AN EVALUATION OF GENDER MAINSTREAMING IN TECHNICAL, VOCATIONAL EDUCATION AND TRAINING INSTITUTIONS IN KENYA

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A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Philosophy in Education

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2013
DECLARATION
This dissertation is my original work and has not been presented for a degree or any other awards in any university, and I declare that all sources have been acknowledged.

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This work is dedicated to my children Rodney, Nicole, Sandra and Natalie. Education is the best investment you can make for yourselves.
ABSTRACT

A country’s most important resource is the skills of its people. To achieve equity and equality in skills development in TVET education, gender mainstreaming was identified. In 2007 Ministry of Education developed Gender in Education policy. There was need to evaluate the implementation process to find out: strategies in place, extent of the gender policy implementation process, the attitudes and perceptions of students and lecturers towards gender mainstreaming, challenges the implementation process faced, and way forward for the implementation process. The findings inform education stakeholders on progress of implementation. The study was based on the Management Evaluation Model and, on Liberal Feminist Theoretical framework. It adopted a mixed method research design. Sample was 276 respondents from ten selected TVET institutions. Probability and non probability sampling was done. Data were collected through three types of instruments (questionnaires, interview guide and document analysis guide). Piloting was done to enhance validity and determine reliability of instruments. Quantitative data were analyzed through descriptive statistics, and qualitative data were organized into themes and patterns pertinent to the study. It was established that: bursaries and sensitization as strategies were in place, and they were working, the gender policy was being implemented in sampled TVET institutions, the perception of lecturers and attitude of students was positive. It was also established that the implementation process faced challenges, for example not all lecturers and students had been sensitized about gender mainstreaming and there were still some forms of gender discrimination. On way forward, use of role models and sensitization of all stakeholders in education were suggested as strategies to enhance gender mainstreaming. The following conclusions were drawn from the study: there were some strategies in place to achieve set objectives, for example provision of bursaries for female students to enhance enrolment in SET courses, the mean GPI for the sampled institutions had moved further from one (1), the lecturers and students had positive attitude towards gender mainstreaming, however, there were some cultural issues hindering gender mainstreaming in the TVET institutions, there were some strengths and weaknesses of the implementation process and, strategies. The following recommendations were made: bursary disbursement and sensitization to be enhanced, MoEST and TVET institutions to put in place mechanisms for effective implementation, cultural inhibitions to be addressed, innovative strategies for gender mainstreaming to be considered, and finally Government to set up structures for full implementation of gender policy.
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<td>African Development Bank</td>
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<tr>
<td><strong>ASAL</strong></td>
<td>Arid and Semi Arid Lands</td>
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<tr>
<td><strong>CEDAW</strong></td>
<td>Convention of the Elimination of all forms of Discrimination Against Women</td>
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<td><strong>CIPP</strong></td>
<td>Context Input Process and Product</td>
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<td><strong>COMEDAF</strong></td>
<td>Conference of Ministers of Education of the African Union</td>
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<td><strong>CSO</strong></td>
<td>Civil Society Organizations</td>
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<td><strong>UNCSW</strong></td>
<td>United Nations Commission on the status of women</td>
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<td><strong>EFA</strong></td>
<td>Education for All</td>
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<td><strong>ECOSOC</strong></td>
<td>Economic and Social Council</td>
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<td><strong>ESRC</strong></td>
<td>Economic and Social Research Council</td>
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<tr>
<td><strong>FAO</strong></td>
<td>Food and Agricultural Organization</td>
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<tr>
<td><strong>GAD</strong></td>
<td>Gender and Development</td>
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<td><strong>GoK</strong></td>
<td>Government of Kenya</td>
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<td><strong>GDP</strong></td>
<td>Gross Domestic Product</td>
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<td><strong>IAEA</strong></td>
<td>International Atomic Energy Agency</td>
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<td><strong>IGA</strong></td>
<td>Income Generating Activities</td>
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<td><strong>ILO</strong></td>
<td>International Labour Organization</td>
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<td><strong>IT</strong></td>
<td>Institute of Technology</td>
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<td><strong>KESSP</strong></td>
<td>Kenya Education Sector Support Programme</td>
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<td><strong>KETISA</strong></td>
<td>Kenya Technical Institutions Sports Association</td>
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<td>Abbreviation</td>
<td>Full Form</td>
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<tr>
<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
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<td>MoE</td>
<td>Ministry of Education</td>
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<td>MoHEST</td>
<td>Ministry of Higher Education Science and Technology</td>
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<td>MDGs</td>
<td>Millennium Development Goals</td>
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<td>MTP</td>
<td>Medium Term Plans</td>
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<td>NCST</td>
<td>National Council for Science and Technology</td>
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<td>NGO</td>
<td>Non Governmental Organization</td>
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<tr>
<td>OSSREA</td>
<td>Organization for Social Science Research in Eastern and Southern Africa</td>
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<td>RoK</td>
<td>Republic of Kenya</td>
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<td>PFA</td>
<td>Plan for Action</td>
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<td>PPTTC</td>
<td>Public Primary Teacher Training College</td>
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<td>PUC</td>
<td>Polytechnic University College</td>
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<td>SET</td>
<td>Science Engineering and Technology</td>
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<td>Science Mathematics and Technology</td>
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<td>SPSS</td>
<td>Statistical Package for Social Sciences</td>
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<td>TTI</td>
<td>Technical Training Institute</td>
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<td>TVET</td>
<td>Technical, Vocational Education and Training</td>
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<td>WID</td>
<td>Women in Development</td>
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<td>UNICEF</td>
<td>United Nations International Children’s Emergency Fund</td>
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<td>Acronym</td>
<td>Description</td>
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<td>UNESCO</td>
<td>United Nations Education Scientific and Cultural Organization</td>
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<td>UNDP</td>
<td>United Nations Development Programme</td>
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<td>UNGEI</td>
<td>United Nations Girl-child Education Initiative</td>
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<td>UPE</td>
<td>Universal Primary Education</td>
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CHAPTER ONE

INTRODUCTION

1.1 Context and Background of the Evaluation Study

The study was done within Kenya in selected Technical Vocational Education and Training (TVET) institutions. Kenya is in the East African region. It borders Somalia to the north eastern side, Ethiopia to the northern side, Sudan to the north western side, Uganda to the western side and Tanzania to the southern side as shown in Appendix K. Its total area is 582,646 square kilometers and had a population of 38.6 million people (19,192,458 male and 19,417,639 female) in 2009 (Kenya National Bureau of Statistics [KNBS], 2011). There were 48 public TVET (polytechnic university colleges, national polytechnics, technical training institutes and institutes of technology) institutions under the Ministry of Higher Education Science and Technology (MoHEST) as per the unpublished data of 2009 (MoHEST, 2010a). These institutions are scattered in the eight regions of Kenya.

A country’s most important resource is not only its raw materials or its geographical location but also the skills of its people. It is recognized that social and economic growth of any country is largely a result of the transformation of knowledge, science and technology into goods and services (Republic of Kenya [RoK], 2008a). Knowledge has become the driving force in economic development and labor markets increasingly require more educated, more technologically advanced, and better-skilled workers. World Bank report emphasizes that full utilization of the scientific and intellectual capacity of men and women is critical for the scientific and technological
development of any country (World Bank, 2008). These capacities can only be developed through education. Education is thus the most important means we have at our disposal to develop human resources, impart appropriate skills, knowledge and attitudes.

Many of the world’s states, through international conventions and commitment have recognized education as a human right (World Bank, 1999). Education empowers people to take charge of their lives and make informed choices. It fosters equity and social cohesion, promotes sustained job creating opportunities, stimulates economic growth and is key to attainment of Millennium Development Goals (MDGs) and Education for All (EFA) goals (World Bank, 2002; RoK, 2009a). Education forms the basis for developing innovation, science and technology in order to harness our resources, industrialize, and participate in the global knowledge economy and for Africa to take its rightful place in the global community (Kiyiapi, 2011).

Kenya’s Vision 2030 is the country’s development blueprint. It is anchored on the economic, social and political pillars whose foundation is Science, Technology and Innovation [STI] (RoK, 2008). In particular, the social pillar deals with: education and training; and gender, youth, sports and culture among other issues. The social pillar seeks to create just, cohesive and equitable social development in a clean and secure environment (RoK, 2007). In pursuance of the goals of Vision 2030, TVET provides the bedrock for the transformation of requisite human resource skills for technological and industrial transformation, which will lead to increased wealth and social wellbeing as well as enhancement of the country’s international competitiveness (RoK, 2008b). This will make Kenya move at the same pace with other countries in development.
The Government of Kenya appreciates the crucial role that higher education, TVET, and STI play in economic development. In cognizance and realization of today’s demands for knowledge-based development, the government set up MoHEST to harmonize, implement, guide and coordinate higher education and TVET as well as application of science and technology (MoHEST, 2010b). Skills development and better performance of males and females at school, and their motivation and attitudes in different subject areas, can have a significant influence on their further educational and occupational pathways. These factors, in turn, may have an impact not only on individual career and salary prospects, but also on the broader effectiveness with which human capital is developed and used in economies and societies (World Bank, 2008). The impact of the mentioned factors on further education and occupational pathways and its effect on human capital development brings the evaluator to look at gender in relation to science, technology and vocational education.

