of resources has been linked to a person's living standard based on income earned, occupational status, living conditions and the education attained (Ahmed, Andaleeb and Arif, 2004). The findings of the current study agree with those of Ngumbao (2012) who found that majority of the trainee parents dependent on small scale farming, of which fathers were 41.5% and mothers were 45.9%. Okwemba (2014) further revealed that majority (57.4%) of the trainees who were enrolled in YPs in Kakamega County were from low socio-economical families. The

present findings are further supported by Maronga, Maroria and Nyikal (2015) in a study in Kisii Central District, Kenya who found that majority (66%) of the trainees indicated that their parents/guardians earned income from small scale farming. Therefore, these studies have revealed that majority of the trainees in VTCs are from low income households.

### 4.5.3 Influence on trainees' choice of courses in VTCs

The study examined the main source of influence for trainees when choosing courses in VTCs. The study sought input from trainees, instructors, managers and County Directors of Youth Training. Table 4.34 demonstrates that majority (74.7%) of the trainees were self-influenced with personal interest to study while 13.7% were influenced by parents, each 4.4% were influenced by a relative and a role model and 2.7% were influenced by a friend.

**Table 4.34:** *Trainees' views on influence on trainees' choice of courses in VTCs*

| Trainees' views on choosing courses | Frequency | Percent |
|---|---|---|
| Influenced by Parent(s) | 25 | 13.7 |
| Influenced by Relative | 8 | 4.4 |
| Influenced by Friend | 5 | 2.7 |
| Personal Interest to Study | 136 | 74.7 |
| My Role Model (Not a family member) | 8 | 4.4 |
| Total | 182 | 100.0 |

However, the findings from instructors in Table 4.35 indicate that majority (70.6%) of the trainees were influenced by parents to choose courses in VTCs while 17.6% were self-influenced with personal interest to learn, 8.8% were influenced by a friend and 2.9% indicated that they were influenced by a relative.

**Table 4.35:** *Instructors' views on influence on trainees' choice of courses in VTCs*

| Instructor's views on choosing course | Frequency | Percent |
|---|---|---|
| Influenced by Parent(s) | 24 | 70.6 |
| Influenced by Relative | 1 | 2.9 |
| Influenced by Friend | 3 | 8.8 |
| Personal Interest to Study | 6 | 17.6 |
| Total | 34 | 100.0 |

To address the variation on the main source of trainees' influence to choose courses in VTCs as seen from the preceding results of trainees and instructors, interviews with the Managers and the County Directors were organized. Majority of the Managers and County Directors of Youth Training stated that parents were the main source of influence for trainees to choose particular courses in VTCs. The interview sessions revealed that trainees developed personal interest to study when they had been advised by parents on the courses to pursue in VTCs. The information obtained from interviews revealed that parents played a major role in influencing their children in choosing courses at different levels of education. However, there were cases of students who choose courses as a result of self-interest and peer influence. Some instructors on the qualitative question in their questionnaire indicated churches and sponsors or donors were also other sources of influence on course selection. The findings of the current study agree with those of Mgau (1999) and Ngumbao (2012) who revealed that parents were the main source of influence in choosing courses in Institutes of Technology and YPs respectively. In summary, parents are the main source of influence on trainees when choosing courses in VTCs.

### 4.5.4 Respondents' views on Family Practices

The study further sought to know the respondents views on the family practices of trainees in VTCs. From Table 4.36, majority (mean=4.25) of the respondents strongly

agreed that their parents regularly encouraged them to aim higher in whatever they did in VTCs. Others agreed that their parents monitored their academic progress in VTCs (mean=3.91) and that their parents regularly communicated with the VTCs (mean=3.56). Some of the trainees disagreed that their parents were interested to know the parents of their friends and that they had a brother who had dropped out of school and that they had a sister who had dropped out of school as shown by mean scores of 2.85, 2.31 and 2.37 respectively.

Table 4.37 shows that majority of the parents did not have high educational aspirations for their children and that they did not also monitor their children's progress in VTCs and that they were not interested to know the parents of their children's' friends as indicated by mean scores of 2.91, 2.76 and 2.41 respectively. The respondents agreed that majority of the parents communicated with the VTCs as shown by a mean score of 3.44.

**Table 4.36:** *Trainees' views on Family Practices*

|  | Trainees' views on Family Practices | N | Mean |
|---|---|---|---|
| i | My parent(s) regularly encourages me to aim higher in whatever I am doing in Vocational Training Centre | 182 | 4.25 |
| ii | My parent(s) regularly monitor my academic progress at VTC | 182 | 3.91 |
| iii | My parent(s) regularly communicates with the VTC | 182 | 3.56 |
| iv | My parent(s) is interested to know the parents of my friends | 182 | 2.85 |
| v | I have a brother who dropped out of school or VTC | 182 | 2.31 |
| vi | I have a sister who dropped out of school or VTC | 182 | 2.37 |
|  | N | 182 |  |

**Table 4.37:** *Instructors' views on the Family Practices*

| Instructors' views on the Family Practices | N | Mean |
|---|---|---|
| i Majority of the parents of the trainees in this VTC have high educational aspirations for their children | 34 | 2.91 |
| ii Majority of the parents of the trainees in this VTC monitor their children's VTC progress | 34 | 2.76 |
| iii Majority of the parents of the trainees in this VTC communicate with the VTC | 34 | 3.44 |
| iv Majority of the parents of the trainees in this VTC are interested to know the parents of their children's friends | 34 | 2.41 |
| N | 34 | |

What is common in Table 4.36 and 4.37 is that parents of the trainees at the VTCs were not interested to know the parents of their children friends. This is an issue that parents need to address since different families have different belief systems which may influence children positively or negatively. Parents should advise their children on the choice of friends from parents who share similar aspirations for instance in the education of their children.

### 4.5.5 Trainees' Main Source of Financial Support in VTCs

Majority (76.9%) of the respondents as shown in Table 4.38 indicated that parents were the main source of financial support (fees and other costs) in VTCs while others were supported by the guardians (10%), self (3.8%), relative (3.3%), government (3.3% and community (2.2%). The findings indicated that parents played a major role in supporting education of their children in VTCs. Rumberger and Lim (2008) observed that children from families with high income are less likely to drop out of school. To further

demonstrate the impact of family income on student completion rates, Chapman, Laird, Ifill and KewalRamani (2011) established that dropout rate of students living in low-income families was about five times greater than the rate of their peers from high-income families. To show that parents are the main financial support to trainees, a study by Maronga, Maroria and Nyikal (2015) revealed that majority (42.8%) of trainees had not joined Secondary school but instead enrolled in YPs due to the inability of their parents/guardians to pay fees for secondary school level. Therefore, parents need to continuously source for funds and equally support their children while in VTCs as those in other levels of education.

**Table 4.38:** *Main source of financial support for trainees in VTCs*

| Main source of financial support | Frequency | Percent |
|---|---|---|
| i   Parents | 140 | 76.9 |
| ii  Guardians | 19 | 10.4 |
| iii Relative | 6 | 3.3 |
| iv  Community | 4 | 2.2 |
| v   Government | 6 | 3.3 |
| vi  Self | 7 | 3.8 |
| Total | 182 | 100.0 |

## 4.5.6   Highest Level of Education of Trainees' Parents

In order to know the highest level of education of trainee parents, the trainees were asked to indicate highest levels of education for their fathers and mothers. Majority (36.3%) of the trainees in Table 4.39 indicated that their fathers had KCSE certificate while 28.0% had KCPE certificate, 7.7% had dropped out of Primary school, 7.1% did not go to school and 6.6% had university education.

**Table 4.39:** *Trainees' responses on the highest level of education of their fathers*

| Level of Father's Education | Frequency | Percent |
|---|---|---|
| i Did not go to school | 13 | 7.1 |
| ii Dropped out of Primary school | 14 | 7.7 |
| iii Primary School Education (KCPE Awarded) | 51 | 28.0 |
| iv Youth Polytechnic Training (Certificate Awarded) | 1 | .5 |
| v Dropped out from secondary | 5 | 2.7 |
| vi Secondary School Education (KCSE Awarded) | 66 | 36.3 |
| vii Teachers Training college Education (Awarded Certificate – Diploma) | 3 | 1.6 |
| viii Teachers Training college Education (Awarded Certificate – P1) | 2 | 1.1 |
| ix Technical Training College Education | 2 | 1.1 |
| x Institute of Technology Education | 6 | 3.3 |
| xi Technical Training Institute Education | 4 | 2.2 |
| xii National Polytechnic (NP) Education | 3 | 1.6 |
| xiii University Education | 12 | 6.6 |
| Total | 182 | 100.0 |

Others indicated that their parents had Institute of Technology Education (3.3%), dropped out of Secondary school (2.7%), had TTI education (2.2%), awarded Diploma at TTC, had gone through National Polytechnic (1.6%), had TTC-P1(1.1%), KTTC education (1.1%) and 0.5% with YP certificate as shown in Table 4.39.

From table 4.40, majority of the trainees (32.4) indicated that their mothers had secondary education while 31.3% had primary education, 9.9% did not go to school, 6.6% dropped out of primary school, 6.6% dropped out of secondary school and 3.3% had university education. Other mothers had attained National Polytechnic Education (2.2%), KTTC education (1.6%) dropped out of YP (1.1%), had TTC diploma (1.1%), had TTC P1 (1.1%), Institute of Technology education (1.1%), TTI education (1.1%) and 0.5% had YP certificate.

The results in Tables 4.39 and 4.40 reveal that majority of the parents of trainees in VTCs had attained at most primary education. Table 4.39 shows a cumulative percentage of 42.9% for fathers with up to primary education certificate and Table 4.40 shows a cumulative percentage of 47.8% for mothers with up to primary education. The results show that majority of the parents of trainees in VTCs are not highly educated, hence may not be able to set high educational and life aspirations for their children. Anguiano (2004) demonstrates how parents with more education effect their children. The author argues that parents with more education served as role models for their children to complete school. These is because such parents have a better command of how education systems work. Further, parents with more education often have social support networks within different community systems that could have been instrumental in helping their children succeed in education. The findings of Ngumbao (2012) agree with those of the present when it established majority (21.8%) at each completed Primary school and Secondary school education. In this study majority (25.4%) of the mothers had completed primary education while 16.2% had not gone to school and 14.2 had completed Secondary school education. The observation from the two studies indicates that fathers are slightly more educated as compared to mothers. This scenario may be attributed to family and gender-based roles such as child rearing and domestic chores which engage most women throughout their lifetime.

**Table 4.40:** *Trainees' responses on the highest level of education of their Mothers*

| Level of Mother's Education | Frequency | Percent |
|---|---|---|
| i Did not go to school | 18 | 9.9 |
| ii Dropped out of Primary school | 12 | 6.6 |
| iii Primary School Education (KCPE Awarded) | 57 | 31.3 |
| iv Dropped out of YP | 2 | 1.1 |
| v Youth Polytechnic Training (Certificate Awarded) | 1 | .5 |
| vi Dropped out from secondary | 12 | 6.6 |
| vii Secondary School Education (KCSE Awarded) | 59 | 32.4 |
| viii Teachers Training college Education (Awarded Certificate – Diploma) | 2 | 1.1 |
| ix Teachers Training college Education (Awarded Certificate – P1) | 2 | 1.1 |
| x Technical Training College Education | 3 | 1.6 |
| xi Institute of Technology Education | 2 | 1.1 |
| xii Technical Training Institute Education | 2 | 1.1 |
| xiii National Polytechnic (NP) Education | 4 | 2.2 |
| xiv University Education | 6 | 3.3 |
| Total | 182 | 100.0 |

### 4.5.7 Respondents' views on family resources

The present study sought views from both the trainees and the instructors on family resources. Studies have shown that students in homes with more family resources as measured by parental education levels, parents' occupational status, and family income are less likely to drop out of school (Rumberger and Lim, 2008). Further, American Psychological Association (2012) established that a strong link exists between poverty and high school dropout rates. Other studies have demonstrated a positive relationship between availability of family income or resources and student academic achievement. Lacour and Tissington (2011) argue that poverty significantly affect resources available for students. Due to lack of resources, many students struggle to reach the same academic

achievement levels of students not living in poverty. Similarly, when access to resources both within the family and school are limited, student suffer and lag behind in the academic achievement (Barry, 2006).

The respondents in Table 4.41 disagreed that trainees in VTCs were from rich families and that they were also from educated families as indicated by mean scores of 2.18 and 2.49 respectively. On the other hand, respondents disagreed that majority of the trainees in VTCs were from poor families and that also were from less educated families with each having a mean score of 2.83. It appears that the trainees were undecided on these two statements that sought their views on family richness and level of education. However, a clear position is indicated in Table 4.42 which agrees with the findings in Tables 4.39 and 4.40 that revealed that majority of the parents of trainees in VTCs were not highly educated.

**Table 4.41:** *Trainees' views on Family Resources*

| Views of trainees on Family Resources | N | Mean |
|---|---|---|
| i  Majority of the trainees in this VTC are from rich families | 182 | 2.18 |
| ii  Majority of the trainees in this VTC are from educated families | 182 | 2.49 |
| iii  Majority of the trainees in this VTC are from poor families | 182 | 2.83 |
| iv  Majority of the trainees in this VTC are from less educated families | 182 | 2.83 |
| N | 182 | |

Respondents in Table 4.42 strongly disagreed (mean=1.79) that majority of the trainees in VTCs were from rich families and that they disagreed (mean=2.32) that majority of the trainees in VTCs were from educated families. The respondents agreed that majority of

the trainees in VTCs were from poor families and that majority of the trainees in VTCs were from less educated families and indicated by mean scores of 3.47 and 3.38 respectively.

On family resources, this study has shown that majority of the trainees in Vocational Training Centre were from poor and less educated families. This confirms earlier findings that trainees drop out of VTCs because of lack of school fees, among other challenges. The findings of this study support those findings in a report by National Center for Education Statistics (NCES) (2001) as cited in Blue and Cook (2004) which established that high school students from families within the lowest 20% income range were 6 times as likely as those with families in the top 20% income distribution to drop out of high school.

**Table 4.42:** *Instructors' views on Family Resources*

| Views of instructors on Family Resources | N | Mean |
|---|---|---|
| i   Majority of the trainees in this VTC are from rich families | 34 | 1.79 |
| ii  Majority of the trainees in this VTC are from educated families | 34 | 2.32 |
| iii Majority of the trainees in this VTC are from poor families | 34 | 3.47 |
| iv  Majority of the trainees in this VTC are from less educated families | 34 | 3.38 |
| N | 34 | |

## 4.6    Institution-based factors and trainees' completion rate in VTCs in Kenya

The third objective was to examine the influence of institution-based factors on trainees' completion rate in Vocational Training Centres in Kenya. This study sought to find out how institution-based factors such as a church sponsor, NVCET curriculum, instructors,

training facilities, type of management of VTCs, state of guidance and counseling services, methods of teaching, among others can influence trainees' completion rate.

### 4.6.1 Respondents' views on the presence of a Church sponsor in VTC

Trainees in Table 4.43 were asked whether they had a church sponsoring the VTC or not. Majority (54.9%) of the trainees indicated that they had no church sponsor while 45.1% did have a church sponsor.