1.1.1 Gender in Relation to Science, Technical and Vocational Education

Gender is a theme that cuts across not only EFA and the MDGs, but in almost all education indicators. Three out of six EFA Goals: goal two, four, and five are concerned with gender equality in education. The MDGs re-affirms the concerns of gender equality in two of their objectives: objective two, and objective three (Koronkiewicz, 2008; UNESCO, 2003). Consequent to this, the Conference of Ministers of Education of the African Union (COMEDAF) adopted gender and culture; tertiary education; Technical Vocational Education and Training (TVET) among others as areas of focus for the second decade of education (2006 to 2015) as quoted by Kiyiapi (2011). This was as a
follow up to the first decade of education for Africa of 1997 to 2006. All these sentiments makes it necessary to look at gender in TVET institutions as technical and vocational education has a part to play in the achievement of MDG and EFA goals.

As stated by Misola (2010) the technical and vocational education and training sector has a crucial role to play in the development of human resources for future manpower requirements. The gender gap in Science, Technology and Vocational Education (STVE) is far greater than that in other fields of education, with the girls lagging far behind in access, participation and performance (Mulemwa, 1999). It can be noted that, despite the deficiencies in many TVET sectors, some colleges and training institutions in some parts of the world have taken the initiative to launch some distinct practices that could trigger changes in the enhancement of women’s participation and competence in TVET - a male-dominated field of specialization (Misola, 2010). The reform of STE/STVE for All requires that every individual be targeted for STVE instruction (Mulemwa, 1999).

In the knowledge society of the 21st Century, dominated by information and communication technology and where labour market demands are constantly changing, providing relevant TVET programmes to both boys and girls is deemed central to the effort to foster sustainable development and eradicate extreme poverty and hunger in Africa. Therefore, TVET education is a high priority investment area in the second decade of education for Africa. It is a means of empowering individuals to take control of their lives in both urban and rural communities and should constitute an integral part of
everyone’s general education (Kiamba, 2011). As appropriate programmes are mounted gender issues have to be considered for a wholesome production of the human capital.

The exclusion of female talent, potential and creativity as has been the case historically in the realm of science and technology constitute an under utilization of human resources (Okhoya, 2004). As stated by Hays and Farhar (2000) in McGregor and Bazi (2001), when women are excluded from science and technology in any culture, that culture is missing half its talent and capability for solving social problems and improving the life of its people. The need to develop capacities of men and women brought about the need for gender mainstreaming in development and all facets of society.

1.1.2 Gender Mainstreaming

Mainstreaming is putting an idea in the central course of other activities to be undertaken as part of the activities in the system. Gender mainstreaming situates gender issues at the centre of research, policy decisions, programme budgets, and institutional structures and processes (Okhoya, 2004). The United Nations Economic and Social Council (ECOSOC) in 1997 defined the concept of gender mainstreaming as:

…the process of assessing the implications for women and men of any planned action, including legislation, policies or programmes, in any area and at all levels. It is a strategy for making the concerns and experiences of women as well as of men an integral part of the design, implementation, monitoring and evaluation of policies and programmes in all political, economic and societal spheres, so that women and men benefit equally, and inequality is not perpetuated. The ultimate goal of mainstreaming is to achieve gender equality…(RoK, 2009d: p. 5).
This is the definition that has been adopted by the Government of Kenya. Gender mainstreaming appeared for the first time in international texts after United Nations Third World conference on women in Nairobi in 1985. This was in relation to the debate within the United Nations Commission on the Status of Women (UNCSW), and on the role of Women in Development (WID). After Nairobi, international development agencies and governments promoted mainstreaming as a new strategy for taking women’s concern into account (McGregor & Bazi, 2001). At the fourth conference on women (Beijing, 1995) governments around the world reaffirmed their commitment to the equal rights of men and women and women’s empowerment. The Platform for Action (PFA) was a major outcome of the Beijing conference and identified gender mainstreaming as a central tool in the promotion of gender equality (Okhoya, 2004; Kfw Development Bank, 2006).

The mainstreaming strategy was emphasized in Beijing because of the lessons that had been learned from previous efforts to improve the position of women (RoK, 2009d). Previous efforts often isolated and marginalized programmes for women, they benefited a limited number of women who participated directly, and did not affect the way in which larger or mainstream policies and projects distributed resources and services (Kfw Development Bank, 2006; Amanda & Gibbard, 2000). As a result, the bulk of the resources and opportunities provided through government programmes continued to bypass women and the disparities between women and men continued to increase. By contrast, a mainstreaming approach focuses on the institutions, policies and programmes that impact in setting the conditions under which communities, households and individuals function (UNDP, 2000).
Gender mainstreaming in practice has continued to be a challenge at both national and community levels despite efforts put in place. Assessments undertaken in the past indicate that gender mainstreaming in the public, Non Governmental Organizations (NGO) and private sectors have been weak both at national and community levels. Various factors have contributed to this shortcoming key among them being lack of an effective monitoring and evaluation framework which is an integral part of the policy implementation programme (RoK, 2009b). As stated by Vimala (2010), after the Jomtien conference of 1990 the world community has worked towards greater gender equality in elementary education and periodic EFA monitoring reports have sensitized governments and the larger community to gender issues. However, this has not been the case at tertiary level. A lot needs to be done at the tertiary level to ensure equal participation of women and men.


The gender policy prepared by the Ministry of Gender and Social Development in Kenya recognizes that it is the right of men, women, boys and girls to participate in and benefit from development and other initiatives. It is a policy that will help Kenya meet its development goals and establish women and men-friendly institutions. The policy advocates for new departures and strategies that are aimed at ensuring greater participation of women and men and equal access to development resources and distribution of the benefits. This will ensure better targeting of marginalized groups and their integration into mainstream of development (RoK, 2009b). The Constitution of Kenya (2010), article 27 section 3, states that women and men have the right to equal treatment, including the right to equal opportunities in political, economic, cultural and social spheres (RoK, 2010a). In 2011, Kenya was ranked the best in gender reforms, a World Bank and International Finance Corporation report rated Kenya highly in a global survey of what governments were doing to remove barriers that stop women from conducting business. Kenya was the economy with the highest number of reforms in the areas covered in Women, Business and Law. Many of the documented changes came about through the Constitution, 2010 (Mutibo, 2011), it is hoped that all these reforms cater incisively for all the sectors of the economy.
Towards accomplishment of gender equality and equity in education, the Ministry of Education (MoE) developed a policy that provides a comprehensive framework of the principles and strategies to be pursued in order to achieve it. The policy acknowledges ongoing initiatives in bridging gender gaps in the provision of education, and identifies special measures that the Government and stakeholders should take to redress the identified gender inequalities and inequities (RoK, 2007). The Gender in Education policy is in line with the national gender policy by the Ministry of Gender, Children and Social Development. In 2006 the Head of Public service asked all ministries and state corporations to appoint gender officers and establish gender units, and in July 2009 gender mainstreaming became a requirement in the performance contract of all Permanent Secretaries and Chief Education Officers of all state corporations (RoK, n.d). The Gender in Education policy document covers gender issues across the education sector in Kenya (from early childhood development education through primary schools, secondary schools to TVET institutions and universities). It is hoped that gender equity and equality will be achieved in the education sector if gender mainstreaming takes place.

1.2.3 Enrolment and Gender in TVET institutions in Kenya

The Republic of Kenya (2007) states that, research studies show that there is poor participation and performance in Science, Mathematics and Technology (SMT) subjects and courses by both males and females. Females’ participation and performance is worse than that of males’ at all educational levels and their participation is very low in technical courses (RoK, 2007). Traditions and customs perceive women to be more suitable for courses such as secretarial, catering, knitting and dressmaking. Courses such as
engineering and building trades are avoided by female students. There are few women in technical professions and finance and so their contribution is minimal, they also have not excelled in more lucrative sectors such as manufacturing and highly profitable entrepreneurship programmes, and in the wider society (Institute of Economic Affairs, 2008; RoK, 2007). There is need for a deliberate effort to attract females to join the male dominated courses (RoK, 2008a; African Union, 2007), and vice versa.

Enrolment in public TVET institutions in Kenya increased from 40,622 in 1999 to over 66,500 in 2004, with females constituting 49.1 per cent of the total enrolment. Female students’ enrolment was highest in youth polytechnics that offer artisan courses and lowest in national polytechnics that offer craft and diploma courses in the technical subjects. Between 1999 and 2004, female enrolment in youth polytechnics was over 50 percent of the total number of students enrolled. The highest female enrolment in Technical Training Institutes (TTI) was 45.7 per cent in 2004. However, female enrolment in national polytechnics had not surpassed 39 per cent between 1999 and 2004. Further, female enrolment in SMT-related courses in TVET institutions was extremely low. In 1998, it stood at only 1.4 per cent in mechanical engineering, 4.4 percent in electrical and electronic engineering, and 5.0 per cent in building and civil engineering (African Development Bank [ADB], 2007; RoK, 2007).

Enrolment within TVET institutions for both male and female students grew by 17 per cent from 28,870 in 2005 to 34,903 in 2006 and to 82,500 in 2008, an increase of 32.1 percent. This was inclusive of youth polytechnics enrolment that was not captured in Table 1.1, as they were under the Ministry of Youth and Sports (RoK, 2009b). This was a
major achievement given the stagnation in the 90s of the sub sector. This increase could partly be attributed to the financial support (bursaries to students and grants to institutions) from the government and other development partners to revitalize TVET institutions. Although the government had been sensitizing management, staff and other stakeholders on addressing gender representation of teachers and students’ course entries in their respective institutions, participation of women in technical courses remained low with majority of females in TVET institutions enrolling in secretarial and institutional management courses (RoK, 2007). Table 1.1 shows enrolment in national polytechnics, ITs and in TTIs from 2004 to 2009.

Table 1.1

Enrolment in TVET institutions from 2005 to 2008

<table>
<thead>
<tr>
<th>Institution</th>
<th>2005 Male</th>
<th>Female</th>
<th>2006 Male</th>
<th>Female</th>
<th>2007 Male</th>
<th>Female</th>
<th>2008 Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>N. P</td>
<td>12,629</td>
<td>7,619</td>
<td>12,914</td>
<td>7,581</td>
<td>13,189</td>
<td>8,095</td>
<td>13,822</td>
<td>9098</td>
</tr>
<tr>
<td>TTI</td>
<td>9846</td>
<td>8684</td>
<td>9925</td>
<td>8731</td>
<td>10818</td>
<td>9517</td>
<td>12132</td>
<td>9876</td>
</tr>
<tr>
<td>IT</td>
<td>4904</td>
<td>3943</td>
<td>4961</td>
<td>4104</td>
<td>5407</td>
<td>4473</td>
<td>5807</td>
<td>4768</td>
</tr>
<tr>
<td>TOTAL</td>
<td>27379</td>
<td>20246</td>
<td>27800</td>
<td>20416</td>
<td>29414</td>
<td>22085</td>
<td>31761</td>
<td>23742</td>
</tr>
<tr>
<td>Difference</td>
<td>7133</td>
<td>7184</td>
<td>7329</td>
<td>8019</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Key:

N.P – National Polytechnic, TTI – Technical Training Institutes, IT – Institutes of Technology

From Table 1.1 it was observed that the difference in the enrollment of male and female students for the five years was more than ten percent each subsequent year, which was a big difference that cannot be ignored if the untapped potential is to be utilized. In 2009 two national polytechnics were upgraded to Polytechnic University Colleges (PUC) and so the table below shows enrollment data inclusive of enrollment of the PUC.

Table 1.2

Enrollment in TVET institutions in 2009 by gender

<table>
<thead>
<tr>
<th>Category</th>
<th>Male</th>
<th>Female</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>PUC &amp; National Polytechnics</td>
<td>13,822</td>
<td>9,098</td>
<td>22,920</td>
</tr>
<tr>
<td>TTI &amp; IT</td>
<td>17,939</td>
<td>14,644</td>
<td>32,583</td>
</tr>
<tr>
<td>Total</td>
<td>31,761</td>
<td>23,742</td>
<td>55,503</td>
</tr>
</tbody>
</table>

Key:

PUC – polytechnic University College  TTI – Technical Training Institutions

IT – Institutes of Technology

Source: Unpublished enrollment data for 2009 in TVET institutions, for MoHEST (MoHEST, 2010b)

From the preceding table, data shows that the difference in enrollment between males and female was 8,009 (14.4 %) in 2009, this big difference needed to be addressed. Efforts have been made, for example, the making of gender mainstreaming a requirement in performance contracting for permanent secretaries, and through various declarations. Policies have been drawn to address gender disparities in education at all levels. The impact however has not been as desired. There are still glaring disparities that pose
challenges to the attainment of gender equity and equality in education and other spheres. The challenges to address include among others continuous review, adoption and adaptation of strategies that work in given situations. The evaluation of the implementation process of the gender in education policy was supposed to highlight some of these challenges, and also show the progress made in the implementation of the gender policy in TVET institutions.

### 1.1.4 Gender in Education (2007) Policy document

The attainment of gender equity and equality in education has become a core development issue and a goal in its own right. Gender audit of education done in Ethiopia, Kenya, Malawi and Uganda by UNGEI Global Advisory Meeting in Paris, in 2007 noted that gender inequality was a serious obstacle in girls’ education (UNICEF, 2007). It results in the human resource not being fully utilized and so lack of development, which hampers the attainment of EFA and MDGs.

Towards the accomplishment of equity and equality in Education, the MoE developed Gender and Education Policy document in 2007 and the government allocated funds for strategies, which included: affirmative action, bursaries and others as a means to achieve gender parity and equality in the TVET institutions among other interventions. The overall goal of the Gender in Education policy (2007) is to promote equity and equality in education, training and research, to contribute to the economic growth and sustainable development of Kenya. The objectives of the policy are: to establish mechanisms to eliminate all gender disparities in education; training and research in
relation to access, enrolment, retention, completion, performance, transition, quality and outcomes.

The Ministry of Education has the primary responsibility and accountability to implement this policy successfully. This is done through the gender and education units whose terms of reference include: coordinating all gender activities related to education; training and research; mainstreaming gender issues in all education and training policies, programmes, activities and processes; advocating for gender and education; initiating research, gender analysis and audit; and ensuring implementation of key recommendations. In addition, the units are also charged with documenting and managing information on gender and education; scaling up and mainstreaming best practices in gender and education. The unit is also charged with championing appropriate and necessary affirmative action interventions; advising the MoE on gender and education issues. Moreover, developing monitoring, evaluation and accountability systems; undertaking monitoring and evaluation of gender in education programmes are tasks undertaken by the units (RoK, 2007). It is hoped that all the above terms of references are adhered to as implementation takes place, and monitoring and evaluation should be in-built.

With a lot of tax payers’ and development partners’ funds being used for the mentioned strategies, there was need to find out the extent of the gender policy implementation process. The evaluation of the implementation process should be done frequently to find out how well the gender policy in education is being implemented and advise where necessary so that corrective measures are taken, and the policy
implementation process continues smoothly. Effective monitoring and evaluation framework is an integral part of the implementation programme (RoK, 2009c). It is during implementation when one discovers that schedules were unrealistic and that programmes were over-ambitious. No matter how well anticipated, policy implementation always brings some surprises. If unanticipated problems arise at a given stage, then a re-evaluation of the plans for implementation, and possibly of the policy decision itself is in order as quoted by Kemmerer (1990) in Haddad (1995). Evaluation provides performance information and/or on-going feedback that are necessary for implementing persons to learn how to improve the implementation process. Institutions are answerable to government or development partners for determining whether the policies are working well and showing that resources are being used responsibly.

Evaluation holds the staff responsible for performance (Ogula, 2009). Due to challenges that arise during implementation process, there was need for the evaluation of the policy implementation process to find out progress and advice on adjustments if necessary.

Most studies done on gender issues concentrated on factors contributing to gender disparities in various institutions. Onsongo (2002; 2005) did two studies on gender disparities in universities’ administration and management. Matula (2009) did a study on Implementation of Gender Policy, in Public Primary Teacher Training Colleges. Odongo (2007) carried out a case study on Factors that contribute to Gender Disparities in the Choice of Courses in TVET institutions (a case of Kabete TTI), another study done by National Council for Science and Technology [NCST], (2010) was on Mainstreaming Gender in Science and Technology, Policies and Programmes in Kenya. No evaluation
study had been done in Kenya on the implementation process of gender policy in TVET institutions, or evaluation of gender mainstreaming policy in education from the time the policy was developed in 2007. Bunyi (2008) indicated that ineffective implementation of policies to address gender inequalities was an obstacle to gender issues in post primary education, so this evaluation study was to fill this gap. There was need also for the evaluation study to provide information on the implementation process of gender mainstreaming in TVET institutions and inform policy makers on the progress of the implementation process.

1.2 Purpose of the Evaluation Study

The evaluation study was to help gauge whether the policy was being implemented, if the strategies set were in place, and what the barriers to the implementation process were and advise on how they could be overcome during the process of implementation.

1.3 Evaluation questions

The following evaluation questions guided the study;

1) What strategies of gender mainstreaming are in place in selected TVET institutions in Kenya?

2) To what extent has the gender mainstreaming policy been implemented in selected TVET institutions in Kenya

3) What are the attitudes of students towards gender mainstreaming in selected TVET institutions in Kenya?
4) What are the perceptions of lecturers towards gender mainstreaming in selected TVET institutions in Kenya?

5) What are the challenges facing the implementation process of the gender policy in selected TVET institutions in Kenya?

6) What improvements can be made to enhance gender mainstreaming in selected TVET institutions?

1.4 Significance of the Study

The findings provide sex-disaggregated data that can help in gender analysis which in turn assists in identifying gender gaps in TVET institutions. The data helps highlight gender disparities in various courses. The results of the evaluation study forms part of the relevant educational data that informs tertiary institution on implementing the gender policy. The findings also provide basis for further research on issues of gender mainstreaming, and act as a future reference for implementation of future policies and research.

The data fills the pipeline on successful strategies to be used to enhance implementation of policies. This was a formative evaluation and so the findings inform the policy makers on any strength to build on and any challenges to address in implementing the policy and on improving the strategies. These findings inform decision makers and government policymakers and other stakeholders on the gender policy implementation process.

The study findings demystify gender issues and show students in various courses can do whatever course they wish without stereotyping, males and females complement
each other when their potential is harnessed through training. The findings help to highlight barriers and systematic obstacles especially those arising from social and cultural inhibitions to men and women in TVET institutions. This resulted in recommendations that may be used in formulating further strategies and innovative strategies for gender mainstreaming. It provides some solutions for policy makers on the issue of mainstreaming gender in other institutions. The findings can also be used to make improvement or adjustment in the implementation of the gender policy.

1.5 Limitations of the Evaluation Study

Some challenges were encountered in the conduct of the evaluation study notably among them being: the evaluator used only one interview guide for the Technical Education Officer as there was only one officer who dealt with disbursement of bursaries to TVET institutions. The evaluator mailed the questionnaires to the respondents and one institution did not return the questionnaires, she collected data from this institution through the documents analysis guide only.