**Table 4.43:** *Trainees' responses on the presence of a church sponsor in VTC*

| Trainee response on the presence of a church sponsor | Frequency | Percent |
|---|---|---|
| Yes | 82 | 45.1 |
| No | 100 | 54.9 |
| Total | 182 | 100.0 |

**Table 4.44:** *Instructors' responses on the presence of a church sponsor in VTC*

| Instructor response on the presence of a church sponsor | Frequency | Percent |
|---|---|---|
| Yes | 14 | 41.2 |
| No | 20 | 58.8 |
| Total | 34 | 100.0 |

Majority (58.8%) of the instructors in Table 4.44 also indicated that there were no church sponsors in VTCs and 41.2% said that VTCs had sponsors. The findings from both the trainees and instructors indicated that some of the institutions had church sponsors. According to Mabeya, Ndiku and Njino (2010), the church sponsor contributes to the maintenance of religious traditions and church doctrines in schools. This study further observed that the government and the church had greatly promoted and developed education in Kenya. Earlier study by Aspinall (2004) argues that as an absolute

minimum, there is need for all schools to ensure that students operate within religious dimension of human life to perform well in academics. According to the Kenya Episcopal Conference (2000), children attend school for the purpose of education but also need to establish good study habits. The learners must attend classes, do assignments and attend all school functions including all religious ceremonies. These studies have revealed the important role that church sponsors play in motivating trainees or students to achieve good performance and instill good habits in them at school. This means that the trainees will progress in VTCs and not drop out because of good academic performance achieved as a result of positive input of the church. Also, the trainees will be able to nurture good habits such as self-discipline, hard work and meeting deadlines that are applicable even beyond the VTCs.

### 4.6.2   Respondents' views on the benefits of a Church sponsor in VTC

The study sought to establish whether the respondents appreciated the benefits of a church sponsor in VTC. The responses from both the trainees and the instructors were analyzed.

**Table 4.45:** *Trainee responses on the benefits of a church sponsor in VTC*

| Trainee responses on benefits of a church sponsor | Frequency | Percent |
|---|---|---|
| Yes | 109 | 59.9 |
| No | 73 | 40.1 |
| Total | 182 | 100.0 |

As shown in Table 4.45, majority (59.9%) of the respondents indicated that they knew that a church sponsoring VTC could motivate the trainees to move on up to completion. However, 40.1% of the respondents held contrary opinions. Though not the majority, a

good number of instructors (41.2%) in Table 4.46 confirmed that the input of a church sponsor in VTC could positively influence trainees to move on with their studies up to completion. This finding supports Muindi (2008) who argued that good academic performance is as a result of high level of student discipline attributed to strong religious foundations and good communication between students and teachers. This study has demonstrated how students discipline can be improved as a result of religious inputs from a church sponsor. To further support the benefits of religious input to student's success, Rumberger and Lim (2008) argued that attending a catholic school or a religious school improved the levels of student completion. Hence, there is need for all VTCs to reconsider the need for having a church sponsor due to its benefits.

**Table 4.46:** *Instructor responses on the benefits of a church sponsor in VTC*

| Instructor response on the benefits of a church sponsor | Frequency | Percent |
|---|---|---|
| Yes | 14 | 41.2 |
| No | 20 | 58.8 |
| Total | 34 | 100.0 |

**4.6.3   Respondents' views on the effects of NVCET curriculum on trainees' completion rate.**

In order to establish the effects of NVCET curriculum on trainees' completion rate, the study sought for views from the trainees and instructors. The findings shown in Table 4.47 indicated that the respondents agreed that the NVCET Curriculum at the VTCs had adequate work to be covered within the specified time, the arrangement of the content/work to be covered in the NVCET curriculum was appropriate for trainees and that trainees found NVCET curriculum challenging to understand the content being

taught as shown by mean scores of 3.45, 3.59 and 3.01 respectively. The trainees disagreed that the NVCET curriculum had too much work to be covered within the specified time, trainees paid extra fee for NVCET curriculum while other programmes are cheaper in VTCs and that NVCET curriculum implementation was expensive for VTCs as indicated by mean scores of 2.82, 2.74 and 2.86 respectively.

**Table 4.47:** *Trainees' views on the effects of the NVCET curriculum on trainees' completion rate*

| | Effects of NVCET curriculum on completion | N | Mean |
|---|---|---|---|
| i | The NVCET Curriculum at the VTC has adequate work to be covered within the specified time | 182 | 3.45 |
| ii | The arrangement of the content/work to be covered in the NVCET curriculum is appropriate for trainees | 182 | 3.59 |
| iii | The NVCET curriculum has too much work to be covered within the specified time | 182 | 2.82 |
| iv | The trainees find NVCET curriculum challenging to understand the content being taught | 182 | 3.01 |
| v | Trainees pay extra fee for NVCET curriculum while other programmes are cheaper in VTCs | 182 | 2.74 |
| vi | NVCET curriculum implementation is expensive for VTCs | 182 | 2.86 |
| | N | 182 | |

As shown in Table 4.48, instructors agreed that the NVCET Curriculum at the VTCs had adequate work to be covered within the specified time, the arrangement of the content/work to be covered in the NVCET curriculum was appropriate for trainees, the NVCET curriculum had too much work to be covered within the specified time, the trainees found NVCET curriculum challenging to understand the content being taught and that NVCET curriculum implementation was expensive for VTCs as indicated by the

mean sores of 3.68, 3.32, 3.56, 3.50 and 3.38 respectively. The instructors disagree (mean=2.74) that trainees pay extra fee for NVCET curriculum while other programmes are cheaper in VTCs.

**Table 4.48:** *Instructors' views on the effects of the NVCET curriculum on trainees'*
*completion rate*

| Effects of NVCET curriculum on completion | N | Mean |
|---|---|---|
| i The NVCET Curriculum at the VTC has adequate work to be covered within the specified time | 34 | 3.68 |
| ii The arrangement of the content/work to be covered in the NVCET curriculum is appropriate for trainees | 34 | 3.32 |
| iii The NVCET curriculum has too much work to be covered within the specified time | 34 | 3.56 |
| iv The trainees find NVCET curriculum challenging to understand the content being taught | 34 | 3.50 |
| v Trainees pay extra fee for NVCET curriculum while other programmes are cheaper in VTCs | 34 | 2.74 |
| vi NVCET curriculum implementation is expensive for VTCs | 34 | 3.38 |
| N | 34 | |

The study revealed that the NVCET curriculum has too much work to be covered within the specified time. This view is supported by the detailed responses given on the qualitative questions by the trainees, instructors, Managers and the County Directors. The trainees and instructors cited too much work on the theory and also the support subjects at the expense of practical work. The managers indicated that the curriculum had too much theory and sometimes some instructors discouraged trainees due to a lot of work involved. Managers also reported that the projects were too many, since the trainee had to

do six projects at each level. The County Directors argued that too much theoretical component discouraged some trainees.

This study further observed that trainees found NVCET curriculum challenging to understand the content being taught (mean=3.01). This view by trainees is supported both by the trainees and instructors in the open ended questions in their questionnaire. The theory was said to be difficult to understand due to poor English foundation of many trainees and low qualifications at entry into VTCs. Trainees and instructors also indicated that lack or less practical work due to inadequate materials and staff contributed to other challenges on the implementation of the NVCET curriculum.

This study also revealed that though students do not pay extra school fees for NVCET as compared to other programmes like trade tests, it was evident that students taking NVCET courses have to cater for material fee. Trainees do six projects at each level which translated to higher cost of material fee which has to be met by the trainee. Trade test trainees do only one project. On the cost of implementing the NVCET curriculum, instructors agreed that this was expensive. This view was also supported by the managers when they reported that NVCET course implementation attracted a huge capital investment on training materials, tools and equipment. The managers also mentioned that the examination materials changed annually, making the institutions to source new materials, tools and equipment.

Though the study established that the content available could be covered within the specified time of four years, a curriculum review could be done to reduce course duration to 2 or 3 years and make it modular-based. One of the challenges associated with NVCET

curriculum as reported by trainees, instructors, Managers and County Directors was lack of certification at all levels. This factor lowers completion rates since many trainees and instructors are demotivated. The findings of the current student supports those of a study by Mandina (2013) of secondary schools in Zimbabwe who revealed that, school dropout was primary grounded in irrelevant curriculum that failed to meet the individual's vocational and intellectual needs and other school problems. The current findings corroborate with those of Deya *et al* (2015) who argued that there is need to review and develop the curriculum that addresses the emerging issues of our society in order to enable the learners to acquire and develop the desired knowledge, skills, values and attitudes for life in the emerging knowledge society. Kerre (2009) observes that without a good curriculum, TVET will not be able to furnish skills required to improve productivity, raise income levels and improve access to employment opportunities for people. The author further observes that there are constraints that prohibit effective provision of Technical and Vocational Education and Training in Kenya. Among these include the development of curriculum for TVET, which is often considered too slow to keep pace with the changes in technology. The findings of the current study, which include among others, too much work to be covered in the NVCET curriculum and challenging content taught support those of Nyerere (2012) who established that TVET sub-sector in Kenya is facing challenges posed by inflexible and outdated curriculum. The author emphasized the need for periodic tracer studies that inform revision of TVET curriculum to reflect changing needs of industry/labour markets and evaluate impact. The studies discussed have shown the advantages of a good curriculum to the learners and also the state of our Kenyan TVET curriculum. Therefore, the current challenges

affecting the NVCET curriculum should be addressed to curb high dropout rates in VTCs in Kenya and at the same time produce learners that can fit to the labour market.

### 4.6.4   Respondents' views on the influence of instructors on trainees' completion rate

The study sought views from the trainees and instructors on the influence of instructors on trainees' completion rate. Table 4.49 shows that the instructors who taught various courses were well trained and qualified (mean=4.05) and that instructors teaching trade areas were adequate (mean=3.64). Respondents as shown in Table 4.50 agreed that there were well trained and qualified staff to teach the NVCET course and disagreed that there were adequate instructors to handle trade course as indicated by the mean scores of 4.53 and 2.53 respectively.

Though respondents in Tables 4.49 and 4.50 agreed that the instructors handling trade areas were well trained and qualified, the qualitative responses given by trainees, instructors, Managers and County directors gave a contrary opinion. This study revealed that some of the instructors, based on their qualifications, may not be able to handle well NVCET curriculum, which is too demanding in terms of depth and extensiveness of the content to be covered. From the qualitative questions on the questionnaire, the instructors and trainees argued that the VTCs should employ qualified instructors to improve trainees' completion rate. This implies that there are some instructors who are not qualified. Managers also pointed out that VTCs lacked qualified instructors and the County Directors observed that there was need to retrain already employed instructors. This study has also revealed that there was only one instructor qualified in both content

and pedagogy in one of the VTCs. These findings agree with those of Sang, Muthaa and Mbugua (2012), who established that trainers were not adequate and did not possess the required qualifications for training. To emphasize the need for well trained instructors in VTCs as revealed by the current study, Aduda (2003) observed that the trainer should have a higher qualification to effectively execute the training function. Based on observations of the present and previous studies, there is need for urgent action by the responsible stake-holders in the Ministry of Education, through employment of adequate and qualified instructors. This remedy could be part of the solution to improving trainees' completion rate in VTCs in Kenya.

**Table 4.49:** *Trainees' views on the influence of instructors on trainees' completion rate*

| | Influence of Instructors on completion rates | N | Mean |
|---|---|---|---|
| i | The instructor who is teaching the NVCET course I am taking (e.g. building technology) looks well trained and qualified | 182 | 4.05 |
| ii | The Instructors who are teaching me General education subjects (e.g. Technical drawing, life skills, …) look well trained and qualified | 182 | 3.83 |
| iii | The instructors teach theory lessons with ease | 182 | 3.71 |
| iv | The instructors conduct practical work with ease | 182 | 3.75 |
| v | The instructors are adequate in my trade area | 182 | 3.64 |
| vi | The instructor is regularly present to teach the course I am taking in this VTC | 182 | 3.87 |
| vii | The instructors are regularly present to teach General education course I am taking | 182 | 3.48 |
| viii | The behavior and conduct of the instructors before the trainees is good | 182 | 3.98 |
| ix | Instructors use methods of teaching that make learning easy and interesting | 182 | 3.95 |
| x | The methods used for teaching in this VTC are appropriate for my age | 182 | 3.41 |
| | N | 182 | |

The study further established, as shown in Table 4.50, that most of the VTCs were understaffed. Though the response from the trainees as shown in Table 4.49 indicated that there were adequate instructors to teach NVCET courses, this position is not supported by the same trainees commented in one of the qualitative items that there was need for more instructors in VTCs to handle both theory and practical lessons. In support of instructors' view in Table 4.50 that there was shortage of instructors, instructors did indicate in a qualitative response there was need to employ more instructors due to shortage. Furthermore, the Managers and the County Directors reported that the VTCs had inadequate instructors. Based on the position taken from the findings shown in table 4.49, this study emphasizes the need for Kenya government to employ adequate and qualified instructors who can effectively handle the NVCET curriculum in VTCs.

**Table 4.50:** *Instructors' views on the influence of instructors on trainees' completion rate*

| | Influence of Instructors on completion rates | N | Mean |
|---|---|---|---|
| i | I am well trained and qualified to teach the NVCET Course or subject | 34 | 4.53 |
| ii | Instructors are well trained and qualified to teach the NVCET Courses or subjects in this VTC | 34 | 4.35 |
| iii | The instructors teach theory lessons with ease | 34 | 4.00 |
| iv | The instructors conduct practical work with ease | 34 | 3.91 |
| v | The instructors are adequate in my trade area | 34 | 2.53 |
| vi | There are no cases of absenteeism by instructors in this VTC | 34 | 3.53 |
| vii | The behavior and conduct of the instructors before the trainees is good | 34 | 4.32 |
| viii | Instructors use methods of teaching that make learning easy and interesting | 34 | 4.29 |
| ix | The methods used are influenced by the age of the trainee | 34 | 3.21 |
| | N | 34 | |

**4.6.5    Respondents' views on the influence of teaching and learning resources on trainees' completion rate.**

Tables 4.51 and 4.52 indicate the trainees and instructors views on the influence of teaching and learning resources on trainees' completion rate. The findings of this study as shown in Table 4.51 indicated that trainees agreed that the adequacy of the training facilities/tools would more likely make a trainee complete his/her training at VTC and that the availability of appropriate/right facilities/tools makes a trainee complete his/her studies at VTC as shown by mean scores of 3.83 and 3.73 respectively. The trainees also agreed (mean=3.72) that the libraries were well equipped in their VTCs. Respondents further agreed that there were adequate classrooms in the VTCs, adequate workshops or Labs in the VTCs, all VTC facilities were in good condition and that there were appropriate/correct facilities/tools for training in the VTCs as indicated by mean scores of 3.37, 3.38, 3.55 and 3.76 respectively.

However, there were some contrary opinions from the quantitative input from the instructors and qualitative inputs from trainees, instructors, Managers and the County Directors on the state of facilities in VTCs as pertains to some of the views given by the trainees in this section. The contrary views will be presented in the next section.

**Table 4.51:** *Trainees' views on the influence of learning resources on trainees' completion rate*

| | Influence of learning resources | N | Mean |
|---|---|---|---|
| i | The adequacy of the training facilities/tools makes a trainee complete his/her training at VTC | 182 | 3.83 |
| ii | The availability of appropriate/right facilities/tools makes a trainee complete his/her studies at VTC | 182 | 3.73 |
| iii | There are adequate classrooms in this VTC | 182 | 3.37 |
| iv | There are adequate workshops or Labs in this VTC | 182 | 3.38 |
| v | The library is well equipped in this VTC | 182 | 3.72 |
| vi | All VTC facilities are in good condition | 182 | 3.55 |
| vii | There are appropriate/correct facilities/tools for training in my VTC | 182 | 3.76 |
| | N | 182 | |

The results shown in Table 4.52 indicate that the instructors agreed that the adequacy of the training facilities/tools would more likely make a trainee complete his/her training at VTC, availability of appropriate/right facilities/tools makes a trainee complete his/her studies at VTC and that the libraries were well equipped in their VTCs as shown by mean scores of 3.53, 3.59 and 3.35 respectively. The respondents disagreed that there were adequate classrooms in VTCs, adequate workshops or Labs in VTCs, all VTC facilities were in good condition, and that there were appropriate/correct facilities/tools for training in the VTCs as shown by mean scores of 2.44, 2.21, 2.24 and 2.68. This position on disagreeing by the instructors is supported with the qualitative inputs from the trainees, instructors, Managers and the County Directors. It is also supported with the input from the observations made during the study.

The trainees and the instructors observed that there was need to increase the training materials in VTCs. They also indicated that classrooms in VTCs were inadequate which

is also supported by the observation made during the study that revealed there was shortage of classrooms making departments and sections not to run smoothly and concurrently. The respondents further emphasized the need for improving the state of the tools and generally learning environment which had occasionally resulted to trainee drop out.

**Table 4.52:** *Instructors' views on the influence of learning resources on trainees' completion rate*

| | Influence of learning resources | N | Mean |
|---|---|---|---|
| i | The adequacy of the training facilities/tools makes a trainee complete his/her training at VTC | 34 | 3.53 |
| ii | The availability of appropriate/right facilities/tools makes a trainee complete his/her studies at VTC | 34 | 3.59 |
| iii | There are adequate classrooms in this VTC | 34 | 2.44 |
| iv | There are adequate workshops or Labs in this VTC | 34 | 2.21 |
| v | The library is well equipped in this VTC | 34 | 3.35 |
| vi | All VTC facilities are in good condition | 34 | 2.24 |
| vii | There are appropriate/correct facilities/tools for training in my VTC | 34 | 2.68 |
| | N | 34 | |

The managers reported that workshops were either poorly equipped or not equipped, classrooms and workshops were inadequate, or there were lack of facilities to fully implement NVCET courses. On the other hand, County Directors observed that workshops, classrooms and equipment were in poor state in most VTCs. The observation during the study by the researcher revealed that workshops and laboratories were inadequate in some of the VTCs while others did not have workshop or laboratory. Some of the VTCs had converted classrooms into laboratories or workshops. Computer laboratories were fairly equipped in most VTCs but the food laboratories were poorly equipped. Though trainees and instructors agreed that the libraries were well equipped,

most of them were small rooms which could not be used as study rooms. The observation revealed that generally facilities in VTCs were not in good condition. Some institutions had drawing rooms but not well furnished. For instance, a Vocational Training Centre could have drawing tables but no chairs, while others used classrooms during drawing lessons. Some teaching equipment and materials were very much out dated. One could rarely see any modern equipment and, the old ones were poorly maintained as in the case of old vehicles used for instruction.

Therefore, the study revealed that there were inadequate classrooms, workshops, laboratories and that most of the facilities were in bad condition. The study further revealed that most of the implemented courses lacked appropriate materials, tools and equipment for teaching and training in VTCs. The study revealed during the researcher's observation that all trainees lacked access to internet facilities which are essential for research and learning processes today. To support this current state of internet facilities in VTCs, UNESCO (2004) observed that few schools and colleges in Kenya had access to computers, internet and e-mail facilities which are essential for research and learning. Given the intensiveness of the NVCET courses in VTCs and the inadequacies of libraries, there is need for VTC institutions to set up internet infrastructure to supplement learning materials and other services to both the trainees and instructors.

The findings of this study disagrees with those of Nduhiu (2014) in a study of strategies influencing production of middle level workforce in public Technical and Vocational Education and Training institutions in Nairobi region, Kenya. This study revealed that lecturers rated adequate teaching resources at 30% agree rate with 49% strongly agreeing.

The author observed that this view may have been attributed to provision of grants to institutions for teaching and learning and donor support to equip institutions. The study further revealed TVET institutions as having up-to-date teaching and learning resources as indicated by the lecturers responses with 36% agree and 16% strongly agree ratings respectively. The study observed that obsolete teaching and learning resources reduce student enrolment in TVET hence negatively affecting the production of middle level workforce.

The current observations support those of Yungungu *et al* (2014) who observed that limited teaching and learning resources negatively affected curriculum implementation in YPs in Machakos District, Kenya. The authors argued that the instructors should get required materials early enough to be able to give quality services. According to UNESCO (2012), quality facilities and equipment are fundamental to the provision of quality and relevant TVET education. It further noted that adequate teaching and learning resources contribute to self-directed responsibility for learning to the trainees.

The present study revealed that there are inadequate and out-dated facilities and resources in some of the VTCs. The previous studies demonstrate the benefits of having adequate and quality learning facilities in institutions of learning. Therefore, there is need to reverse the current state in VTCs through adequate funding from the government and other stakeholders so as to adequately equip them. This strategy will aim at improving trainees' completion rate in VTCs in Kenya.

**4.6.6    Respondents' perception of the influence of VTC administration on trainees'
completion rate**

The study sought views from the trainees and the instructors on the influence of VTC
administration on trainees' completion rate. The findings in Table 4.53 reveal that
trainees agree that the manager's office ensures that the trainees observe discipline all the
time, the manager's office ensures that school policies are followed, the manager's office
is supportive and caring, the manager is competent in his/her work, the Manager's office
caters for the needs of trainees, and that the manager spends VTC funds well as clearly
indicated by mean scores of 4.38, 4.25, 4.12, 4.02, 3.98 and 4.03 respectively.

**Table 4.53:** *Trainees' perception of the influence of VTC administration on trainees'
completion rate*

| | Influence of VTC administration on completion rates | N | Mean |
|---|---|---|---|
| i | The manager's/principal's office ensures that the trainees observe discipline all the time | 182 | 4.38 |
| ii | The manager's/principal's office ensures that school policies are followed | 182 | 4.25 |
| iii | The manager's/principal's office is supportive and caring | 182 | 4.12 |
| iv | The manager/principal is competent in his/her work | 182 | 4.02 |
| v | The Manager's/principal's office caters for the needs of trainees | 182 | 3.98 |
| vi | The Manager/Principal manages/uses well VTC funds | 182 | 4.03 |
| | N | 182 | |

The instructors in table 4.54 agreed that the manager's office ensures that the trainees
observe discipline all the time, the school policies are followed, the manager's office is
supportive and caring, the manager is competent in his/her work, the Manager's office
caters for the needs of trainees, and that the manager spends well VTC funds as shown
respectively by mean scores of 3.94, 3.82, 3.59, 3.85, 3.65 and 3.62.

From the Tables 4.53 and 4.54, the study revealed that the VTC administration support well various operations. However, there was concern from County Directors who pointed out that majority of the managers had low qualifications having attained craft certificate and diploma. It was also cited by County Directors that many of the managers did not have managerial skills to run the VTCs. Taking into consideration the concerns of the County Directors, Gamage (2009) says that the role of school leadership is the most significant tool for enhancing school performance, students' achievements and retention. To demonstrate the effect of a school administration on student learning, Wahlstrom, Louis, Leithwood and Anderson (2010) observed that the leadership effects from the school administration on student learning occur largely because leadership strengthens professional community; teachers' engagement in professional community, in turn, fosters the use of instructional practices that are associated with student achievement.

Therefore, there is need to consider the views of the County Directors and the key role the school leadership plays in improving student academic achievement as demonstrated by previous studies.  Hence, the managers' positions should be filled with qualified staff or retrain those already in the managerial positions through capacity building or further training.

**Table 4.54:** *Instructors' perception on the influence of VTC administration on trainees' completion rate*

| | Influence of VTC administration on trainees' completion rate | N | Mean |
|---|---|---|---|
| i | The manager's/principal's office ensures that the trainees observe discipline all the time | 34 | 3.94 |
| ii | The manager's/principal's office ensures that school policies are followed | 34 | 3.82 |
| iii | The manager's/principal's office is supportive and caring | 34 | 3.59 |
| iv | The manager/principal is competent in his/her work | 34 | 3.85 |
| v | The Manager's/principal's office caters for the needs of trainees | 34 | 3.65 |
| vi | The Manager/Principal manages/uses well VTC funds | 34 | 3.62 |
| | N | 34 | |

### 4.6.7 Respondents' perception of the influence of counseling services on trainees' completion rate

Through the questionnaire, views were sought from trainees and instructors to ascertain whether the counseling services influenced trainees' completion rate or not. Table 4.55 indicates that the trainees agreed that there were adequate counseling services in the VTCs, the counseling services cater for both academic and social aspects of trainees, the counseling services cater for only social aspects of trainees in the VTCs, there are trained and qualified staff in the VTCs who provide counseling services to trainees, the VTCs organize for experts from outside to come and counsel trainees because of lack of trained and qualified staff within the VTCs as indicated by mean scores of 3.77, 3.79, 3.01, 3.75 and 3.27 respectively. The trainees disagreed that the counseling services cater for only academic work (mean=2.88). Some of the positions taken by the trainees on the adequacy and availability of trained and qualified staff to handle guidance and counseling contradict with their responses on the qualitative items. On the qualitative items in the trainees' questionnaire, the trainees indicated that there were high cases of drug abuse,

early marriages and pregnancies in VTCs and they recommended enhancement of guidance and counseling to guide the trainees.

**Table 4.55:** *Trainees' perception of the influence of counseling services on trainee completion rate*

| | Influence of counseling services on trainees' completion rate | N | Mean |
|---|---|---|---|
| i | There are adequate counseling services in the VTC | 182 | 3.77 |
| ii | The counseling services cater for both academic and social aspects of trainees | 182 | 3.79 |
| iii | The counseling services cater for only academic work in this VTC | 182 | 2.88 |
| iv | The counseling services cater for only social aspect of trainees in this VTC | 182 | 3.01 |
| v | There are trained and qualified staff in this VTC who provide counseling to trainees | 182 | 3.75 |
| vi | This VTC organizes for an expert from outside to come and counsel trainees because of lack of trained and qualified staff within the VTC | 182 | 3.27 |
| | N | 182 | |

Findings in Table 4.56 shows that respondents agreed that there are adequate counseling services in VTCs, the counseling services catered for both academic and social aspects of trainees, and that there are trained and qualified staff in the VTCs who provided counseling to trainees as shown by mean scores of 3.12, 3.56 and 3.35 respectively. The respondents disagreed that the counseling services catered for only academic work, the counseling services catered for only social aspect of trainees in this VTC, and that the VTCs organized for experts from outside to come and counsel trainees because of lack of trained and qualified staff within the VTCs as shown by mean scores of 2.24, 2.32 and 2.91 respectively. The quantitative responses from the instructors on the adequacy of the counseling services and availability of the trained and qualified guidance and counseling

staff contradicted with their qualitative responses. Majority of the instructors indicated in the qualitative items of the instructors' questionnaire that there were high cases of pregnancy and early marriages which were attributed to inadequate counseling services in VTCs. The instructors suggested that guidance and counseling should be enhanced to improve trainees' completion rate.

**Table 4.56:** *Instructors' perception of the influence of counseling services on trainees'*

*completion rate*

| Influence of counseling services on trainee completion rate | N | Mean |
|---|---|---|
| i  There are adequate counseling services in the VTC | 34 | 3.12 |
| ii  The counseling services cater for both academic and social aspects of trainees | 34 | 3.56 |
| iii  The counseling services cater for only academic work in this VTC | 34 | 2.24 |
| iv  The counseling services cater for only social aspect of trainees in this VTC | 34 | 2.32 |
| v  There are trained and qualified staff in this VTC who provide counseling to trainees | 34 | 3.35 |
| vi  This VTC organizes for an expert from outside to come and counsel trainees because of lack of trained and qualified staff within the VTC | 34 | 2.91 |
|    N | 34 | |

All the managers pointed out that VTCs lacked trained and qualified staff to handle guidance and counseling issues. The managers pointed out that the instructors, who had been tasked to manage guidance and counseling matters, were not able to handle issues related to personal/social aspect of trainees confidentially. This resulted to trainee-instructor poor relationship and even dropping out of school. The managers further mentioned that some of the instructors had been taken through some short courses but

could not do a good job. This necessitated institutions to occasionally invite experts from outside in some of the VTCs to come and guide and counsel trainees.

The County Directors reported that guidance and counseling was inadequately handled in most VTCs. They argued that though some of the instructors had been sensitized on guidance and counseling, there was need for proper training since most of them could not keep secrets. From the findings presented from trainees, instructors, Managers and County Directors of youth training, it was evident that counseling services need to be enhanced in VTCs in Kenya. The current state of counseling services in VTCs in Kenya supports the findings of Wambu and Fisher (2015) on the study of school guidance and counseling in Kenya. The authors observed that school counseling in Kenya is a relatively young profession, still struggling to find its identity. The study further observed that schools continue to grumble with various emerging students' behavioral, social, and psychological problems such as drug abuse, bullying, violence, suicides, and high drop-out rates. The study also notes that though the Kenyan government had acknowledged the need to strengthen school counseling, the practical implication of it is yet to be realized. The availability of school counselors is critical because they provide counseling programs in three critical areas: academic, personal/social, and career (American Counseling Association, 2007). The report further observes that effective programs are important to the school climate and crucial element in improving student achievement. Croninger and Lee (2001) observed that students who come from socially disadvantaged backgrounds and who have had academic difficulties in the past find guidance and assistance from teachers especially helping. According to US Department of Education (2002), high-quality school counseling services can improve a student's academic

achievement. The current study has revealed that VTCs have low capacities to deal with guidance and counseling issues. Based on the reviewed studies, the availability of well trained and qualified VTC staff in guidance and counseling and support from the government can greatly assist trainees, hence curbing trainee low completion rates. Therefore, guidance and counseling units in VTCs need to be enhanced through proper training of those in-charge or hiring well trained and qualified guidance and counseling staff. Also, the Kenyan government support together with other stake-holders is critical in ensuring successful implementation of counseling services in all educational institutions such as VTCs.

### 4.6.8 Respondents' perception of the influence of various bodies on trainees' completion rate

The results in table 4.57 indicate that the respondents were satisfied with the contributions of National government, County governments and the communities towards trainees' completion rate as shown by mean scores of 3.53, 3.35 and 3.12 respectively. The respondents were not satisfied with the management of Boards of Management (BOMs) (mean=2.85). The poor performance of the BOMs could be attributed to poor remuneration of instructors as mentioned by the managers during the interview sessions. The poor remuneration occasionally leads to poor implementation of some courses because of the demotivated instructors. County Directors also reported that instructors had a low commitment to work because of poor remuneration from the BOM. The County Directors further revealed that some of the Boards of Management (BOMs) were of low capacity, hence could not contribute effectively to the running of the VTCs on matters such as of infrastructural development. The findings of this study agree with

those of Mutinda (2015) in a study of the challenges facing Boards of Management of public secondary schools in Kamwangi District Kenya. The study found that BOMs faced many challenges in management of public secondary schools. The challenges involved inadequate staff personnel, staff discipline, inadequate funds and lack of skills in budgeting, accounting and auditing procedures. The study recommended that appointment of BOMs should be from among people of integrity and competence with a minimum requirement of University education. Despite the challenges facing BOMs, the participation of BOMs in schools or educational institutions has been widely acknowledged in both developing and developed countries (Kamba, 2010). As stated by the Kenya's Education Act (2013) that BOMs are the agents of the Ministry of Education and Teachers Service Commission, there is need for the government to develop clear policy guidelines on governance and management of VTCs. Otherwise, the poor management leadership in VTCs may negatively affect their growth which may result in lower trainees' completion rate.

However, as reported by some of the managers, there were cases of church sponsors not contributing much to the welfare of the VTCs. The sponsors were reported to have occasionally asked for money from the VTCs. According to Kenya's Education Act (2013), the role of the Sponsor shall be; (i) to participate and make recommendations of review of syllabus, curriculum, books and other teaching aids; (ii) representation in the School Management Committees and Board of Management; (iii) to provide supervisory and advisory services in matters regarding spiritual development in schools including the appointment of chaplains at their own expense; (iv) maintenance of spiritual development while safeguarding the denomination or religious adherence of others; and (v) to offer

financial and infrastructural support. Therefore, due to the challenges faced by the VTCs from the sponsors, there is need to sensitize church sponsors on their roles in the running of educational institutions such as VTCs.