1.6 Delimitations of the Evaluation Study

There are TVET institutions in Kenya under other government ministries for example: Ministry of Youth and Sports (Youth Polytechnics); Ministry of Public Works (Kenya Institute of Highways and Buildings Technology): and Ministry of Tourism (Kenya Utalii College). Some other TVET institutions are run by individuals and churches as private entities and others by NGOs. Although these institutions play a crucial role in the skills and knowledge development of the country, they were not included in the study since they do not fall under the MoHEST mandate. The TVET
institutions that were upgraded to university colleges were also not included in the evaluation study. This was because they had been in existence for less than four years at the time of evaluation study since they were upgraded.

The study looked at institutions under the MoHEST’s mandate and those that were mixed (enroll both female and male). Nkabune TTI which was in Eastern Province was omitted as it was only enrolling female students at the time of the study (it had boarding facilities for female students only).

The policy document objective for TVET is to increase enrolment, retention, transition and achievement in TVET institutions, especially for girls and women. The evaluation concentrated on enrolment and not on retention, transition and achievement in TVET institutions. Also mentioned is the engendering of management structures, boards and human resource for TVET institutions which also this evaluation study did not cover. Covering all these areas could have made the evaluation study too broad and so the evaluator limited herself to the objective of increase in enrolment, especially for girls and women.

1.7 Evaluation Model used

The evaluation model used was the Context Input Process and Product (CIPP) model developed in the 1960s by Stufflebeam as quoted by Worthen and Sanders (1987). This model belongs to the management oriented models. The basic idea in these models or approaches is that evaluation provides information to management to help them in making decisions about progress. The CIPP model is a model that is meant to serve decision makers. Its rationale is that evaluation information is an essential part of good
decision making. The model best serves education by serving administrators, policymakers, school boards, teachers and other stakeholders in education who need good evaluation information.

The stages in the CIPP model takes place one after another and each needs to be evaluated to inform the next step so that adjustments are done if need be. The four stages give rise to the four types of evaluations; context evaluation, input evaluation, process evaluation and product evaluation as shown in Figure 1.1. each type of evaluation can also be viewed as distinct type of evaluation. As one stage takes place and is evaluated the information collected is given to decision makers or policy makers to use as input for the next stage. By highlighting different levels of decisions, the decision-maker is always the audience to whom a management-oriented evaluation is directed, and the decision-makers concerns, informational needs, and criteria for effectiveness guide the direction of the implementation process.
The model depicted in figure 1.1 shows aspects or levels of the policy decisions are being made about. To effectively evaluate the implementation process, process evaluation was done. This evaluation serves implementing decisions. It looks at how well the policy is being implemented, monitoring how the programme is performing, auditing the programme to make sure it is following required guidelines and identifying defects in the implementation of the programme. It also looks at what barriers threaten its success, and what revisions are needed. Once these questions are answered, procedures can be monitored, controlled and refined (Payne, 1994; Worthen & Sanders, 1987). The process evaluation carried out during the implementation of a program provides periodic feedback to the implementers and management about what is actually occurring in the programme (Ogula, 2002; Payne, 1994). This evaluation provides information to implementers and decision makers of the Gender in Education policy. The information is going to be used to improve the implementation process and adjust the implementation where necessary. It will improve implementation and help achieve gender parity and
equality. The model gave direction on the type of evaluation done and the importance of this evaluation to the implementation process.

1.8 Theoretical framework of the Study

Most theories on policy issues concerning gender have been advanced by feminist movements. There are many theories dealing with gender studies. Some of these theories include: Cultural Feminist theory concerned with gender differences, Radical Feminist theory and Psychoanalytic Feminist theory dealing with gender oppression and Liberal Feminist theory dealing with gender inequality (Keel, 2011). This study used the Liberal feminist theory that advocates equal access and equal rights. It is a gentle, more politically and socially accepted perspective grounded in the conceptions of individual’s civil rights. It emphasizes women’s equal access to domains dominated by men and vice versa. On issues to do with mainstreaming, frame theory has been advanced and is mentioned in the literature review of the study.

Liberal feminist theory is the basis for policies and strategies like affirmative action, equal rights amendment and other laws that assume the elimination of barriers. This theory stresses on equality, it is concerned with the sense of access and opportunity based on merit or credentials as opposed to equality of outcomes. It discourages sex discrimination (Wolff, 2007). It views education as a means of change which the researcher concurs with. As stated by Charlesworth (2005) in Morley (2007) gender mainstreaming is largely associated with liberal feminism in so far as it attempts to work within existing paradigms, while being critical of them, it is sometimes seen as deradicalising the feminist project.
The exclusion of female talent, potential and creativity from science, technology and in technical courses constitute an under utilization of human resources (Misola, 2010; Okhoya, 2004). When women are discriminated upon and excluded from science and technology in any level of education then the society is missing half its talent, and capability for solving social problems and improving the life of its people is not harnessed. It is imperative that equal opportunities are provided to all regardless of gender and all are encouraged to explore the opportunities available. This should be done from an early age so that cultural barriers are removed and career guidance and counseling are provided on opportunities available.

The Liberal Feminist theory advocates for provision of equal opportunities for all regardless of gender as ones potential is not pegged on gender but on their potential and innate abilities. However, by the fact that this theory was first advanced by feminist movement makes people view it as a theory that advocates for female issues and not gender issues.

Liberal Feminist theory is appropriate for the study as it stresses on the need for equality in terms of accessing educational and career opportunities without discriminating due to ones gender. This theory has also been used by other researchers like Onsongo (2005), and Morley (2007) among other gender studies. As already mentioned gender mainstreaming is about providing equal opportunity to all without looking at a particular gender. If gender mainstreaming is employed then the untapped human resources will be used and in the process bring about improved global economy through achievement of
EFA goals and MDGs. This will in turn bring about development and full utilization and harnessing of the untapped talents available.

1.9 Logical Framework of the Study

This evaluation study used the logical framework approach. This framework conceptualizes programmes. The framework is a tool which provides a structure for specifying the components of an activity and the logical linkages between a set of means and a set of ends. It places the programme in its larger framework of objectives within the programme and within the national research system (McLEAN, 1988). The logical framework shows the flow of activities in gender mainstreaming and the end product from the input. Figure 1.2 shows the flow of activities graphically.
Figure 1.2

Logical framework and the relationship of variables in this evaluation study

Source: Adopted from the Guide to the logical framework approach by the European Integration Office (2011: p. 20).
The variables in the evaluation study are gender mainstreaming as the dependent variable and the implementation process as the independent variable. The CIPP oriented model was used in the study. As implementation takes place the model is used in that information is passed to decision makers by implementers to inform them on the progress of implementation and advice on any adjustments or changes that are required for effective implementation of the gender in education policy.

The logical framework shows that the untapped potential of many female students who stay away from science, mathematics, technology and technical related courses can be harnessed when the policy is implemented in TVET institutions. The implementation of gender policy brings on board more female students in TVET institutions, which in the process brings about gender parity and equality. Providing equal opportunities and resources, is in line with what is advocated by the Liberal Feminist theory mentioned in the previous section that advocates for provision of equal opportunities and resources. And as stated by UNESCO committed shift towards the creation of gender equality in education will deliver a wide range of associated benefits for economic growth and for other objectives of development policy to be achieved (UNESCO, 2003).

During gender mainstreaming there are strategies put in place, when these strategies are effectively implemented they are supposed to increase enrolment not only in the specific courses or subjects but in the institutions as a whole. Also during gender mainstreaming cultural inhibitions to gender mainstreaming are dealt with, and this can be done through sensitization and role modeling among others, the environment is also made gender responsive, this will result in gender parity. Gender parity in the TVET
institutions results in gender equality and the untapped human resource is utilized, and in the process the country gets a knowledgeable and skilled human power to be able to achieve the EFA goals and the MDGs. When EFA and MDGs are achieved, countries have skilled and knowledgeable labour force which in turn leads to improved living standards, resourceful societies and improved global development.
1.10 Operational Definitions of Key Terms

**Affirmative action** refers to a temporary measure to bring on board a disadvantaged group of people, used as a strategy to bring about equity when carrying out gender mainstreaming.

**Evaluation** refers to the systematic collection, analysis, interpretation and presentation of data or information about a programme (gender mainstreaming) to find out how the programme is running and advice for corrective measure or adjustment.

**Engender** refers to the process of ensuring that planning and programming are gender sensitive

**Gender** refers to the socially determined roles, responsibilities and careers for males and females

**Gender analysis** refers to the process of examining roles, responsibilities, in institutions, society and development or any other aspects with regards to men and women, boys and girls, with a view to identifying gaps, raising concerns and addressing them. This is done with a view to bringing about gender equity and equality in institutions.

**Gender discrimination** refers to unequal treatment to individuals or groups of people based on their gender. This results in inequality in the provision of opportunities and resources.

**Gender disaggregated data** refers to classification of information and data based on gender
Gender equality refers to equal empowerment participation and provision of resources to both sexes in all spheres of public and private life. Accepting and valuing equality and the difference between men and women and the diverse roles they play in society.

Gender equity refers to the practice of fairness and justice in the distribution of benefits, access to and control of resources, responsibilities, power, opportunities and services. It is the elimination of all forms of discrimination based on gender.

Gender mainstreaming refers to the inclusion of gender concerns in the planning, design, implementation, monitoring and evaluation of policies, plans, programmes, activities and projects at all levels of education and even in society.

Gender parity refers to the numerical concept referring to equal number of females and males relative to their respective numbers in the population.

Gender Parity Index (GPI) refers to females’ level of access to education compared to that of males’. It is calculated for each education level.