**Table 4.57:** *Respondents' perception of the influence of various bodies on trainees'*
*completion rate*

| Influence of various bodies on trainees' completion rate | N | Mean |
|---|---|---|
| i   National Government | 34 | 3.53 |
| ii  County Government | 34 | 3.35 |
| iii Community | 34 | 3.12 |
| iv  Board of Management (BOM) | 34 | 2.85 |
| N | 34 | |

**4.6.9   Methods of Teaching Trade areas under NVCET curriculum in VTCs**

This study sought to establish the frequency of use of methods of teaching suggested for teaching of courses by the instructors. The study revealed that all the instructors used demonstration method (100%) while 94% used discussion, 91% used question and answer, 85% used project, 82% used lecture and 74% used field trip (Table 4.58). The study further revealed that few instructors employed use of games (32%), case study (24%) and debates (15%) methods. The instructors suggested that games, debates and case studies should be removed from the methods of teaching used in VTCs. Perhaps there is need to train instructors in pedagogy so as to appreciate various methods of teaching and apply them in teaching the trade areas. Some instructors suggested that industrial attachment, team teaching and e-learning ought to be indicated in the curriculum as methods of teaching NVCET courses. The findings of the current study closely concurs with those of Yungungu et al (2014) which established that teaching methods such as question and answer, observation and demonstration were more

frequently used in programme implementation in YPs than other teaching methods. The study further observed that such methods were effective for good mastery of skills by the trainees. The need for appropriate methods of teaching is critical so as to impart trainees with the relevant skills applicable to the work of work (Gakio, 2012). According to Murithi (2013), majority of the instructors in Juja Farm did not use the same methods of teaching in various trade areas. The study observed that the absence of some methods in some trades denied the trainees the hands on access to real enterprise management skills and hence no morale for self-employment.

It is evident from these studies and the current study that the methods focusing on the three domains of learning are not balanced. The pedagogy adopted in VTCs must consider all the three domains of learning; psychomotor, cognitive and affective domain. This approach will ensure production of graduates that are fully developed to participate in the world of work.

**Table 4.58:** *Methods of teaching trade areas under NVCET curriculum in VTCs*

| Methods of Teaching in VTCs | Frequency | percent |
|---|---|---|
| i    Demonstration | 34 | 100 |
| ii   Discussion | 32 | 94 |
| iii  Lecture | 28 | 82 |
| iv   Visit/Field trip | 25 | 74 |
| v    Debates | 5 | 15 |
| vi   Question & Answer | 31 | 91 |
| vii  Project | 29 | 85 |
| viii Games | 11 | 32 |
| ix   Case study | 8 | 24 |
| N | 34 | |

This sub-theme on institution-based factors has revealed several issues that touch on VTCs and are negatively influencing trainees' completion rate. Most of these are similar to those established in a study by Yungungu *et al* (2014) on effectiveness of Youth Polytechnics in training the youth for employment in Machakos District, Kenya. The study revealed that YPs studied had irrelevant curriculum, inadequate and unqualified instructors, limited teaching and learning resources, lacked starting entry point mark during admission for class eight, secondary drop-outs and Form four leavers. Therefore, there is need to address issues raised in the present study so as to improve trainees' completion rate in Vocational Training Centres in Kenya. The measures to be taken may include reviewing of the NVCET curriculum, hiring trained and qualified staff, provision of adequate teaching and learning resources and establishing starting entry mark and other qualifications for those admitted to VTCs, among others.

## 4.7    Community-based factors and trainees' completion rate in VTCs in Kenya

The fourth objective sought to establish community-based factors that influenced trainees' completion rate in VTCs in Kenya.

### 4.7.1   Respondents' perception of the influence of the surrounding community on trainees' completion rate.

The study sought views from instructors and trainees on the influence of the surrounding community on trainees' completion rate. The analysis of relevant items in Table 4.59 indicated that the trainees agreed that there were trainee role models from the surrounding community, the presence of role models from the community could positively improve the completion rates of VTC trainees, and that the surrounding

community gave both moral and material support to the VTCs as shown respectively by mean scores of 3.88, 3.75 and 3.41. The trainees further agreed that the presence of a supportive community can increase the completion rates of the trainees, the community with negative attitude lowers the completion rate of VTC trainees, and that some members of the surrounding communities interfered with projects in the VTCs as shown respectively by the mean scores of 3.64, 3.19 and 3.03. The respondents disagreed that the surrounding communities were very negative about the VTCs (mean=2.53). As revealed by the trainees that some of the members of the surrounding communities interfered with projects in VTCs, Semejju (2004) suggests that community involvement would create a better understanding of the socio-economic benefits of the Youth Polytechnics to the development of the catchment area. The author argued that community involvement promotes a sense of ownership and increases accountability to avoid misuse of resources. Also, Muthoni (2015) claims that there is an interrelationship between the community involvement in school affairs and student achievement. Therefore, there is need for VTCs to continuously engage the surrounding community in their various activities so as to change the current negative perception towards them.

**Table 4.59:** *Trainees' views on the influence of community-based factors on trainees'*

        *completion rate*

| Trainees' views on the influence of community-based factors | N | Mean |
|---|---|---|
| i   There are trainee role models from the surrounding community | 182 | 3.88 |
| ii  The presence of role models from the community can positively improve the completion rates of trainees | 182 | 3.75 |
| iii The surrounding community gives both moral and material support to the VTC | 182 | 3.41 |
| iv The presence of a supportive community can increase the completion rates of the trainees | 182 | 3.64 |
| v  The surrounding community is very negative about the VTC | 182 | 2.53 |
| vi Community with negative attitude lowers the completion rates of VTC trainees | 182 | 3.19 |
| vii Some members of the surrounding community interfere with projects in this VTC | 182 | 3.03 |
|     N | 182 | |

Table 4.60 shows that the instructors agreed that there were trainee role models from the surrounding community, the presence of role models from the community can positively improve the completion rate of trainees, and that the surrounding communities gave both moral and material support to the VTCs as shown respectively by mean scores of 3.91, 4.21 and 3.03. The instructors also agreed that the presence of a supportive community can increase the completion rates of the trainees, the community with negative attitude lowers the completion rate of VTC trainees, and that some members of the surrounding communities interfered with projects in the VTCs as shown respectively by the mean scores of 4.15, 4.00 and 3.09. The instructors disagreed that the surrounding communities were very negative about the VTCs (mean=2.59). According to Kamau and Ngumbu

(2013), active community involvement in the management and curriculum issues in Youth Polytechnics would increase a sense of ownership and understanding of vocational training programmes. Hence, community involvement with an aim of avoiding conflicts is critical in nurturing well developed VTCs that are acceptable and able to address the needs of the society.

**Table 4.60:** *Instructors' views on the influence of community-based factors on trainees' completion rate*

| Instructors' views on the influence of community-based factors | N | Mean |
|---|---|---|
| i   There are trainee role models from the surrounding community | 34 | 3.91 |
| ii  The presence of role models from the community can positively improve the completion rates of trainees | 34 | 4.21 |
| iii The surrounding community gives both moral and material support to the VTC | 34 | 3.03 |
| iv  The presence of a supportive community can increase the completion rates of the trainees | 34 | 4.15 |
| v   The surrounding community is very negative about the VTC | 34 | 2.59 |
| vi  Community with negative attitude lowers the completion rates of VTC trainees | 34 | 4.00 |
| vii Some members of the surrounding community interfere with projects in this VTC | 34 | 3.09 |
| N | 34 | |

The trainees and instructors responded similarly in Tables 4.59 and 4.60. Though they agreed that there were role models from the surrounding communities, the qualitative results from the instructors and County Directors revealed that there were few role models. It was further observed that there was lack of encouragement from those who had completed courses in VTCs due to their personal engagements. The instructors said

that the availability of role models could motivate many trainees to complete their courses, which eventually yield high trainees' completion rate. The study further established that the community's support morally and materially was very minimal, which could have been attributed to poor perception of the VTCs. The managers stated that there was high level of discouragement from those in the informal sector, commonly referred to as *Jua Kali* arguing that people can earn money without training. Hence, occasionally some trainees drop out of VTCs and venture into the informal sector. It was further revealed by the County Directors that some of the members of the community took their children to other sectors of education, hence depriving VTCs the needed resources in terms of financial support through payment of school fees. The instructors also revealed that members of the community did not put much emphasize on mobilizing financial support for needy children in VTCs. On the other hand, the trainees emphasized the need for a morally and materially supportive community. All these concerns imply that there was less or no support from the community and perhaps that is why the instructors stressed the need to sensitize the community on the benefits of VTCs. To highlight the need for a surrounding community that is supportive, South, Baumer and Lutz (2003) argued that students in low socio-economic neighborhoods are more likely to drop-out of school than students in more affluent neighborhoods. Affluent or well-to-do neighborhoods provide more access to community resources and positive role models. In a study done in Primary schools in Eldoret Municipality by Simiyu and Sambu (2014), it was observed that the community played a key role in provision of Technical and Vocational Education and Training facilities and equipment.

Though the quantitative responses from both trainees and instructors indicated that there were no negative perceptions from the community, the qualitative responses gave more insightful information into the issues. The Managers and the County Directors reported that there was still negative attitude from the surrounding communities towards VTCs. For instance, some members of the community perceived VTCs as second class education institutions meant for failures, leaders encouraging all failures to join VTCs, negative statements by some Primary school teachers who say, "If you fail, you will go to VTCs", among others. All these responses indicate that there was negative attitude towards Vocational Training Centres in Kenya. These findings corroborates those of Kamau and Ngumbu (2013) who established that community attitude towards Youth Polytechnics' training was negative and that technical/vocational education is perceived as a preserve for the poor and non-academic performers in the society. Similarly, Waihura, Kagema and Kimiti (2016) found out that TIVET training was regarded as low class education by the public. Ngerechi (2005) cited in Kamau and Ngumbu (2013) argued that for Kenya to cater for the changing technological systems and economic, a change of attitude by the government and other stake-holders towards vocational and training must be addressed. Perhaps there is need for regular sensitization on the benefits of the VTCs to the youths and the community at large so as to change their poor image. The interference of the development projects as reported by the respondents in the VTCs has to be addressed amicably through involvement of all the stake-holders; government, community and Boards of Management.

**4.8    Respondents' suggestions for improving trainees' completion rate**

This section sought suggestions from both the trainees and instructors on how to improve trainees' completion rates in Vocational Training Centres.

**4.8.1    Trainees' suggestions for improving of trainees' completion rate**

The most frequently mentioned suggestions as shown in Table 4.61 were; trainees observing school rules and upholding good morals (28.2%), government supporting fee payment through grants and loans (14.1%), improving trainee-instructor relationship (13.5%), providing adequate infrastructure and training materials (12.9%), parental moral, fee payment and material support (9.8%). Other interventions suggested by the trainees include; enhancing guidance and counselling (8.0%), reviewing the NVCET curriculum (4.9%), employing adequate and qualified instructors (3.7%), having role models (3.1%) and having morally and materially supportive community (1.8%).

**Table 4.61:** *Trainees' suggestions for improving trainees' completion rate*

| | Trainees' suggestions | Frequency | Percent |
|---|---|---|---|
| i. | Trainees observing school rules and upholding good morals | 46 | 28.2 |
| ii. | Government support fee payment – grants and loans | 23 | 14.1 |
| iii. | Improving trainee-instructor relationship | 22 | 13.5 |
| iv. | Providing adequate infrastructure and training materials | 21 | 12.9 |
| v. | Parental moral, fee and material support | 16 | 9.8 |
| vi. | Enhancing guidance and counselling | 13 | 8.0 |
| vii. | Reviewing the NVCET curriculum | 8 | 4.9 |
| viii. | Employing adequate and qualified instructors | 6 | 3.7 |
| ix. | Having role models | 5 | 3.1 |
| x. | Having morally and materially supportive community | 3 | 1.8 |
| | Total | 163 | 100 |

**4.8.2 Instructors' suggestions for improving of trainees' completion rate**

The most frequently mentioned suggestions by the instructors as indicated in Table 4.62 include; providing adequate infrastructure and training materials (26.2%), employing adequate and qualified instructors (13.8%), reviewing the NVCET curriculum (13.8%), having better terms of service for instructors (9.2%), parents and community supporting trainees morally, financially and materially (9.2%). Other suggestions include; enhancing guidance and counselling (7.7%), government supporting fee payment through grants and loans (6.2%), trainees participating in co-curricular activities (6.2%), sensitizing parents, guardians and community on the importance of VTCs to trainees (4.6%), and having role models (3.1%).

**Table 4.62:** *Instructors' suggestions for improving trainees' completion rate*

| | Instructors' suggestions | Frequency | Percent |
|---|---|---|---|
| i. | Providing adequate infrastructure and training materials | 17 | 26.2 |
| ii. | Employing adequate and qualified instructors | 9 | 13.8 |
| iii. | Reviewing the NVCET curriculum | 9 | 13.8 |
| iv. | Having better terms of service for instructors | 6 | 9.2 |
| v. | Parents and community to support trainees morally, financially and materially | 6 | 9.2 |
| vi. | Enhancing guidance and counselling | 5 | 7.7 |
| vii. | Government supporting fee payment through grants and loans | 4 | 6.2 |
| viii. | Trainees participating in co-curricular activities | 4 | 6.2 |
| ix. | Sensitizing parents, guardians and community on the importance of VTCs to trainees | 3 | 4.6 |
| x. | Having role models | 2 | 3.1 |
| | Total | 65 | 100 |

The findings as shown in Tables 4.61 and 4.62 indicate that most of the suggestions made by the trainees and instructors are similar.  Some of these suggested solutions for improving completion rates have been reported in other studies. McInnis, Hartely, Polesel and Teese (2002) argue that specialized guidance, explicit integration of practical and theory content, raising awareness on the availability of support services such as financial support and parental involvement in school activities could increase completion levels in Vocational Education and Training and Higher Education. Furthermore, APHRC (2013) recommends that improving pre-service and in-service teacher training, ensuring adequate and sufficient infrastructure and teaching materials, providing financial support for children from the poorest households will reduce grade repetition and improve completion rates in school. Revision of school curriculum that is manageable by students could improve completion of school (Kanyora, 2014).

## 4.9     Summary

This chapter has presented and discussed findings of this study that were guided by trainee-based, family-based, institution-based and community-based factors. On trainee-based factors, the study has found that pregnancy, early marriages, employment in the course of study and low entry qualification occasionally influenced trainees to drop out of the VTC. On family-based factors, the findings indicated that family status in terms of occupation, education and income influenced trainees' completion rate. On institution-based factors, the study revealed that the adequacy of the teaching and learning facilities and availability of trained and qualified instructors played a critical role in ensuring trainee high completion rates. Under community-based factors, the study established that negative attitude towards VTCs, lack of moral and material support, and inadequate role

models impacted negatively on trainees' completion rate. On suggestions for improving trainees' completion rate, this study provided possible actions to be undertaken by trainees, families, Vocational Training Centres and the surrounding communities.

# CHAPTER FIVE

# SUMMARY, CONCLUSION AND RECOMMENDATIONS

## 5.1    Introduction

This chapter presents the summary of the study, conclusions, recommendations, gaps which must be filled through further study and the summary of this chapter.

## 5.2    Summary of the Study

The study sought to examine the factors that influenced trainees' completion rate in Vocational Training Centres in Kenya with focus on National Certificate of Education and Training (NVCET) curriculum. Chapter one presented the background of the study, statement of the problem, the purpose of the study and its objectives which were drawn from the four identified independent variables. The research questions addressing the objectives, justification, significance, assumptions, scope and limitations of the study, theoretical and conceptual frameworks of the study were also presented in chapter one. Chapter two reviewed relevant literature related to the study. The chapter begins with the discussion of the TVET system in Kenya and the concept of Youth Polytechnics. The chapter then focused on the extent to which trainee-based, family-based, institution-based and community-based factors influence trainees' completion rate in Vocational Training Centres in Kenya. Chapter three discusses the methodology of the study. The study employed descriptive research design. The study area, the target population, sample size and the sampling procedure, the study variables, data collection instruments, validity and reliability of instruments are presented and discussed. The chapter also describes the development and administration of the research instruments, data analysis and ethical

considerations that governed the study. Chapter four focuses on the data presentation, analysis, interpretation and discussion. The results of this study are presented using frequency, percentage and mean distribution tables, and scatter charts.