Gender roles refers to socially assigned roles and responsibilities of males and females as opposed to biologically determined functions.

Mainstreaming refers to strategy to work towards changing internal process by including those who are excluded in order to achieve change in the institution or organization improve output.

Implementation refers to the execution of a planned project/ programme or policy. Action that follows planning.

Participation refers to active involvement in an activity for example in the enrolment, retention, progression, performance and transition.
Technical education/Vocational education refers to type of education where learners are taught technical or vocational skills that they can use in the world of work. Normally the skills are related to specific trade or occupation or vocation.

Sex refers to the sexual characteristic, biologically determined showing the difference between men and Women.

Policy refers to guidelines to act as guiding principle to show or direct the course of Action

Training refers to imparting skills to learners for job creation/ or prepare them for the world of work.

Institution refers to an organization where learning is taking place to prepare learners for the world of work.
CHAPTER TWO

DESCRIPTION OF THE GENDER MAINSTREAMING POLICY

2.1 Introduction

This chapter describes the concept of gender mainstreaming. It highlights gender mainstreaming in education, guidelines to gender mainstreaming, objectives of gender mainstreaming, and gender mainstreaming in Kenya. It also reviews Gender in Education (2007) policy document prepared by the Ministry of Education.

2.2 The Concept of Gender Mainstreaming

United Nations Development Programme (UNDP) describes gender mainstreaming as taking account of gender equality concerns in all policy, programme, administrative and financial activities, and in organizational procedures, thereby contributing to organizational transformation. In practical terms, gender mainstreaming is a means of ensuring that staff fully understands the relevant policy, its context, and have the capacity to implement it. This is done in order that they can bring the outcomes of policy analysis including socio-economic analysis into the core decision-making processes of the organization (UNDP, 2000). Also including “capacity to implement” is a crucial aspect as some policies fail due to lack of proper implementation.

The concept of gender mainstreaming developed out of a historical background of efforts to advance equality for women. In 1970, Ester Boserup used data and information on development projects, in Third World countries, to highlight the differential impact on women and men of development and modernization strategies. Responding to this, liberal feminists, in the United States, advocated the use of legal and administrative reform to
ensure that women and their concerns were better integrated into economic systems (Rhynie and the Institute of Development and Labour Law). Mainstreaming gender differs from previous efforts to integrate women’s concerns into government activities. Rather than ‘add on’ a women’s component to existing policies, plans, programmes and projects, a gender perspective informs all stages, and aspect of the decision-making process (RoK, 2009b; Rhynie and the Institute of Development and Labour Law, 1999).

UNESCO’s gender mainstreaming strategy ensures that women and men benefit equally from programme and policy support. It intends to transform development such that equality becomes both a means and an end. It aims at achieving all international development goals, including, those explicitly seeking to achieve gender equality. As stated by UNESCO in Vimala (2010):

Gender mainstreaming, means; identifying gaps in gender equality through the use of gender analysis and sex-disaggregated data, raising awareness about the gaps, building support for change through advocacy and partnerships, developing strategies and programmes to close existing gaps, putting adequate resources and the necessary expertise into place, monitoring implementation, and holding individuals and institutions accountable for results (Vimala, 2010.p.6).

The results should have measurable indicators as to how both men and women have benefited and transformed development. Three organizations UN-ECOSOC, UNDP and UNESCO agree that gender mainstreaming should start with identifying gaps, policy formulation, implementation of the policies and even monitoring and evaluation. Whenever policy is prepared there is need to have necessary expertise to implement, and
conduct frequent monitoring and evaluation. And at every step there is need to check for gender balance and to advice on progress and make changes where necessary. The UNESCO’s gender mainstreaming strategy is more explicit as it states how the strategy should work and it brings in the idea of accountability from those involved (implemented) whether it is individuals or institutions.

According to Okhoya (2004), gender mainstreaming means moving away from merely mentioning women in documents to (i) devising actual plans or strategies to involve them; and (ii) defining monitorable indicators that will provide evidence of outcomes during implementation. Women and men need to be integrated as participants and beneficiaries of all regular programme activities and projects and where necessary, special measures be put in place. In the planning stages, gender mainstreaming entails being explicit about the differing needs and experiences of men and women, giving voice and visibility to women’s as well as men’s perspectives, and ensuring that the design is based upon gender disaggregated data. At the implementation stage, Okhoya (2004) states that gender mainstreaming means making sure that both men and women are participating equally in the decision-making process while during monitoring, it means tracking indicators that measure the differential impact of interventions by gender. Both men and women should actively take part in determining the evaluation criteria that gender equality is explicitly assessed and the evaluation team is gender balanced.

According to Moser (2005) as quoted by Verloo in the document by the European Training Foundation [ETF], (n.d), gender mainstreaming has four related stages which are; embracing the terminology of gender equality and gender mainstreaming; getting a
gender mainstreaming strategy in place; implementing gender mainstreaming in practice; and evaluating or auditing the practice of gender mainstreaming. These stages are similar to the UN-ECOSOC, UNDP and UNESCO, gender mainstreaming which start with identifying gaps, policy formulation, implementation of the policies and even monitoring and evaluation. These are stages the evaluator will consider as she evaluates the implementation process of the gender policy.

As indicated by Okhoya (2004), if institutions and governments understand gender mainstreaming, then they will be able to implement it as required and have monitorable indicators to track progress. For effective mainstreaming of gender issues, it is paramount that the terms sex and gender be clearly understood, as the two are frequently misunderstood. As stated by Kfw Development Bank (2006), the sex of an individual is biologically determined, and refers to the biological differences between men and women. A small proportion of the differences in roles assigned to men and women can be attributed to biological or physical differences based on sex. Gender refers to the socially constructed definition of women and men and the relationship between them. Gender roles and relationships are learned and vary across cultures and over time (Esplen & Jolly, 2006; Kfw Development Bank, 2006; McGregor & Bazi, 2001).

Gender determines the conception of tasks, functions and roles attributed to women and men in society, in both public and private life. Understanding these roles and relationships and how they impact upon development outcomes is a key objective of gender mainstreaming. Designing appropriate interventions (based on an understanding of these roles and relationships) to make development outcomes more equal as well as
effective and efficient is central to the concept of gender equity (Kfw Development Bank, 2006; McGregor and Bazi, 2001) and equality. The term gender as stated by Geisler, Keller and Norman, (1999) and the European Commission and Socrates - Grundtvig programme, (2007) is misunderstood, when some people think of gender, they mean women or women issues and specifically affirmative action for women. Ideally gender means that we have to think about women and men, but this is always forgotten. In the same document by Geisler, Keller and Norman, (1999), state that gender means not only men’s but also women’s views, needs, problems and priorities feature in program planning.

Since men normally take a much more public role than women, space must be created to ensure that women’s as well as men’s voices are heard. Men and women should be sensitized on gender roles and relationships and how they vary across culture and over time. Equality is an objective that is achieved through gender mainstreaming as stated in the European Union’s IPA Programme for Croatia (European Union, 2011). And so gender mainstreaming should be clearly articulated and understood for effective implementation of gender policies.

2.3 Gender Mainstreaming in Education

Gender mainstreaming in education requires investing in the education of both girls and boys, while maintaining a balance between them. Whilst it is essential to increase gender parity in tertiary education, it is even more important to ensure mainstreaming is achieved in fields which are traditionally regarded as masculine (scientific, technical and vocational education fields) (Karega & Bunwaree, 2010). In
many developing countries as stated by World Bank, Kenya included, girls still have fewer opportunities than boys to access secondary and tertiary levels of education, as well as scientific and technical courses. This is because of various social and cultural constraints. Women are also subjected to discrimination in the labor market. Investing in the education of girls at post primary education levels is the best way to provide them with the necessary set of skills and competencies to participate in the labor market and become economically empowered (World Bank, 2008). As an investment in the education of girls is done, care must be taken in order to maintain a balance between boys and girls.

Vocational education programmes were traditionally sex-segregated, channeling males and females into different courses. As stated by UNESCO (2003) Women have continued to progress in their traditional fields, such as social sciences, humanities, services and health related programmes. Enrolment in such programmes has a very significant impact on subsequent employment. Women were also under-represented in apprenticeships because they were less likely to learn about programmes, to qualify, and to be selected (Rhynie and Institute of Development and Labour Law, 1999). Vimala, (2010) states that due to the mindset and gender stereotypes about girls’ and boys’ aptitude for mathematics and science at the primary and secondary school level, fewer women enroll in science, technology and technical related courses as compared to men.

Gender stereotypes encourage women to pursue a career in child development, education, medicine (nursing) and a range of service sector occupations. While this may not be bad per se, women are often pushed into just a few vocations. This attitude has
been challenged to a certain extent with the spread of manufacturing and the coming of the digital revolution. Many young women in China, India, and Republic of Korea, now view vocational training, science and technology as viable career options, thereby enhancing career opportunities (Vimala, 2010). The same attitude can be challenged in Africa and indeed in Kenya as already the digital revolution is taking place with the coming of the techno city (Konza).

Gender mainstreaming can be said to be a long-term strategy, with different stages of development. The first step is to identify the ways in which the status quo in effect is designed with men in mind. The second step is to open systems up to accommodate men and women equally. The ultimate goal is to achieve gender equality (Morley, 2007). To more effectively adapt gender mainstreaming strategy there are guidelines that have been developed as a road map to effective and efficient mainstreaming.