## 5.3    Conclusion of the Study

This study investigated the factors influencing trainees' completion rate in Vocational Training Centres in Kenya. The study revealed that there has been annual increase on trainee enrolment rate in VTCs. Despite this increase, there has been continued drop in the trainees' completion rates which necessitated a study to be done to establish the causes of this phenomenon. This study sought to examine the influence of trainee-based factors, family-based factors, institution-based factors and community based factors on trainees' completion rate in Kenya.

## 5.3.1    The influence of trainee-based factors on trainees' completion rate in VTCs in Kenya

This study revealed that some of trainees had challenges in their training in VTCs because of their entry qualification or mark. The study found out that some of the trainees with lower qualification found training difficult especially in theory, which occasionally led to drop out from VTCs. Perhaps that is why majority of the respondents suggested a mark of between 201 and 250 for those enrolling in NVCET courses in VTCs.

Further, the study established that female pregnancies, early marriages, drug and substance abuse and other indiscipline cases, employment or cheap labour in the course of study influenced trainees to drop out. The study also established that factors that influenced trainee drop-out were negative peer influence, persistent poor performance in

VTCs, lack of interest to study as a result of forced option, low entry qualification with an expectation of easy course which becomes contrary to having enrolled to do more practical course. However, cases of pregnancies and early marriages affected mainly the female trainees while cases of indiscipline affected mainly the male trainees.

Therefore, this study concludes that low entry qualification of trainees, female pregnancies, early marriages, drug and substance abuse, employment during the course of study influenced trainee low completion rates in VTCs. The study further concludes that negative peer influence, poor performance in VTCs and lack of interest to study influenced trainees' low completion rate in VTCs.

**5.3.2  The influence of family-based factors on trainees' completion rate in VTCs in Kenya**

This study established that majority of the trainees were living with both parents while some were leaving in other forms of family structures such as those of a single parent. The study revealed that some trainees dropped out from the VTCs because of destabilized family set ups resulting from death of parents, families with marital challenges and very sketchy family structures. The study also revealed that parents were the main source of influence on courses chosen by their children in VTCs. Despite this parental influence, majority of the parents were not of high social status in the society since they were not associated with jobs such as engineers, doctors, high leadership positions, among others. It was perceived that the status of the parents influence what children pursue in VTCs. The findings revealed that majority of the trainees' parents had at most Primary school education and had high poverty levels. Therefore, Low education and occupation of many

parents made them not to set high levels of aspirations for their children, hence majority dropped out of VTCs. Given that the parents were the main source of financial support, the high poverty levels within the families contributed to high fee balances in VTCs and lack of support for other basic needs, caused trainees to drop out from VTCs.

Further, the study established that parents were not monitoring the progress of their children in VTCs, hence were not able to understand specific needs that needed support towards them. Because of ignorance, some parents forced their children to do some courses they were not interested in and eventually making them drop out of VTCs. The study also revealed that most of the children lacked parental guidance, leaving much of the burden to the VTCs. This study further revealed that most parents had negative attitude towards VTCs, in that they gave priority in fee payment to other levels of educational institutions. This parental approach occasionally discouraged trainees from continuing with education. The parents were also not interested to know the parents of their children's friends. Families have different belief systems in terms of aspirations and other aspects which may be in conflict, resulting in trainee dropping out from VTCs. The study further revealed that drop out of trainee siblings did not influence drop-out rates in VTCs.

In view of these findings, this study concludes that destabilized family structures, poor parental influence on the choice of courses in VTCs, low status of parents in terms of occupation, low income earned and low education levels, parental high poverty levels and lack of parental role in monitoring their children's progress in VTCs influenced trainee low completion rates. Other family-based factors that influenced low completion rates

include parental high level of ignorance, lack of parental guidance and counseling, parental negative attitude towards VTCs and lack of parental interest to know the parents of their children's friends. Therefore, a positive change in either of these variables will cause a positive change in the completion rates of trainees in VTCs.

### 5.3.3 The influence of institution-based factors on trainees' completion rate in VTCs in Kenya

This study revealed that some institutions did not have a church sponsor. Majority of the respondents argued that spiritual input of the church was crucial in motivating trainees to complete their courses. Perhaps trainee indiscipline cases, pregnancy, early marriages, among others could have been remedied with religious input to VTCs. On the NVCET curriculum, the study revealed that the content taught was too much to the trainees within the specified time, focusing mainly on the theory at the expense of practice which is normally the expectation of many trainees pursuing courses in VTCs. The content taught was also challenging, making some trainees to drop in the process of studying. The study also revealed that some of instructors had certificate qualification both in content and pedagogy. This qualification restrained them from discharging NVCET courses which are very comprehensive. The study also revealed that some instructors discouraged trainees to pursue NVCET courses because of too much work involved. Low professional qualification hampered selection and effective use of appropriate teaching methods which resulted to overall poor quality of instruction. The use of effective teaching methods could be enhanced through further training by instructors in low qualification. Perhaps other methods of teaching such as live work, team teaching and e-learning/digital models could be introduced to improve the acquisition of knowledge and skills taught. The low

qualification of some instructors and their inadequacy resulted to trainee drop out from VTCs. The conduct and behaviour of the instructors before the trainees was good and therefore did not negatively influence trainees' completion rate. However, there were few cases of trainee-instructor conflicts that were settled from time to time.

Further, the study revealed that general facilities were inadequate in all the VTCs which include; classrooms, workshops, labs, boarding and land for expansion. Instructional materials, tools and equipment were also inadequate, outdated, in poor state and not embracing the modern technology thus influenced trainees to drop from VTCs. Though most VTCs had reference reading materials, most of them did not have study rooms or libraries for the trainees, hence making the VTC environment not conducive for studying. These shortcomings in the VTCs' facilities demotivated trainees who eventually dropped out.

The study also revealed that the type of the administration in the VTCs did not affect negatively the trainees' completion rate. However, the County Directors of Youth Training argued that there was need to review the Managers' qualifications because they were cited to be low and some of them lacked managerial skills.

The study has, further, revealed that though most VTCs offered guidance and counseling services, much was still needed to be done to improve them. For instance, there was poor handling of cases in many institutions, instructors unable to handle cases confidentially resulting in some trainees dropping from the system. High number of cases such as early pregnancies, early marriages, cheap labour, drunkedness, drug abuse and theft were largely attributed to lack of a strong guidance and counseling systems. As a result,

inadequate handling of guidance and counseling and lack of trained and qualified staff led to high dropout rates of trainees from the system.

The study revealed that majority of the respondents were satisfied with National government, County governments and partly communities on the role they played in the running of the VTCs. However, majority of the respondents were dissatisfied with the leadership of Boards of Management (BOMs), where they felt their leadership in the running of the VTCs was poor. Some of the cases reported included; poor remuneration of the instructors employed by the Board and their low capacities to handle various issues in the VTCs. As a result of poor pay, some instructors became demotivated making them less committed to their work and in turn negatively influencing the trainees to leave the VTCs.

Therefore, the study concludes that lack of church sponsors in some VTCs, the present difficult NVCET curriculum, low qualification of instructors, poor selection and use of teaching methods, inadequate general facilities and instructional materials influenced trainee low completion rates in VTCs. Other factors that influenced trainee low completion rates include; inadequate handling of guidance and counseling issues, low status of guidance and counseling systems, lack of trained and qualified guidance and counseling staff and the poor leadership of Boards of Management (BOMs).

### 5.3.4 The influence of community-based factors on trainees' completion rate in VTCs in Kenya

On community-based factors, the study revealed that there were few role models in the community. The shortage of this caused less impact on the high number of trainees

currently enrolling in VTCs and as a result influencing low completion rates. The study also revealed that there was very minimal moral and material support from the surrounding communities which occasionally influenced low completion rates in VTCs. The study further revealed that negative perception of the VTCs by the community was prevalent. For instance, some viewed VTCs as second class educational institutions and places for failures. There were also cases of interference from the surrounding communities on development projects due to vested interests such as the need to be awarded tenders for the projects and apportioned jobs during project implementation. The interferences occasionally stopped or delayed completion of much needed facilities such as workshops, class rooms and dormitories in VTCs. Hence, this negative impact of the surrounding communities contributed to trainee dropping out from the VTCs. Therefore, the study concludes that lack of adequate role models, minimal moral and material support, negative perception of VTCs and interference on the development projects influenced negatively trainees' completion rate in Vocational Training Centre.

The conclusion of this study has shown that trainee-based, family-based, institution-based and community-based factors influenced trainees' completion rate in Vocational Training Centres in Kenya. Therefore, a positive action in either of these variables will cause an increase in trainees' completion rate in VTCs. The next section provides a way forward on actions which could be taken to improve trainees' completion rate in Vocational Training Centres in Kenya.

**5.4     Recommendations of the Study**

Based on the findings and the conclusion of this study, the researcher makes the following recommendations;

i   Vocational Training Centres should urgently enhance guidance and counseling programs so as to handle both social and academic aspects of the trainees. Many cases of pregnancies, drug abuse, employment in the course of study, choice of courses, among others could be addressed effectively through guidance and counseling. This could be done through capacity building of existing staff or employing trained and qualified staff and engaging peer counselors. Parents should also play a key role in guiding their children.

ii   National government, County governments and VTC leadership should urgently mobilize and allocate more funds to support trainees' fee payment, employment of adequate trained and qualified staff, retraining its staff, equipping VTCs with adequate facilities and learning materials and building capacity of its Boards of Management (BOMs) on prudent financial management and resource mobilization. Besides national government funding, VTCs could initiate Income Generating Activities (IGAs), seek for donor and public support, among others.

iii   The national government should urgently review NVCET curriculum to make it modular and competency-based. This will allow trainees to move according to their abilities. The curriculum should also consider the minimum entry mark for those enrolling in VTCs with KCPE. Perhaps, a minimum of 200 marks as suggested by the respondents. The curriculum should be mainly practical oriented.

There is need to reduce the duration of the courses and issue certificates at level 1 and 2.

iv   The Ministry of Education and the community leadership should urgently sensitize parents or families and the communities on the need to support their children's education in VTCs. Strategies to rebrand VTCs need to be initiated and implemented immediately so as to create a positive public perception. This will make parents and communities value education of their children equally in VTCs and other levels of education.

v   Community leadership should urgently initiate community out-reach programs such as voluntary services in the VTCs. This will enhance both moral and material support to VTCs.

vi   The communities and the Vocational Training Centres should continuously do a follow-up of the trainees who have already completed courses in VTCs and build a pool of role models that will create positive influence to continuing trainees.

vii   The County and National governments should urgently develop and implement sustainable funding model for vocational training. Investment level in vocational training in Kenya is still very low. Some materials and equipment for vocational training are very expensive and the government must develop a sustainable way of supporting this demand.

viii To address the current inadequate linkage with industry and higher TVET institutions, the VTCs in collaboration with County government should develop and implement robust industrial attachment/apprenticeship program in VTCs. They should also develop and implement policy guidelines on VTCs trainees'

tracer study. VTCs together with the government should institute and sustain linkages with higher TVET institutions particularly on TVET career pathways.

## 5.5    Suggestions for further research

This study established gaps which should be filled through further study. These gaps are;

i    A study to investigate factors and their extent in influencing trainees' completion rate from a gender perspective in VTCs in Kenya

ii    A study to investigate the influence of Industrial Attachment (IA) on trainees' completion rate in VTCs

iii    A study to investigate the influence of Guidance and Counselling on trainees' completion rate in VTCs

iv    A study to investigate the relevance of NVCET courses towards employment

v    A similar study to be conducted in other counties to establish how trainee, family, institution and community-based factors influence trainees' completion rate in VTCs in Kenya

## 5.6    Summary

This chapter has presented the study summary, conclusion and recommendations of the study. The purpose of this study was to investigate the factors that influence trainees' completion rate in Vocational Training Centres in Kenya with focus on National Vocational Certificate of Education and Training curriculum. This study has highlighted the various challenges affecting the effective implementation of the NVCET curriculum. However, some recommendations have been made on the possible actions to be taken by the trainee families, the surrounding communities, the Vocational Training Centres and

the government to address the challenges affecting the curriculum. It is anticipated that these recommendations will be made possible through involvement of all the stakeholders. This study has also suggested some further research to be done on the same area with an aim of understanding better the NVCET curriculum so as to make informed decisions in future.

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**APPENDICES**

**Appendix I: Map of Kenya showing the study area**



**Source**: http://www.guide2kenya.com/uploads/content/Kenya-County-Map.jpg

**Appendix II: Letter of Transmittal**

> Hoseah Kiplagat
> University of Eldoret
> P.O. BOX 1125-30100
> ELDORET
> Mob: 0722-486123
> **Date: …………………….**

**TO WHOM IT MAY CONCERN**

Dear Sir/Madam,

**RE: DATA COLLECTION**

This is to kindly inform you that I am a student currently pursuing a Doctor of Philosophy degree in Educational Technology at the School of Education, University of Eldoret.

I am conducting a study to establish the factors that influence trainees' completion rate in Vocational Training Centres in Kenya with focus on National Vocational Certificate of Education and Training (NVCET) Curriculum.

The findings of the study will be useful to the Ministry of Education, Science and Technology, and all other stakeholders who have interest in the Vocational Training Centre training in Kenya. This will ensure that completion rates are enhanced in Vocational Training Centres. The findings of the study will be shared with the respondents.

Attached herein, please find attached questionnaire that seek your views on various aspects of Vocational Training Centre.

Kindly provide information by responding to the questions honestly and sincerely. The information provided will be used ONLY for academic purpose and will be treated with highest confidentiality. You are NOT required to record your name or initials anywhere.

Thank you

Yours faithfully,

**Hoseah Kiplagat**
PhD Student – EDU/DPHIL/CI/003/12
University of Eldoret

**Appendix III: Informed Consent**

**Title of the Study:** Factors Influencing Trainees' Completion Rate in Vocational
Training Centres in Kenya: Focus on National Vocational Certificate
of Education and Training (NVCET) Curriculum

**Researcher:**   Hoseah Kiplagat,
School of Education,
University of Eldoret
**Mob:** 0722-486123, **Email:** hoskiphokip@yahoo.com

Dear Sir/Madam,

You are invited to take part in a research study. Before you decide to participate, it is important that you understand why the research is being conducted and what it will involve. Please read and understand the information carefully. You may ask the research whose name is indicated above if there is anything that is not clear or if you need additional information.

The purpose of the study is to establish the factors that influence trainees' completion rate in Vocational Training Centres in Kenya with focus on National Vocational Certificate of Education and Training (NVCET) curriculum.

There are no risks foreseen from your participation in this study. You may decline to answer any or all questions and you may terminate your involvement at any time if you decide so.

It is anticipated that the findings of the study will improve various aspects touching on the implementation and evaluation of the NVCET Curriculum.

You may choose not to participate in the study and leave your responses blank, or you may read quietly at your desk of table.

Please do not write any information that may identify you such as your name or initials on your questionnaire. Your responses will be anonymous. Should you have any questions about the research or any related matters, please contact the researcher at the mobile number and the email address provided above.

**CONSENT**

By signing this consent form, I confirm that I have read and understood the information and I have had the opportunity to ask questions. I understand that my participation is voluntary and that I am free to withdraw at any time, without giving any reason and without cost. I understand that I will be given a copy of this consent form. I voluntarily accept to take part in this study.