2.4 Guidelines to Gender Mainstreaming

Guidelines are important elements in the mainstreaming of gender in development. Gender mainstreaming needs to be guided by overall national goals, objectives and priorities of specific countries, the guidelines ensure that gender issues can no longer be thought of and treated as a separate set of issues but should be seen and treated as a key element of all issues at all levels (National Committee on the Advancement of women Vietnam, 2004). Mainstreaming should specifically seek to: make explicit the importance of gender along with ethnicity and social class as a factor for consideration in the process of development; it should ensure gender equity in access,
and in relation to studies which lead to better careers and job opportunities; it should overcome structural barriers, whether they be legal, economic, political, or cultural which may influence the access and/or participation of either sex in developmental offings. It should also seek to increase the awareness of the active role which women and men can play in development; and increase the participation of women in decision-making in the management and implementation of policies and programmes (Rhynie and the Institute of Development and Labour Law, 1999; Kfw Development Bank, 2006; National Committee on the Advancement of women Vietnam, 2004). The above guidelines as stated by the National Committee on the Advancement of women Vietnam (2004) facilitate change and learning in an organization so that it comes more able to contribute to greater equality between women and men in meaningful and measurable ways. The guidelines are also good for good governance.

The process of mainstreaming gender should include: questioning the underlying paradigm on which the national policy, goals and objectives have been based; do joint programming with other development entities, include other government ministries and departments, intergovernmental and Non-Governmental Organizations (NGOs). It should also involve aligning with other entities’ priorities, activities and critical issues by; placing gender-sensitive women and men in strategic positions in policy-setting and decision-making; making women visible in all data; and providing training in gender analysis, methodology and awareness.

Gender mainstreaming involves both analysis of the different roles of men and women in a given place at a given time and action to be taken to ensure that development
of policy, planning and implementation are sensitive to the needs of women as well as men. It should promote greater equality of opportunity and benefit to all (Okhoya, 2004). Gender mainstreaming focuses on women and men as actors and beneficiaries of development process (RoK, 2009). Mainstreaming involves ensuring that gender perspectives and attention to the goal of gender equality are central to all activities in education policy, curriculum, research, advocacy, resource allocation, facilities, planning, implementation and monitoring of tertiary education programmes. It builds on the knowledge and lessons learnt from previous experiences with gender policies. Specific gender equality policy is a strategy that directly addresses gender imbalances by taking into account needs of women and men and elaborating policies to meet these needs (McGregor & Bazi, 2001). With guidelines for gender mainstreaming stated, objectives of the same have been developed as no strategy can run without clearly stated objectives.

2.5 Objectives of Gender Mainstreaming

The objectives of gender mainstreaming acknowledges that mainstreaming all development activities have a gender dimension and impact. Gender mainstreaming may not benefit women and men equally, but it seeks to understand the roles, responsibilities, resources and priorities of women and men within a specific context, examining the social, political, economic and environmental factors which influence their roles and decision-making capacity. Gender mainstreaming ensures that women and men participate equally at all stages of the project/programme cycle – both as beneficiaries and as decision makers (KfW Development Bank, 2006). Although government agencies such as a national women’s machinery may provide the initial impetus for gender
mainstreaming activities, these activities will not be effective or sustainable if individuals and groups within a society do not understand the importance of the change being sought. Gender mainstreaming entails a fundamental transformation of the underlying paradigms that informs education and other development issues (Rhynie and the Institute of Development and Labour Law, 1999). The status quo must be challenged if men and women are to participate equally in all stages of development and their potential harnessed.

Gender mainstreaming is an important aspect of good governance. It prioritizes equality of opportunity rather than numerical equity and allows for the advancement of gender equality and equity regardless of whether it is women or men whose position needs to be advanced. In some regions and sectors, for example, women may be in a more advantageous position than men. Gender analysis can reveal this and serve to open fair and equitable opportunities for men and women.

In order to flourish in the fullest sense, society is dependent on the utilization of all human resources. Whereas the planning and policy making processes recognize that it is the right of men and women to participate and benefit equally from development initiatives, this has often not been the case. Policies therefore, need to recognize that traditional development theories have not facilitated the participation of women in strategic areas, positions of power and influence because they are based on traditional assumptions of the roles and responsibilities of women and men. Without quality gender disaggregated data, the planning and programming process cannot be efficient and productive.
Gender mainstreaming includes gender specific issues, activities and affirmative action whenever women or men are in a disadvantaged position. It can target women exclusively, men and women together or men only to enable them participate in and benefit equally from development efforts (Karega & Bunwaree, 2010). It focuses on gender roles and relationships; it is designed to ensure that women and men have access to project resources and services, in relation to their actual responsibilities. It can reveal a need for changes in goals, strategies and actions to ensure that both women and men can influence, participate in and benefit from development processes. It is one way of securing human rights and social justice for women as well as men. It is also increasingly recognized that incorporating gender perspectives in different areas of development ensures the effective achievement of other social and economic goals (Siwal, 2007).

Focus on gender equality as an objective, rather than women as a target group, ensures that initiatives not only respond to gender differences but seek to reduce gender inequality, more attention is paid to men and their role in creating a more equal society (Morley, 2007; UNDP, 2000). When men are involved in reducing inequality they embrace the initiative and make it more fulfilling as they know it is for the good of the society and not just a women initiative.

2.6 Policy Framework on Gender Mainstreaming in Kenya

Since 1963, national and sectorial policies have had different impacts on Kenyan women and men, and more often than not they have overlooked gender concerns. The national policy on gender and development provides a basis for the government to underscore its commitment to advancing the status of women (RoK, 2000). Kenya has
ratified two core labour standards of the ILO including: Convention No.100 on equal pay for work of equal value and Convention No.111 on Discrimination (Employment Occupation Convention 1968). The commitment of the Government of Kenya to mainstream gender in national development for equitable growth and poverty reduction is evidenced by the establishment of different national machineries with different but complementary roles (RoK, 2009c). This on the part of the government shows the good will that is required for other stakeholders to play a part.

The need to mainstream gender issues into national development has been recognized in many government policy pronouncements and commitments reflected by signing and ratifying various instruments, treaties and international conventions. For effective gender mainstreaming, Kenya provided departmental and institutional mechanisms through National Policy for Gender and Development (2003) (RoK, 2010b), and the Sessional Paper No. 2 of 2006. These include Ministry of Gender and Social Services; the National Commission on Gender and Development, Gender Officers in Ministries, Parastatals and Institutions of Higher Learning; District Gender and Social Development Officers and Government Officers at the divisional level. Government institutions are required to work very closely with the Civil Society Organizations (CSOs), Communities and other Development Partners. The Government of Kenya is determined to address any existing imbalances through policy formulation and implementation taking into account different needs and skills of men and women (RoK, 2000). Cascading the need to mainstream gender at various levels of government empowers government officers to address any existing imbalances and this strengthens the gender mainstreaming objective in the country.
Despite the recognition and determination, assessments undertaken continue to confirm that gender mainstreaming in the public, NGOs and private sectors has been weak both at national and community level resulting to myriad of challenges being experienced (RoK, 2000). In a study funded for FAO, Kaudia and Obonyo (2007) noted that the Government of Kenya had made effort to mainstream gender by influencing the content of strategic plans, policies and legislations of government ministries.

The Second Annual Progress Report on the Implementation of the first Medium Term Plan [MTP] (2008-2012) articulates the government’s commitment to continued mainstreaming of gender into government policies, plans, budgets and programmes. Mainstreaming gender has been identified as an approach geared inwards achieving gender equity in all aspects of society and as means of realizing the aspirations of Vision 2030 goals. Further, the Government aims at increasing the participation of women through the affirmative action policy of at least 30 per cent representation in all economic, social and political decision making processes and platforms as well as through economic empowerment (RoK, n.d). It also aims at enhancing dissemination of gender disaggregated data and providing equal access to financial services (RoK, 2011; RoK, 2010b).

The report mentions financial and human resource as a challenge to implementation of flagship projects, gender mainstreaming activities included. It further notes that gender gaps still exist in access to and control of resources and socio-economic opportunities. With the report mentioning gaps in access to and control of resources and socio-economic opportunities, more innovative ways are required to address these
challenges for the gender gaps to be filled. There was mention to address the gaps in access to and control of resources and to socio economic opportunities but no mention to address the gender gap in training opportunities, especially training opportunities in TVET institutions. The study established that the effort is limited to statements of intent only and that there are no action plans to transform the policies to outcome. This is the challenge Kenya faces; turning statements into outcome and to create an enabling environment which recognizes the potential roles and responsibilities of women and men in the development of the country, and to utilize strategies that will address the socio-cultural barriers that have contributed to gender disparities and lack of realization of full potential of individuals.


The Ministry of Education Gender Policy (2007) document, the gender policy recognizes that it is the right of men, women, boys and girls to participate in and benefit from development and other initiatives. The policy is helping Kenya meet its development goals and establish women and men friendly institutions. The policy advocates for new departures and strategies that are aimed at ensuring greater participation of women and men and equal access to development, resources and distribution of the benefits. It promises a more cost-effective (economical) way of managing resources and ensuring sustainable development. The policy ensures better targeting of marginalized groups (men, women or both) and their integration into mainstream of development. This policy was a development from the Sessional Paper.
No. 1 of 2005 which was the education blueprint at the time the policy was being developed.

The Sessional Paper Number One of 2005 (RoK, 2005) indicates that the objective of TVET institutions, is to provide and promote life-long education and training. To address the challenges facing the TVET institutions the Government set up the following policy statements, among others: provide scholarships and other merit awards for staff and students in order to promote excellence in creativity and innovation in the field of science and technology and provide loans and bursaries to enhance access to TVET institutions taking special account of the marginalized groups such as female students and the physically handicapped.