**Respondent's Signature: ………………………………………… Date: ………………**

**Researcher's Signature: ………………………………………….. Date: ………………**

**Appendix IV: Questionnaire for VTC Trainees**

**Name of VTC:** ………………………….………… **Date:** ………………………

The questionnaire is meant to collect data for purely academic work. The study seeks to establish the **Factors Influencing Trainees' Completion Rate in Public Vocational Training Centres in Kenya: Focus on NVCET Curriculum**.
Answer all questions as indicated in various sections by either filling in the blank spaces or ticking (√) the option or statement that applies

## SECTION A: DEMOGRAPHIC INFORMATION
1. Sex:           Male [   ]     Female [   ]
2. Level of study (e.g. 1 or 2): …………… Year of study (e.g. 2, 3 or 4): ……………
3. Indicate your age bracket
   - **i** Below 15 years…..... [   ]
   - **ii** 15 – 19 years…….. [   ]
   - **iii** 20 – 24 years…….. [   ]
   - **iv** 25 – 29 years…….. [   ]
   - **v** 30 – 34 years…….. [   ]
   - **vi** Above 35 years…… [   ]

## SECTION B: TRAINEE-BASED FACTORS
4. What was your highest level of academic qualification before enrolling in Vocational Training Centre
   - **i** Secondary Education (KCSE Awarded). [   ]
   - **ii** Dropped out of secondary school……… [   ]
   - **iii** Primary Education (KCPE Awarded)…. [   ]
5. If you completed Primary School Education, kindly indicate the **range of marks** you scored
   - **i** 451 – 500…… [   ]
   - **ii** 401 – 450…… [   ]
   - **iii** 351 – 400…… [   ]
   - **iv** 301 – 350…… [   ]
   - **v** 251 – 300…… [   ]
   - **vi** 201 – 250…… [   ]
   - **vii** 151 – 200…… [   ]
   - **viii** 101 – 150…… [   ]
   - **ix** 051 – 100…… [   ]
   - **x** 000 – 050…… [   ]
6. **(a)** Indicate the course you are taking in Vocational Training Centre
   - **i** Agri-business (Modern methods of Agriculture)…. [   ]
   - **ii** Appropriate Carpentry and Joinery……………….. [   ]
   - **iii** Building Technology………………………………… [   ]
   - **iv** Electrical and Electronics Technology…………… [   ]
   - **v** Fashion Design and Garment Making Technology [   ]
   - **vi** Food processing Technology……………………… [   ]

**vii** Hair Dressing and Beauty Therapy Technology…..  ☐
**viii** Information and Communication Technology……. ☐
**ix** Leather Work Technology………………………. ☐
**x** Metal Processing Technology……………………... ☐
**xi** Motor Vehicle Technology………………………… ☐
**xii** Refrigeration and Air Conditioning………………. ☐

**(b)** Why did you take the above course in VTC?

……………………………………………………………………………………………

……………………………………………………………………………………………

**(c)** What are you planning or expecting to do after completing the course at Vocational Training Centre?

………………………………………………………………………….................

……………………………………………………………………………………………

7. **(a)** Does your Entry Qualification make you have challenges in your training at Vocational Training Centre?      YES ☐            NO ☐

**(b)** If yes in (a), list the main challenges you are facing during your training at VTC because of your entry qualification

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

**(c)** Suggest some of the ways to address the challenges you are facing in your training

……………………………………………………………………………………

……………………………………………………………………………………

……………………………………………………………………………………

8. Indicate your level of agreement or disagreement with the statement as regards the Entry Qualifications of Vocational Training Centre Trainees. Use a tick (√), where 1-Strongly Disagree (SD), 2-Disagree (D), 3-Undecided (U), 4-Agree (A), and 5-Strongly Agree (SA)

|  | Statement | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | Entry Qualifications of Vocational Training Centre trainee influences whether one will complete the course or not |  |  |  |  |  |
| 2 | Trainees with higher qualification find training easy |  |  |  |  |  |
| 3 | Trainees with lower qualification find training difficult |  |  |  |  |  |
| 4 | Trainees with higher qualification under the content being taught faster than those with lower qualification |  |  |  |  |  |
| 5 | Occasionally trainees with lower qualification drop out of VTC |  |  |  |  |  |
| 6 | Female trainees drop out of this VTC because of pregnancy |  |  |  |  |  |
| 7 | Male trainees drop out of this VTC because of pregnancy |  |  |  |  |  |
| 8 | Female trainees drop out of this VTC because of indiscipline |  |  |  |  |  |
| 9 | Male trainees drop out of this VTC because of indiscipline |  |  |  |  |  |

**9.** What is your suggestion on the Entry Qualification of a youth seeking to pursue the current trade area you are teaching? Suggest range of marks from **question 5** above (E.g. 051 – 100) ……………………………………………………………………

**10.** Indicate your level of agreement or disagreement with the statement as regards to reasons for trainee drop out in Vocational Training Centre. Use a tick (√), where 1-Strongly Disagree (SD), 2-Disagree (D), 3-Undecided (U), 4-Agree (A), and 5-Strongly Agree (SA)

| | Statement | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | Female trainees drop out of this VTC because of pregnancy | | | | | |
| 2 | Male trainees drop out of this VTC because of pregnancy | | | | | |
| 3 | Female trainees drop out of this VTC because of indiscipline | | | | | |
| 4 | Male trainees drop out of this VTC because of indiscipline | | | | | |
| 5 | Female trainees drop out of this VTC because of employment | | | | | |
| 6 | Male Trainees drop out of this VTC because of employment | | | | | |
| 7 | Some female trainees drop out of VTC because of lack of fees | | | | | |
| 8 | Some male trainees drop out of VTC because of lack of fees | | | | | |
| 9 | Specify any other reason(s) for dropping.………..…………………………………………….. …………………………………………………………………………………………………….. …………………………………………………………………………………………………….. | | | | | |

**11.** Indicate the level of your performance currently at VTC

**a)** Trade area – Theory
- **i** Excellent (Above 70%)…☐
- **ii** Good (60% - 69%)….☐
- **iii** Average (50%- 59%)…..☐
- **iv** Below Average (40%-50%)….☐
- **v** Not good (Below 40%)…☐

**b)** Trade area – Practice
- **i** Excellent (Above 70%)…☐
- **ii** Good (60% - 69%)….☐
- **iii** Average (50%- 59%)….☐
- **iv** Below Average (40%-50%)…☐
- **v** Not good (Below 40%)…☐

**c)** General Education (Communication skills, Entrepreneurship skills, Life skills, ICT Studies & Technical Drawing). Average of all the General Education courses
- i Excellent (Above 70%)…☐
- ii Good (60% - 69%)…☐
- iii Average (50%- 59%)….☐
- iv Below Average (40%-50%)…☐
- v Not good (Below 40%)…☐

**12. a).** Would you recommend anybody to seek training under NVCET Curriculum in Vocational Training Centre? YES ☐ NO ☐

**b).** If YES, Why ………………………………………………………………………..

If NO, Why …………………………………………………………………………

## SECTION C: FAMILY-BASED FACTORS

**13.** Kindly indicate the structure of your family

**i**   Living with both parents…………………... ☐

**ii**  Living with a single parent……………….. ☐

**iii** Living in a family with someone sick…….. ☐

**iv** Living in a family with marital challenges... ☐

**v**   Living with a guardian…………………….. ☐

**vi** Any other. Specify ……………………………………………………………

**14. (a)** What is the occupation of your father (e.g. teacher, herdsman, farmer etc)?

……………………………………………………………………………………….

**(b)** What is the occupation of your mother (e.g. teacher, herdsman, farmer etc)?

……………………………………………………………………………………….

**15.** Who influenced you MAINLY to choose the course you are current pursuing in Vocational Training Centre? Use a **(√)**

**i**    Influenced by Parent(s)……………… ☐

**ii**   Influenced by a friend………………. ☐

**iii**  Self. Personal interest to study………. ☐

**iv**  My role model. Not a family member.. ☐

**v**    Any other. Specify ……………………………………………………………

**16.** Indicate your level of agreement or disagreement with regard to the following statements on your family practices. Use a tick (√), where 1-Strongly Disagree (SD), 2-Disagree (D), 3-Undecided (U), 4-Agree (A), and 5-Strongly Agree (SA)

| | Statement | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | My parent(s) regularly encourages me to aim higher in whatever I am doing in Vocational Training Centre | | | | | |
| 2 | My parent(s) regularly monitor my academic progress at VTC | | | | | |
| 3 | My parent(s) regularly communicates with the VTC | | | | | |
| 4 | My parent(s) is interested to know the parents of my friends | | | | | |
| 5 | I have a brother or a sister who dropped out of school or VTC | | | | | |

**17.** Who supports you mainly (fees and other costs) in Vocational Training Centre?

**i**    Parent(s)……. ☐

**ii**   Guardian……. ☐

**iii**  Relative…….. ☐

**iv**  Community…. ☐

**v**    Government… ☐

**vi**  Self………….. ☐

**vii** Any other. Specify ……………………………………………………………

**18.** Indicate the highest level of education your parents completed. Use a **tick (√)**

|    | Level of Education | Father | Mother |
|----|--------------------|--------|--------|
| 1  | University Education |  |  |
| 2  | National Polytechnic (NP) Education |  |  |
| 3  | Technical Training Institute Education |  |  |
| 3  | Institute of Technology Education |  |  |
| 4  | Technical Training College Education |  |  |
| 5  | Teachers Training college Education (Awarded Certificate – P1) |  |  |
| 6  | Teachers Training college Education (Awarded Certificate – Diploma) |  |  |
| 7  | Secondary School Education (KCSE Awarded) |  |  |
| 8  | Dropped out from secondary |  |  |
| 9  | Youth Polytechnic Training (Certificate Awarded) |  |  |
| 10 | Dropped out of VTC |  |  |
| 11 | Primary School Education (KCPE Awarded) |  |  |
| 12 | Dropped out of Primary school |  |  |
| 13 | Did not go to school |  |  |
| 14 | Do not Know |  |  |

**19.** Indicate your level of agreement or disagreement with the following statements as regards the family resources of the trainees in your Vocational Training Centre. Use a tick (√), where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | Statement | SD | D | U | A | SA |
|---|-----------|----|---|---|---|----|
| 1 | Majority of the trainees in this VTC are from rich families |  |  |  |  |  |
| 2 | Majority of the trainees in this VTC are from educated families |  |  |  |  |  |
| 3 | Majority of the trainees in this VTC are from poor families |  |  |  |  |  |
| 4 | Majority of the trainees in this VTC are from less educated families |  |  |  |  |  |

## SECTION D: INSTITUTION-BASED FACTORS

**20.** Use a tick (√) to respond to the following statements
    **a).** Do you have a church sponsoring the VTC (e.g. Catholic, Anglican etc)?
        YES [   ]     NO [   ]
    **b).** The Spiritual input of the church sponsoring the VTC, motivates the trainees to move on with their training up to completion
        YES [   ]     NO [   ]

**21.** Indicate your level of agreement or disagreement with the following statements on how NVCET curriculum affects trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

| | **Statement** | **SD** | **D** | **U** | **A** | **SA** |
|---|---|---|---|---|---|---|
| 1 | The NVCET Curriculum at the VTC has adequate work to be covered within the specified time | | | | | |
| 2 | The arrangement of the content/work to be covered in the NVCET curriculum is appropriate for trainees | | | | | |
| 3 | The NVCET curriculum has too much work to be covered within the specified time | | | | | |
| 4 | The trainees find NVCET curriculum challenging to understand the content being taught | | | | | |
| 5 | Trainees pay extra fee for NVCET curriculum while other programmes are cheaper in VTCs | | | | | |
| 6 | NVCET curriculum implementation is expensive for VTCs | | | | | |

**22.** Indicate your level of agreement or disagreement with the following statements on how instructors influence trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

| | **Statement** | **SD** | **D** | **U** | **A** | **SA** |
|---|---|---|---|---|---|---|
| 1 | The instructor who is teaching the NVCET course I am taking (e.g. building technology) looks well trained and qualified | | | | | |
| 2 | The Instructors who are teaching me General education subjects (e.g. Technical drawing, life skills, …) look well trained and qualified | | | | | |
| 3 | The instructors teach theory lessons with ease | | | | | |
| 4 | The instructors conduct practical work with ease | | | | | |
| 5 | The instructors are adequate in my trade area | | | | | |
| 6 | The instructor is regularly present to teach the course I am taking in this VTC | | | | | |
| 7 | The instructors are regularly present to teach General education course I am taking | | | | | |
| 8 | The behavior and conduct of the instructors before the trainees is good | | | | | |
| 9 | Instructors use methods of teaching that make learning easy and interesting | | | | | |
| 10 | The methods used for teaching in this VTC are appropriate for my age | | | | | |

**23.** Indicate your level of agreement or disagreement with the following statements in relation to the influence of learning resources on trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | **Statement** | **SD** | **D** | **U** | **A** | **SA** |
|---|---|---|---|---|---|---|
| 1 | The adequacy of the training facilities/tools makes a trainee complete his/her training at VTC | | | | | |
| 2 | The availability of appropriate/right facilities/tools makes a trainee complete his/her studies at VTC | | | | | |
| 3 | There are adequate classrooms in this VTC | | | | | |
| 4 | There are adequate workshops or Labs in this VTC | | | | | |
| 5 | The library is well equipped in this VTC | | | | | |
| 5 | All VTC facilities are in good condition | | | | | |
| 7 | There are appropriate/correct facilities/tools for training in my VTC | | | | | |

**24.** Indicate your level of agreement or disagreement with the following statements on the influence of VTC management/administration on trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | **Statement** | **SD** | **D** | **U** | **A** | **SA** |
|---|---|---|---|---|---|---|
| 1 | The manager's/principal's office ensures that the trainees observe discipline all the time | | | | | |
| 2 | The manager's/principal's office ensures that school policies are followed | | | | | |
| 3 | The manager's/principal's office is supportive and caring | | | | | |
| 4 | The manager/principal is competent in his/her work | | | | | |
| 5 | The Manager's/principal's office caters for the needs of trainees | | | | | |
| 6 | The Manager/Principal manages/uses well VTC funds | | | | | |

**25.** Indicate your level of agreement or disagreement with the following statements on the influence counseling services on trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | **Statement** | **SD** | **D** | **U** | **A** | **SA** |
|---|---|---|---|---|---|---|
| 1 | There are adequate counseling services in the VTC | | | | | |
| 2 | The counseling services cater for both academic and social aspects of trainees | | | | | |
| 3 | The counseling services cater for only academic work in this VTC | | | | | |
| 4 | The counseling services cater for only social aspect of trainees in this VTC | | | | | |
| 5 | There are trained and qualified staff in this VTC who provide counseling to trainees | | | | | |
| 6 | This VTC organizes for an expert from outside to come and counsel trainees because of lack of trained and qualified staff within the VTC | | | | | |

**26.** Indicate with a tick (√) the methods of teaching used in VTC to deliver the NVCET curriculum in your course

i     Demonstration………..  ☐
ii    Discussion…………….  ☐
iii   Lecture………………..  ☐
iv    Visit/Field trip………..  ☐
v     Debates………………  ☐
vi    Question & Answer….  ☐
vii   Project………………...  ☐
viii  Games……………….  ☐
ix    Case Study…………….  ☐

## SECTION E: COMMUNITY-BASED FACTORS

**27.** Indicate your level of agreement or disagreement with the following statements. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | Statement | SD | D | U | A | SA |
|---|-----------|----|---|---|---|----|
| 1 | There are trainee role models from the surrounding community | | | | | |
| 2 | The presence of role models from the community can positively improve the completion rates of trainees | | | | | |
| 3 | The surrounding community gives both moral and material support to the VTC | | | | | |
| 4 | The presence of a supportive community can increase the completion rates of the trainees | | | | | |
| 5 | The surrounding community is very negative about the VTC | | | | | |
| 6 | Community with negative attitude lowers the completion rates of VTC trainees | | | | | |

**28.** Suggest some of the ways to improve trainees' completion rate in Vocational Training Centres in Kenya.

………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………
………………………………………………………………………………………

**Thank you for the information provided**

**Appendix V: Questionnaire for VTC Instructors**

**Name of VTC:** …………………………………………… **Date:** ………………

The questionnaire is meant to collect data for purely academic work. The study seeks to establish the **Factors Influencing Trainees' Completion Rate in Public Vocational Training Centres in Kenya: Focus on NVCET Curriculum**.

Answer all questions as indicated in various sections by either filling in the blank spaces or ticking the option or statement that applies

## SECTION A: GENERAL INFORMATION

1. Sex:                     Male ☐          Female ☐
2. Indicate your age bracket
   **i** Below 20 years…... ☐
   **ii** 20 – 24 years…….. ☐
   **iii** 25 – 29 years…….. ☐
   **iv** 30 – 34 years…….. ☐
   **v** 35 – 39 years…….. ☐
   **vi** 40 – 44 years…….. ☐
   **vii** 45 – 49 years…….. ☐
   **viii** 50 – 54 years…….. ☐
   **ix** 55 – 59 years…….. ☐
   **x** 60 years and above. ☐

3. Kindly indicate your **Highest Academic Qualification**
   **i** Degree……………………. ☐
   **ii** Higher National Diploma... ☐
   **iii** Diploma…………………. ☐
   **iv** Craft Certificate………….. ☐
   **v** Artisan Certificate………… ☐
   **vi** KCSE……………………. ☐
   **vii** KCPE……………………. ☐
   **viii** Any other. Specify ……………………………………………………………

4. Indicate your **Highest Professional Qualification**
   **i** Bachelor of Technical/Technology Education…….. ☐
   **ii** Higher National Diploma in Technical Education... ☐
   **iii** Diploma in Technical Education…………………. ☐
   **iv** Certificate in Technical Education………………. ☐
   **v** Any other. Specify ……………………………………………………………

**5.** Indicate the range of years of experience in your current position
   **i**   Below 5 years…....... ☐
   **ii**   5 – 9 years…..…..... ☐
   **iii**  10 – 14 years…….. ☐
   **iv**  15 – 19 years…….. ☐
   **v**   20 – 24 years…….. ☐
   **vi**  25 years and above ☐

**6.**  **a).** Indicate the trade area/course you are currently teaching in VTC
   **i**    Agri-business (Modern methods of Agriculture)… ☐
   **ii**   Appropriate Carpentry and Joinery……………… ☐
   **iii**  Building Technology…………………………….. ☐
   **iv**  Electrical and Electronics Technology…………… ☐
   **v**    Fashion Design and Garment Making Technology ☐
   **vi**  Food processing Technology…………………….. ☐
   **vii** Hair Dressing and Beauty Therapy Technology…. ☐
   **viii** Information and Communication Technology…… ☐
   **ix**  Leather Work Technology……………………….. ☐
   **x**    Metal Processing Technology……………………. ☐
   **xi**  Motor Vehicle Technology……………………….. ☐
   **xii** Refrigeration and Air Conditioning……………… ☐

  **b).** Indicate the subject(s)/general education subjects you are currently teaching
     • Communication Skills ……………………. ☐
     • Entrepreneurship Skills …………………... ☐
     • Life Skills…………………………………. ☐
     • ICT Studies……………………………….. ☐
     • Technical Drawing……………………….. ☐

  **c).** Indicate the trade area/course you trained in before you became an instructor in VTC
   **i**    Agri-business (Modern methods of Agriculture)…. ☐
   **ii**   Appropriate Carpentry and Joinery……………….. ☐
   **iii**  Building Technology…………………………….. ☐
   **iv**  Electrical and Electronics Technology…………… ☐
   **v**    Fashion Design and Garment Making Technology.. ☐
   **vi**  Food processing Technology…………………….. ☐
   **vii** Hair Dressing and Beauty Therapy Technology…. ☐
   **viii** Information and Communication Technology……. ☐
   **ix**  Leather Work Technology……………………….. ☐
   **x**    Metal Processing Technology……………………. ☐
   **xi**  Motor Vehicle Technology……………………….. ☐
   **xii** Refrigeration and Air Conditioning……………… ☐
   **xiii** Any other course. Specify ………………………………………………………

**d).** Indicate the subject(s) you trained in before you became an instructor in VTC

- Communication Skills ………………….…. ☐
- Entrepreneurship Skills …………………... ☐
- Life Skills………………………………… ☐
- ICT Studies………………………………... ☐
- Technical Drawing………………………... ☐
- Any other subject. Specify …………………………………………………

## SECTION B: TRAINEE-BASED FACTORS

**7.** Indicate the number of trainees with regard to highest level of qualification they had before enrolling in the trade area you are currently teaching

|  | Highest Level of Qualification | Year of Enrolment | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
|  |  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| 1 | Secondary Education (KCSE Awarded) |  |  |  |  |  |  |  |  |
| 2 | Dropped out of Secondary School |  |  |  |  |  |  |  |  |
| 3 | Primary Education (KCPE Awarded) |  |  |  |  |  |  |  |  |
| 4 | Any other. Specify ………………… |  |  |  |  |  |  |  |  |

**8.** If the trainees enrolled in your trade area completed primary school education, what is the number of trainees according to the following range of marks

|  | Range of Marks | Year of Enrolment | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
|  |  | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 |
| 1 | 451 – 500 |  |  |  |  |  |  |  |  |
| 2 | 401 – 450 |  |  |  |  |  |  |  |  |
| 3 | 351 – 400 |  |  |  |  |  |  |  |  |
| 4 | 301 – 350 |  |  |  |  |  |  |  |  |
| 5 | 251 – 300 |  |  |  |  |  |  |  |  |
| 6 | 201 – 250 |  |  |  |  |  |  |  |  |
| 7 | 151 – 200 |  |  |  |  |  |  |  |  |
| 8 | 101 – 150 |  |  |  |  |  |  |  |  |
| 9 | 051 – 100 |  |  |  |  |  |  |  |  |
| 10 | 000 – 050 |  |  |  |  |  |  |  |  |

**9. a).** Does the Entry Qualification of a trainee with less marks give him/her challenges in the training? Use a tick (√)   **(i)**Theory:   YES ☐   NO ☐
   **(ii)** Practice: YES ☐   NO ☐

**b).** List the main challenges that are faced by trainees with less marks

(i) In theory: …………………………………………………………………………..
……………………………………………………………………………………………
(ii) In Practice: …………………………………………………………………………
……………………………………………………………………………………………

**c).** Suggest some of the ways to address challenges faced by trainees with less marks

(i) In theory: …………………………………………………………………..

…………………………………………………………………………………

(ii) In Practice: …………………………………………………………………..

…………………………………………………………………………………...

**10.** Indicate your level of agreement or disagreement with the statement as regards the Entry Qualifications of Vocational Training Centre Trainees. Use a tick (√), where 1-Strongly Disagree (SD), 2-Disagree (D), 3-Undecided (U), 4-Agree (A), and 5-Strongly Agree (SA)

|   | Statement | SD | D | U | A | SA |
|---|-----------|----|---|---|---|----|
| 1 | Entry Qualifications of Vocational Training Centre trainee influences whether one will complete the course or not | | | | | |
| 2 | Trainees with higher qualification find training easy | | | | | |
| 3 | Trainees with lower qualification find training difficult | | | | | |
| 4 | Trainees with higher qualification under the content being taught understand faster than those with lower qualification | | | | | |
| 5 | Occasionally trainees with lower qualification drop out of VTC | | | | | |
| 6 | Any other. Specify …………………………………………………………… …………………………………………………………………………………… | | | | | |

**11.** What is your suggestion on the Entry Qualification of a youth seeking to pursue the current trade area you are teaching? Suggest range of marks (e.g. 051 – 100) ………

**12.** Indicate the trainee enrolment, progression, and completion levels in your trade

**2008 Cohort/Group**

| Level 1 | | Level 2 | |
|---------|---------|---------|---------|
| Year 1 (2008) | Year 2 (2009) | Year 1 (2010) | Year 2 (2011) |
| | | | |

**2009 Cohort/Group**

| Level 1 | | Level 2 | |
|---------|---------|---------|---------|
| Year 1 (2009) | Year 2 (2010) | Year 1 (2011) | Year 2 (2012) |
| | | | |

**2010 Cohort/Group**

| Level 1 | | Level 2 | |
|---------|---------|---------|---------|
| Year 1 (2010) | Year 2 (2011) | Year 1 (2012) | Year 2 (2013) |
| | | | |

**2011 Cohort/Group**

| Level 1 | | Level 2 | |
|---------|---------|---------|---------|
| Year 1 (2011) | Year 2 (2012) | Year 1 (2013) | Year 2 (2014) |
| | | | |

**2012 Cohort/Group**

| Level 1 | | Level 2 | |
|---------|---------|---------|---------|
| Year 1 (2012) | Year 2 (2013) | Year 1 (2014) | Year 2 (2015) |
| | | | |

**2013 Cohort/Group**

| Level 1 | | Level 2 | |
|---|---|---|---|
| Year 1 (2013) | Year 2 (2014) | Year 1 (2015) | Year 2 (2016) |
| | | | |

**2014 Cohort/Group**

| Level 1 | |
|---|---|
| Year 1 (2014) | Year 2 (2015) |
| | |

**13.** Indicate your level of agreement or disagreement with the statement as regards to reasons for trainee drop out in Vocational Training Centre. Use a tick (√), where 1-Strongly Disagree (SD), 2-Disagree (D), 3-Undecided (U), 4-Agree (A), and 5-Strongly Agree (SA)

| | Statement | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | Female trainees drop out of this VTC because of pregnancy | | | | | |
| 2 | Male trainees drop out of this VTC because of pregnancy | | | | | |
| 3 | Female trainees drop out of this VTC because of indiscipline | | | | | |
| 4 | Male trainees drop out of this VTC because of indiscipline | | | | | |
| 5 | Female trainees drop out of this VTC because of employment | | | | | |
| 6 | Male Trainees drop out of this VTC because of employment | | | | | |
| 7 | Any other. Specify …………………………………………………………………… …………………………………………………………………………………………… | | | | | |

## SECTION C: FAMILY-BASED FACTORS

**14.** Based on your experience, indicate the main source of influence on the trainee to take a course at VTC. Use a (√**)**

**i** Influenced by Parent(s)…………………. ☐
**ii** Influenced by a friend…………………. ☐
**iii** Self. Personal interest to study………….. ☐
**iv** His/her role model. Not a family member. ☐
**v** Any other. Specify ……………………………………………………………………

**15.** Indicate your level of agreement or disagreement with the following statements as regards the family resources of the trainees in your Vocational Training Centre. Use a tick (√), where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

| | Statement | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | Majority of the trainees in this VTC are from rich families | | | | | |
| 2 | Majority of the trainees in this VTC are from educated families | | | | | |
| 3 | Majority of the trainees in this VTC are from poor families | | | | | |
| 4 | Majority of the trainees in this VTC are from less educated families | | | | | |

**16.** Indicate your level of agreement or disagreement with the following statements as regards the family practices of the trainees in your Vocational Training Centre. Use a tick (√), where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | Statement | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | Majority of Parents of the trainees in this VTC have high educational aspirations for their children | | | | | |
| 2 | Majority of the Parents of the trainees in this VTC monitor their children's VTC progress | | | | | |
| 3 | Majority of the Parents of the trainees in this VTC communicate with the Vocational Training Centre | | | | | |
| 4 | Majority of the parents in this VTC are interested to know the parents of their children's friends | | | | | |

## SECTION D: INSTITUTION-BASED FACTORS

**17.** Use a tick (√) to respond to the following statements
   **a).** Do you have a church sponsoring the VTC (e.g. Catholic, Anglican etc)?
   YES [　　]　　NO [　　]
   **b).** The Spiritual input of the church sponsoring the VTC, motivates the trainees to move on with their training up to completion
   YES [　　]　　NO [　　]

**18.** Indicate your level of agreement or disagreement with the following statements on how NVCET curriculum affects trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | Statement | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | The NVCET Curriculum at the VTC has adequate work to be covered within the specified time | | | | | |
| 2 | The arrangement of the content/work to be covered in the NVCET curriculum is appropriate for trainees | | | | | |
| 3 | The NVCET curriculum has too much work to be covered within the specified time | | | | | |
| 4 | The trainees find NVCET curriculum challenging to understand the content being taught | | | | | |
| 5 | Trainees pay extra fee for NVCET curriculum while other programmes are cheaper in VTCs | | | | | |
| 6 | NVCET curriculum implementation is expensive for VTCs | | | | | |

**19.** Indicate your level of agreement or disagreement with the following statements on how instructors influence trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | Statement | SD | D | U | A | SA |
|---|-----------|----|---|---|---|----|
| 1 | I am well trained and qualified to teach the NVCET Course or subject | | | | | |
| 2 | Instructors are well trained and qualified to teach the NVCET Courses or subjects in this VTC | | | | | |
| 3 | The instructors teach theory lessons with ease | | | | | |
| 4 | The instructors conduct practical work with ease | | | | | |
| 5 | The instructors are adequate in my trade area | | | | | |
| 6 | There are no cases of absenteeism by instructors in this VTC | | | | | |
| 7 | The behavior and conduct of the instructors before the trainees is good | | | | | |
| 8 | Instructors use methods of teaching that make learning easy and interesting | | | | | |
| 9 | The methods used are influenced by the age of the trainee | | | | | |

**20.** Indicate your level of agreement or disagreement with the following statements in relation to the influence of learning resources on trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | Statement | SD | D | U | A | SA |
|---|-----------|----|---|---|---|----|
| 1 | The adequacy of the training facilities/tools makes a trainee complete his/her training at VTC | | | | | |
| 2 | The availability of appropriate/right facilities/tools makes a trainee complete his/her studies at VTC | | | | | |
| 3 | There are adequate classrooms in this VTC | | | | | |
| 4 | There are adequate workshops or Labs in this VTC | | | | | |
| 5 | The library is well equipped in this VTC | | | | | |
| 6 | All VTC facilities are in good condition | | | | | |
| 7 | There are appropriate/correct facilities/tools for training in my VTC | | | | | |

**21.** Indicate your level of agreement or disagreement with the following statements on the influence of VTC management/administration on trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | Statement | SD | D | U | A | SA |
|---|-----------|----|---|---|---|----|
| 1 | The manager's/principal's office ensures that the trainees observe discipline all the time | | | | | |
| 2 | The manager's/principal's office ensures that school policies are followed | | | | | |
| 3 | The manager's/principal's office is supportive and caring | | | | | |
| 4 | The manager/principal is competent in his/her work | | | | | |
| 5 | The Manager's/principal's office caters for the needs of trainees | | | | | |
| 6 | The Manager/Principal manages well VTC funds | | | | | |

**22.** Indicate your level of agreement or disagreement with the following statements on the influence counseling services on trainees' completion rate in this VTC. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

|   | **Statement** | **SD** | **D** | **U** | **A** | **SA** |
|---|---|---|---|---|---|---|
| 1 | There are adequate counseling services in the VTC | | | | | |
| 2 | The counseling services cater for both academic and social aspects of trainees | | | | | |
| 3 | The counseling services cater for only academic work in this VTC | | | | | |
| 4 | The counseling services cater for only social aspect of trainees in this VTC | | | | | |
| 5 | There are trained and qualified staff in this VTC who provide counseling to trainees | | | | | |
| 6 | This VTC organizes for an expert from outside to come and counsel trainees because of lack of trained and qualified staff within the VTC | | | | | |

**23.** Indicate your level of satisfaction or dissatisfaction on the type of management of the following on affairs of the VTC. Use a tick (√),where 1-Strongly Dissatisfied (**SD**), 2-Dissatisfied (**D**), 3-Undecided (**U**), 4-Satisfied (**S**), and 5-Strongly Satisfied (**SS**)

|   | **Body** | **SD** | **D** | **U** | **S** | **SS** |
|---|---|---|---|---|---|---|
| 1 | National Government | | | | | |
| 2 | County Government | | | | | |
| 3 | Community | | | | | |
| 4 | Board of Management (BOM) | | | | | |

**24.** Indicate with a tick (√) the methods of teaching you use in your trade area under NVCET curriculum
- i    Demonstration………..
- ii   Discussion…………….
- iii  Lecture……………….
- iv   Visit/Field trip………..
- v    Debates……………….
- vi   Question & Answer….
- vii  Project ………………..
- viii Games………………...
- ix   Case Study……………

**25.** All the methods listed above are appropriate for teaching my trade area
YES ☐               NO ☐

**26. (a).** If the answer in 18 above is NO, list the methods which should be removed from your trade area

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

**(b).** List the new methods which could be used in teaching your trade area under NVCET curriculum

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

## SECTION E: COMMUNITY-BASED FACTORS

**27.** Indicate your level of agreement or disagreement with the following statements. Use a tick (√),where 1-Strongly Disagree (**SD**), 2-Disagree (**D**), 3-Undecided (**U**), 4-Agree (**A**), and 5-Strongly Agree (**SA**)

| | Statement | SD | D | U | A | SA |
|---|---|---|---|---|---|---|
| 1 | There are trainee role models from the surrounding community | | | | | |
| 2 | The presence of role models from the community can positively improve the completion rates of trainees | | | | | |
| 3 | The surrounding community gives both moral and material support to the VTC | | | | | |
| 4 | The presence of a supportive community can increase the completion rates of the trainees | | | | | |
| 5 | The surrounding community is very negative about the VTC | | | | | |
| 6 | Community with negative attitude lowers the completion rates of VTC trainees | | | | | |
| 7 | Some members of the surrounding community interfere with projects at the VTC | | | | | |

**28.** Based on your own experience, suggest some of the measures which could be employed in Vocational Training Centres to improve trainees' completion rate

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

…………………………………………………………………………………………

**Thank you for the information provided**

**Appendix VI: Interview Schedule for VTC Managers**

**Name of VTC:** …………………………….………… **Date:** ………………………

The interview is meant to collect data for purely academic work. The study seeks to establish the **Factors Influencing Trainees' Completion Rate in Public Vocational Training Centres in Kenya: Focus on NVCET Curriculum**.