To implement the above policy statements the government proposed to implement the following strategies among others: establish financing mechanisms through bursaries, and scholarships for persons with special needs and institutionalize affirmative action for female students and those from vulnerable groups (RoK, 2005).

2.8 Gender Policy in Education in TVET institutions

The overall goal of the Gender in Education policy (2007) is to promote equity and equality in education, training and research, to contribute to the economic growth and sustainable development of Kenya. To attain this goal, the following objectives among others were formulated to establish mechanisms to eliminate all gender disparities in education, training and research in relation to access, enrolment, retention, completion, performance, transition, quality and outcomes:
1) To mainstream gender at all educational levels, institutions, policies, programmes and other activities, planning, implementation and budgeting processes;

2) To improve gender participation and improve performance in Science, Mathematics and Technology (SMT) subjects and SMT-based courses;

3) To ensure that institutional work environments are gender responsive;

4) To empower girls and boys, women and men on gender issues; and

5) To enhance educational outcomes for girls and boys, women and men (RoK, 2007: pp. 7-8).

The evaluator only addressed those objectives that address enrolment, as the evaluator limited herself to gender mainstreaming in TVET institutions in relation to enrolment of students. From the above objectives the following guiding principles were articulated:

1) The gender and education policy has the mandate to address gender inequalities whether these exist in favour of boys or girls, men or women;

2) The policy affirms the right to equitable, quality education for all: girls and boys, women and men;

3) The policy shall pay attention to the needs of girls and women;

4) Affirmative action will be used as a corrective measure for gender imbalances;

5) All education stakeholders will use gender mainstreaming to enhance attainment of gender equality and equity;
6) Equal participation of girls and boys, women and men, especially in governance and management, will be ensured;

7) Empowerment of girls and boys, women and men will be used as the main strategy for the achievement of gender equity and equality in education;

8) Transparency, accountability and good governance will be upheld;

9) Gender responsiveness and inclusiveness will be upheld;

10) Partnership and collaboration in the realization of gender equity and equality will be maintained and reinforced;

11) Gender equity and equality will be enforced as a crosscutting theme in all programmes and activities (RoK, 2007: p. 8).

The above guiding principles were to act as terms of reference during the implementation of the policy so that the implementation team stays on course in terms of what they were to do. These guiding principles are important to the evaluator and to the study as the evaluator referred to them as she evaluated the implementation process.

The Policy document came up with the objective to increase enrolment, retention, transition and achievement in TVET institutions, especially for girls and women. This objective led to the setting up of the following policy statements (guidelines), among others:

1) Provide a framework to ensure more opportunities and infrastructure support for improved women’s and girls’ participation in TIVET;

These guidelines acted as road maps in the setting up of various strategies to improve girls and women’s participation in TVET, and more so in enhancing the participation of females in SMT based courses. To implement the above policy statements, the Ministry suggested the following strategies among others to be employed by the relevant institutions:

1) Where possible provide bursaries, loans and scholarships to school leavers especially the marginalized groups such as girls, children with special needs and persons from ASALs, to study technical courses where they are underrepresented;

2) Implement affirmative action in polytechnic admissions for science related courses

3) Encourage rehabilitation of sanitary facilities, learning facilities and physical infrastructure in public TIVET institutions to ensure that they are gender friendly in order to create a gender-responsive environment;

4) Develop women role model programmes in TIVET institutions and provide technical knowledge and vocational skills, as well as promote attitudes necessary for development

5) Develop bridging programmes for students from disadvantaged backgrounds, especially girls and women, between secondary and TIVET institutions, especially in SMT-related courses;
6) Collaborate with partners to provide seed money to TIVET institutions to promote Income Generating Activities (IGA) to establish endowment funds for student bursaries (GoK, 2007: pp. 24-25).

The above policy document is under implementation and so there was need to find out the implementation progress and implementation of strategies mentioned. The implementation of this policy is crucial to achieving gender parity and equality and for effective gender mainstreaming. It is important to evaluate the implementation process in order to assess the level of implementation for any adjustments or corrections of the policy (formative evaluation). It is also done as it was stated that the policy be evaluated after every four to five years to make sure it’s objectives are achieved (summative evaluation).

It was noted in the policy document, that the policy will be reviewed every five years to take into account emerging issues and trends, it was also noted that periodic evaluation of the programme be done with a view of using the findings for programme improvement and interventions just as mentioned in the CIPP model. So far no evaluation of the policy has been done or if done, the findings have not been made public. With the split of the MoE into MoHEST and MoE, there was need to find out how the implementation process was taking place in TVET institutions to track progress even with two different ministries managing education activities.

The Government of Kenya (RoK, 2009c) on its medium term plan and indicators of Vision 2030 noted that, no medium term plan or outcome indicator was mentioned for TVET institutions or middle level colleges. Only the transition rates for universities were
captured. Without a medium term plan or outcome indicator, monitoring and evaluation of the gender policy for the middle level colleges and TVET institutions becomes a challenge that needs to be addressed. With this challenge in place it was imperative that a process evaluation is done as this can be used as basis for further formative evaluation.
CHAPTER THREE

REVIEW OF RELATED LITERATURE

3.1 Introduction

In this Chapter, literature was reviewed on approaches to gender mainstreaming, theories on gender issues and gender mainstreaming, studies on gender mainstreaming in institutions in general were reviewed. Moreover, studies on implementation of gender mainstreaming in tertiary institutions, strategies to enhance gender mainstreaming, perception and attitude to gender mainstreaming, methodologies used in previous studies, way forward for gender mainstreaming policy were reviewed. In addition, gaps were identified in the studies reviewed.

3.2 Approaches to Gender Mainstreaming

Gender mainstreaming approaches were developed in the 1970s and 1980s globally to address the disadvantaged position of women and to focus on what women lacked. They advocated that women were “left out” of development and needed to be “integrated”. It was later noted that rather than consider women in isolation, there was need to take account of women from the broader context of their lives. This involved looking at women in the family, economy and society and the way in which society and institutions through their values and practices reinforced and recreated inequality between women and men (UNDP, 2000). The approaches developed in the 1970s and 1980s, included Women in Development (WID) and Gender and Development (GAD). Later there was a paradigm shift in gender mainstreaming approaches, due to the development of different perspectives to gender mainstreaming.
The WID approach was developed on recognition that women constituted a large untapped resource, yet development programmes had ignored their interests and needs. In most cases, the status of women in the society worsened (Rhynie and the Institute of Development & Labour Law, 1999; Geisler, Keller & Norman, 1999). WID approach was affected by the ‘trickle down’ and ‘human capital’ development theories of the 1960’s and 1970’s. It focused on sex as an analytical category without examining the effects of race, class and culture; the potential for, and actual discrimination and exploitation of women by women (Rhynie and the Institute of Development and Labour Law, 1999). It sought to integrate women into the development process, isolated women’s projects from the mainstream and focused on women’s productive role. It prompted legislation to protect women’s rights, for example, the Convention on the Elimination of All Forms of Discrimination Against Women [CEDAW] (KfW Development Bank, 2006; Geisler, Keller & Norman, 1999). This development was a milestone in taking care of the rights of women as historically they had been treated unequally. However, the approach did not effectively take care of women’s issues.

An alternative to the WID approach offered in the 1980s was the GAD approach. It questioned the view that women’s problems were not seen in terms of their gender (European Commission & Socrates - Grundtvig programme, 2007; Rhynie & the Institute of Development and Labour Law, 1999; RoK, n.d). It was a response to failure of WID approach which had ignored the role played by men in decision-making and resource allocation; and tended to treat women as a uniform category (KfW Development Bank, 2006). The GAD approach focused on gender relations of power at all levels in society,
and interventions that could bring equality and equity between women and men in all spheres of life. It recognized that improving the status of women was a goal that required participation of both men and women, although separate projects and programs for women could be supported. The GAD approach, viewed women as agents of change and not passive recipients of development assistance. The intervention strategies of a GAD perspective brought about structural changes and shifts in power relationships (Rhynie and the Institute of Development and Labour Law, 1999; RoK, n.d). This was a major boast to gender issues as the issues were now viewed from a broader perspective of gender issues and not just as women issues.

Reports done by Rhynie and the Institute of Development and Labour Law and KfW Development Bank on approaches to gender mainstreaming were in agreement on the WID approach, it advocated for integrating women issues. As mentioned the WID approach viewed women in isolation while the GAD approach viewed women as agents of change. Jahan in line with the paradigm shifts beyond the 1980s came up with the agenda setting and integrationist approaches to gender mainstreaming, while Rees came up with three models to gender mainstreaming, these models are explained later.

Jahan’s (1995), approaches to gender mainstreaming as already mentioned included agenda setting and integrationist approaches. The agenda setting (transformative) approach transforms and reorients existing policy paradigms, it changes decision making processes, prioritizes gender equality objectives and rethinking of policy ends. In this approach the mainstream changes. The Integrationist approach implies that gender issues are addressed within the existing policy, strategies and priorities. It is
selling gender mainstreaming as a way of more effectively achieving existing policy goals. This approach is less likely to be rejected by implementers and other stakeholders but it is less substantial. The integrationist" approach has been the most common way of understanding and operationalizing gender mainstreaming. According to Jahan (1995) as extracted by UNDP, the integrationist approach, "builds gender issues within existing development paradigms" (UNDP, 2000: p. 21). UNDP further notes that integration of women is to include women on an equal footing with men in all projects, and in all available opportunities. Mainstreaming gender in TVET institutions by using the integrationist approach is less likely to be rejected and will give women an equal footing to men in terms of accessing opportunities in various fields and to enable them use their potential to the fullest. The agenda setting approach will face some resistance as men will see it as women taking up their positions and in the process being disadvantaged.