Answer all questions to the best of your ability

## SECTION A: PERSONAL INFORMATION

1. Sex:               Male ☐         Female ☐
2. Kindly state your age bracket
   - **i** Below 20 years…… ☐
   - **ii** 20 – 24 years…….. ☐
   - **iii** 25 – 29 years…….. ☐
   - **iv** 30 – 34 years…….. ☐
   - **v** 35 – 39 years…….. ☐
   - **vi** 40 – 44 years…….. ☐
   - **vii** 45 – 49 years…….. ☐
   - **viii** 50 – 54 years…….. ☐
   - **ix** 55 – 59 years…….. ☐
   - **x** 60 years and above. ☐
3. Kindly state your **Highest Academic Qualification**
   - **i** Degree ……………………. ☐
   - **ii** Higher National Diploma... ☐
   - **iii** Diploma……………………. ☐
   - **iv** Craft Certificate………….. ☐
   - **v** Artisan Certificate………… ☐
   - **vi** KCSE……………………… ☐
   - **vii** KCPE……………………... ☐
   - **viii** Any other. Specify ………………………………………………………………
4. Indicate your **Highest Professional Qualification**
   - **i** Bachelor of Technical/Technology Education…….. ☐
   - **ii** Higher National Diploma in Technical Education... ☐
   - **iii** Diploma in Technical Education……………………. ☐
   - **iv** Certificate in Technical Education………………… ☐
   - **v** Any other. Specify ………………………………………………………………
5. What is the range of years of experience in your current position
   - **i** Below 5 years…….... ☐
   - **ii** 5 – 9 years………….. ☐
   - **iii** 10 – 14 years…….. ☐
   - **iv** 15 – 19 years…….. ☐
   - **v** 20 – 24 years…….. ☐
   - **vi** 25 years and above ☐

## SECTION B: NVCET COURSES IMPLEMENTED BY THE VTC

6. Kindly state the NVCET trade areas/courses that have been implemented by the VTC
   - **i** Agri-business (Modern methods of Agriculture)… ▢
   - **ii** Appropriate Carpentry and Joinery……………… ▢
   - **iii** Building Technology………………………………. ▢
   - **iv** Electrical and Electronics Technology…………… ▢
   - **v** Fashion Design and Garment Making Technology ▢
   - **vi** Food processing Technology……………………... ▢
   - **vii** Hair Dressing and Beauty Therapy Technology…. ▢
   - **viii** Information and Communication Technology…… ▢
   - **ix** Leather Work Technology………………………..... ▢
   - **x** Metal Processing Technology……………………. ▢
   - **xi** Motor Vehicle Technology………………………..... ▢
   - **xii** Refrigeration and Air Conditioning………………. ▢

7. What are the reasons if not all courses have been implemented by the VTC?

## SECTION C: FACTORS INFLUENCING COMPLETION RATES IN VTC WITH FOCUS ON THE NVCET CURRICULUM

8. Comment on the availability of enrolment/admission policy for the youths in your VTC
9. If the completion rates in 9 above have been high, what are some of the factors (Trainee-based, family-based, institution-based, and community-based) that have contributed to this?
10. If the completion rates in 9 above have been low, what are some of the factors (Trainee-based, family-based, institution-based, and community-based) that have contributed to this?
11. Suggest some of the measures or steps to be taken to improve completion rates in VTC
12. Who are the stakeholders that take part in the management of the VTC?
13. What is your level of satisfaction or dissatisfaction by the bodies/committees mentioned in 13 above on the management of VTC?

**Thank you**

**Appendix VII: Interview Schedule for County Directors of Youth Training**

**County:** …………………………………………..…….. **Date:** ………………………

The interview is meant to collect data for purely academic work. The study seeks to establish the **Factors Influencing Trainees' Completion Rate in Public Vocational Training Centres in Kenya: Focus on NVCET Curriculum**.

Answer all questions to the best of your ability

## SECTION A: PERSONAL INFORMATION

**1.** Sex: Male ☐ Female ☐

**2.** Kindly state your age bracket
- **i** Below 20 years…... ☐
- **ii** 20 – 24 years…….. ☐
- **iii** 25 – 29 years…….. ☐
- **iv** 30 – 34 years…….. ☐
- **v** 35 – 39 years…….. ☐
- **vi** 40 – 44 years…….. ☐
- **vii** 45 – 49 years…….. ☐
- **viii** 50 – 54 years…….. ☐
- **ix** 55 – 59 years…….. ☐
- **x** 60 years and above. ☐

**3.** Kindly state your **Highest Academic Qualification**
- **i** Degree ……………………. ☐
- **ii** Higher National Diploma... ☐
- **iii** Diploma…………………. ☐
- **iv** Craft Certificate………….. ☐
- **v** Artisan Certificate………… ☐
- **vi** KCSE……………………. ☐
- **vii** KCPE……………………. ☐
- **viii** Any other. Specify …………………………………………………………………

**4.** Indicate your **Highest Professional Qualification**
- **i** Bachelor of Technical/Technology Education…….. ☐
- **ii** Higher National Diploma in Technical Education... ☐
- **iii** Diploma in Technical Education………………….. ☐
- **iv** Certificate in Technical Education………………… ☐
- **v** Any other. Specify …………………………………………………………………

**5.** What is the range of years of experience in your current position
- **i** Below 5 years…...... ☐
- **ii** 5 – 9 years…..…….. ☐
- **iii** 10 – 14 years…….. ☐
- **iv** 15 – 19 years…….. ☐
- **v** 20 – 24 years…….. ☐
- **vi** 25 years and above ☐

## SECTION B: NVCET COURSES IMPLEMENTED BY THE VTC

6. Kindly state the NVCET trade areas/courses that have been implemented in the county
   i   Agri-business (Modern methods of Agriculture)… ☐
   ii  Appropriate Carpentry and Joinery……………… ☐
   iii Building Technology………………………………… ☐
   iv  Electrical and Electronics Technology…………… ☐
   v   Fashion Design and Garment Making Technology ☐
   vi  Food processing Technology……………………... ☐
   vii Hair Dressing and Beauty Therapy Technology…. ☐
   viii Information and Communication Technology…… ☐
   ix  Leather Work Technology………………………... ☐
   x   Metal Processing Technology……………………… ☐
   xi  Motor Vehicle Technology……………………….... ☐
   xii Refrigeration and Air Conditioning……………… ☐

7. What are the reasons if not all courses have been implemented by the county?

## SECTION C: FACTORS INFLUENCING COMPLETION RATES IN VTC WITH FOCUS ON THE NVCET CURRICULUM

8. Comment on the availability of enrolment/admission policy for the youths in the county
9. If the completion rates in 9 above have been high, what are some of the factors (Trainee-based, family-based, institution-based, and community-based) that have contributed to this?
10. If the completion rates in 9 above have been low, what are some of the factors (Trainee-based, family-based, institution-based, and community-based) that have contributed to this?
11. Suggest some of the measures that could be taken to improve completion rates in VTCs
12. Who are the stakeholders that take part in the management of the VTCs in the county?
13. What is your level of satisfaction or dissatisfaction by the bodies/committees mentioned in 13 above on the management of VTCs in the county?

**Thank you**

## Appendix VIII: Personal Observation Checklist

**Name of VTC:** ……………………………………………. **Date:** …………………

Below is a list of infrastructural facilities, documents, human resource and various operations or activities that the Vocational Training Centre is expected to have. The inadequacies of the items listed are likely to influence the trainee low completion rates in VTCs with focus on the NVCET curriculum

| No | Observations | Availability | | | |
|---|---|---|---|---|---|
| | | Adequate | Inadequate | Unavailable | Alternative |
| 1 | Availability of general physical infrastructure | | | | |
| 2 | Availability of plans for general improvement | | | | |
| 3 | Availability of workshop attendants | | | | |
| 4 | Availability of lab attendance | | | | |
| 5 | Availability of instructors | | | | |
| 6 | Availability of qualified instructors | | | | |
| 7 | Use of appropriate teaching methods | | | | |
| 8 | Availability of policies, rules & regulations | | | | |
| 9 | Availability of NVCET Curriculum | | | | |
| 10 | Availability of tools & equipment for courses implemented | | | | |
| 11 | Availability of tools and equipment in working condition | | | | |
| 12 | Availability of a study room/library | | | | |
| 13 | Availability of internet facilities | | | | |
| 14 | Availability of reference materials/books | | | | |
| 15 | Availability of teaching & examination timetables | | | | |
| 16 | Activities of departments/sections running smoothly and concurrently | | | | |
| 17 | Community support – evidence | | | | |
| 18 | Family support – evidence | | | | |
| 19 | Government support – evidence | | | | |
| 20 | Career guidance & counseling | | | | |
| 21 | Motivation talks – evidence | | | | |
| 22 | Church support – evidence | | | | |
| 23 | Availability of modern & serviceable equipment | | | | |
| 24 | Availability of workshops | | | | |
| 25 | Availability of labs | | | | |
| 26 | Availability of drawing rooms | | | | |
| 27 | Availability of well equipped w/shops | | | | |
| 28 | Availability of well equipped labs | | | | |
| 29 | Availability of well equipped drawing rooms | | | | |
| 30 | Availability of land for expansion | | | | |

# Appendix IX: Research Work Plan

| Activities/ Critical stages | Month | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | Nov 2014 | Dec 2014 | Jan 2015 | Feb 2015 | Mar 2015 | Apr 2015 | May 2015 | June 2015 | July Aug 2015 | Sept to Dec 2015 | May 2016 | May Nov 2016 |
| Developing the research idea | ▥ | | | | | | | | | | | |
| Developing research proposal | | ▥ | ▥ | ▥ | | | | | | | | |
| Developing research tools | | ▥ | ▥ | ▥ | | | | | | | | |
| Proposal presentation | | | | | ▥ | | | | | | | |
| Reviewing proposal | | | | | | ▥ | | | | | | |
| Applying for consents from authorities | | | | | | | ▥ | | | | | |
| Talking with the representatives in research sites | | | | | | | ▥ | | | | | |
| Piloting and validating tools | | | | | | | ▥ | | | | | |
| Reviewing tools | | | | | | | ▥ | | | | | |
| Training research assistants | | | | | | | ▥ | ▥ | | | | |
| Selecting the sample | | | | | | | ▥ | ▥ | | | | |
| Data Collection | | | | | | | | | ▥ | | | |
| Data verification, coding & entry | | | | | | | | | ▥ | | | |
| Data analysis | | | | | | | | | | ▥ | | |
| Thesis report writing & proof reading | | | | | | | | | | ▥ | | |
| Thesis presentation | | | | | | | | | | | ▥ | |
| Reviewing thesis & submission | | | | | | | | | | | | ▥ |
| Information to the respondents & authorities | | | | | | | | | | | | ▥ |

**Appendix X: Research Budget**

| NO | ITEM/ACTIVITY | COST |
|---|---|---|
| 1. | **TYPESETTING AND PRINTING** | |
| | a). Proposal 90 pages @ 30 | 2,700 |
| | b). Thesis report 200 pages @ 30 | 6,000 |
| | c). Questionnaire 20 pages @ 30 | 600 |
| | d). VTC Manager interview schedule 3 pages @ 30 | 90 |
| | e). County Director of Youth Training interview schedule 3 pages @ 30 | 90 |
| | **SUB-TOTAL** | **9,480** |
| 2. | **PHOTOCOPYING SERVICES** | |
| | a). Proposal 90 pages @ 3 x 10 copies | 2,700 |
| | b). Thesis report 200 pages @ 3 x 15 copies | 9,000 |
| | c). Trainee questionnaire 10 pages @ 3 x 182 | 5,460 |
| | c). Instructor questionnaire 10 pages @ 3 x 58 | 1,110 |
| | d). VTC Manager interview schedule 3 pages @ 3 x 5 | 45 |
| | e). County Director of Youth Training interview schedule 3 pages @ 3 x 4 | 36 |
| | **SUB-TOTAL** | **18,351** |
| 3 | **DATA COLLECTION** | |
| | a). Travelling 5 sites @ 10,000 | 50,000 |
| | b). Accommodation and meals 5 sites @ 10,000 | 50,000 |
| | c). Purchase of vehicle tyres @ 4,500 | 18,000 |
| | **SUB-TOTAL** | **118,000** |
| 4 | **STATIONERY** | |
| | a). Printing papers @ 400 x 15 realms | 6,000 |
| | b). Pens, pencils, erasers, sharpeners, markers, highlighters | 1,500 |
| | c). Foolscaps 3 realms @ 350 | 1,050 |
| | d). Note books 3 @ 100 | 300 |
| | **SUB-TOTAL** | **8,850** |
| 5. | **EQUIPMENT** | |
| | a). Tablet | **53,000** |
| 6. | **OTHER EXPENSES** | |
| | a). Air time @ 1000 x 10 months | 10,000 |
| | b). Internet @ 1000 x 10 months | 10,000 |
| | c). Proposal report binding charges @ 100 x 10 copies | 1,000 |
| | d). Thesis report binding – Draft copies @ 200 x 9 copies | 1,800 |
| | d). Thesis report binding – Final @ 300 x 8 copies | 2,400 |
| | e). Research assistants 5 @ 5000 | 25,000 |
| | f). Research Permit=2,000, Research Permit collection = 8,000 | 10,000 |
| | **SUB-TOTAL** | **58,400** |
| | **SUB-TOTAL = 1+2+3+4+5+6** | **266,081.00** |
| 7 | **CONTINGENCIES** (10% of 1+2+3+4+5+6) | **26,608.10** |
| | **GRAND TOTAL** | **292,689.10** |

**Appendix XI: Research Clearance Permit**

THIS IS TO CERTIFY THAT:
MR. HOSEAH KIPLAGAT KANDIE
of UNIVERSITY OF ELDORET, 0-30100
Eldoret,has been permitted to conduct
research in Baringo , Elgeyo-Marakwet
, Kakamega , Nandi Counties

on the topic: FACTORS INFLUENCING
TRAINEE LOW COMPLETION RATES IN
YOUTH POLYTECHNICS IN KENYA:
FOCUS ON NATIONAL VOCATIONAL
CERTIFICATE OF EDUCATION AND
TRAINING CURRICULUM

for the period ending:
30th June,2016

Applicant's
Signature

Permit No : NACOSTI/P/15/5449/6233
Date Of Issue : 3rd July,2015
Fee Recieved :Ksh 2,000

Director General
National Commission for Science,
Technology & Innovation