Rees (1998) on the other hand came up with three models to gender mainstreaming; the first model was one in which equality based on sameness is fostered, women enter previously male domains, and the existing male norm remains the standard. The second one was where there was a move towards the equal valuation of existing and different contributions of women and men in a gender segregated society. The third model was where there was a new standard for both men and women, that is, the transformation of gender relations. She describes the first, as ‘tinkering’ with gender inequality; the second as ‘tailoring’ situations to fit the needs of women; the third being ‘transformation’. She argues that only the third model is gender mainstreaming. It has potential to deliver gender justice as it transforms institutions and the standards
associated with it and necessary for effective equality. Booth and Bennett (2002) argue that the three are gender mainstreaming approaches. The evaluator sees model one being just like Jahan’s integrationist approach while model three being like the agenda setting approach. The two are approaches to gender mainstreaming but she agrees with Morley that the integrationist approach is better as it seeks to address gender in the existing policy paradigms, and the implementers and recipients will more readily embrace it as it will incorporate changes gradually in terms of the structures in place this will lead to less resistance to the strategies being proposed.

It is necessary to critically look at the approaches to gender mainstreaming and how they have evolved in order to understand what approach is being applied by institutions, and governments. This will help those involved in gender mainstreaming to know which approach is likely to work in what situation in the quest to address gender inequality and inequity. This will also help the scholars of gender studies and implementers of gender policies and programmes to understand which approach is best in gender mainstreaming activities. The evaluator also looked at various theories that have been used in gender issues and in mainstreaming.

3.3 Theories on Gender issues and Gender Mainstreaming

Various theories have been used in gender studies. Although some have been viewed as feminist theories as they were first championed by feminists to advocate for the rights of women who had been discriminated upon historically, these theories still apply to gender issues and not just women issues. Theories on mainstreaming have also been developed and a notable one being frame theory.
Frame theory was drawn on by both Verloo (2004) and Ferree (2004) as stated in Walby (2003-2004) to capture variations in the relationship between gender equality projects and the mainstream. Frame theory has become a key influence in the theorization of social movements, gender equality being one of the social movements and an end means to gender mainstreaming.

Frame theory provides a vocabulary to engage with the contestations over, and shifts in meaning that are key to the understanding of social movements and related civil society activities. Two terms have been used, ‘frame extension’ and ‘frame bridging’, which capture some of the ways in which social movements either modify and extend the dominant frame so as to include their own projects or find a way to link or bridge their project to the dominant frame. By extending or modifying the dominant frame, the other projects are included and in so doing mainstream the disadvantaged frame.

Ferree (2004) and Verloo (2004) as stated in Walby (2003-2004) are critical of some features of Frame theory, that it does not carefully enough distinguish among the available discursive structures and resources, the actors’ strategic choices in this context, and the outcomes attained. As they develop it in their work, they include national structures of opportunity as well as the voices and activities of a range of actors as they re-work frames in complex ways. Further, Ferree (2004) in Walby (2003-2004) links Frame theory with comparative institutional histories so as to provide greater depth to the account of the resources on which feminist social movements draw (Walby, 2003-2004).

Most theories on policy issues concerning gender issues have been advanced by feminist movements. There are many feminist critical analysis theories dealing with
gender studies, these theories include: Cultural feminism theory, which deals with gender differences, it seeks to create social space that accepts women as different and have positive contribution to society. Radical feminism theory and Psychoanalytic feminism theory deals with gender oppression, they both deal with oppression and patriarchy in the society. Social feminism theory deals with structural oppression, it is a critique of capitalism and patriarchy in society. The one dealing with gender inequality is Liberal feminism theory, it requires legal and institutional change, and it rejects second class status (Keel, 2011). Cultural feminism, radical feminism, psychological feminism and social feminism deal with gender issues, however, their interest is not access to and provision of equal opportunities to all but seeks to create social space and fight patriarchy in society. The liberal feminism advocates for provision of equal access to resources and opportunities which is why the evaluator decided to use it.

Liberal feminist theory advocates equal access and equal rights. It is a gentle, more political and socially accepted perspective grounded in the conceptions of individuals civil rights, emphasizing women’s equal access to domains dominated by men and vice versa. The Frame theory dealing with gender mainstreaming is broader as it deals with social movements. Therefore, the evaluator chose to use Liberal feminist theory which is specific to gender equality. The theory has been used before in gender studies by other researchers both locally, and internationally. For instance, Onsongo (2005) used the Feminist perspective in data analysis which posit that women and men have equal potential to develop themselves in all spheres of life. As expounded earlier,
the theory fits well with the objectives of gender mainstreaming and so makes it appropriate for use in gender mainstreaming studies.

### 3.4 Studies on Gender Mainstreaming in institutions

A well-educated population leads to a more productive workforce, which can lead to increased economic growth, better social outcomes (for example, better fertility and mortality indicators), and higher returns, particularly for women. Linking education with labour market outcomes is particularly important, because finding appropriate employment is an important end goal of educational attainment (World Bank, 2008). And so is provision of equal opportunities and resources for all regardless of gender.

A study done by UNESCO (1995) globally stated that males dominate the natural sciences, engineering and agriculture courses, while females are more likely to be found in the social and biological sciences. The UNESCO report found that females accounted for higher percentage of enrolment in training oriented courses, and commercial and service trade oriented courses than in the industrial and engineering trades or occupations (McGregor & Bazi, 2001). This brings the questions to why the trend, whether it is the society that dictates this or ones innate capability.

Country case studies presented to World Bank from developing countries showed that even within the context of gender equality, boy’s education cannot be ignored. Efforts to improve the education of girls in some countries have resulted in significant increases and progress in female enrolment, but a slight regression in male enrolment and participation which is a cause for concern. Boys in Bangladesh, for example, had been dropping out of school in larger numbers than girls, a phenomenon that was the country’s
biggest gender challenge to the point where girls account for 60 per cent of enrollment in schools, especially in rural areas (World Bank, 2008). This raises the need to mainstream gender carefully, putting in mind the disadvantaged gender.

Case studies from Jamaica’s educational indicators demonstrate the high levels of involvement of women in the educational process. At the tertiary level, they outnumber men significantly although there is equal enrolment of both male and female students at primary level. The levels of literacy for both women and men had remained high and stable over the twenty-year period 1970–1990, and this situation probably resulted from a certain lack of urgency about gender planning. Examination of the needs of the boys and men in the system, and the identification and assessment of factors affecting their under-achievement could be an important aspect of gender planning in Jamaica. It could also be useful to examine how women’s perceived advantage in the educational system affects their future career prospects vis-à-vis those of men in Jamaica (Rhynie and the Institute of Development and Labour Law, 1999), and other regions of the world.

The two studies mentioned in the preceding paragraphs show cases where male students had been disadvantaged. This had been as a result of effort being concentrated on the education of girls and in the process the education of boys lagged behind. The latter is as a result of lack of gender planning, while the former is due to effort being concentrated on female students. From the above scenario it is imperative that whenever gender mainstreaming is being carried out, there is need to consider the status of both the male learner and female learner (gender analysis) so that not one gender is concentrated on while the other stagnates.
Another study done in France UNESCO (2003), showed that despite increases of the female presence in most fields, there remained a traditional differentiation between ‘masculine’ and ‘feminine’ fields of study. In 2001 overall disparities were in favour of young women in upper secondary education, where women represented close to 54 percent of total enrolment. More disaggregated figures, however, showed that their share was 58 percent in general education, 65 percent in scientific and technological education and 43 percent in the professional baccalaureate. These figures conceal great inequalities as regards programme orientation. Even in general secondary education, girls were over-represented among humanities graduates (83%) and slightly under-represented in science programmes (44.5%). With this kind of data, there is need to have sex segregated data on the various programmes to know the enrolment ratios per programme and interrogate these data critically in the light of gender mainstreaming.

The proportion of girls was lowest in courses associated with higher labour market rewards, the scientific and technological baccalaureate, and in those courses with an industrial orientation (7.9%), whereas the medically and socially oriented studies are highly feminized at 96 percent of graduates (UNESCO, 2003). Although the distribution changes across countries, the broad field of ‘social sciences, business and law’ attracts the largest number of female enrolments (often more than one-third of the total) in almost all countries. Women were most numerous in the field of education, where they often represent three-quarters or more of enrolments, especially in industrialized and transition countries. Sub-Saharan Africa is an exception, however: in only three countries
(Botswana, Mauritius and Swaziland) where women account for more than half of the total enrolments in education programmes (UNESCO, 2003).

In most of the other regions the second field chosen by women is health and welfare, where women often represent between two-thirds and three-quarters of the students. Again, sub-Saharan Africa is an exception, where the proportion of women exceeds 50 percent in only four countries (Angola, Botswana, Madagascar and Swaziland) – perhaps because many health-related programmes are provided at ISCED Level 5B, in the form of short programmes of professional orientation. There is need to find out why the trend is the way it is to make the courses more inclusive.

Progress has occurred in natural sciences and engineering and – outside Africa – in agriculture. It would, of course, be necessary to examine more detailed statistics to determine in which particular disciplines women have made most gains and where they still lag behind (UNESCO, 2003), the evaluator echoes the same sentiments of detailed statistics to determine in which disciplines women have made strides, and so the need for the study in TVET institutions in Kenya to provide sex segregated data.

A study done by Huggins and Randall, (2007) for the South African Association of Women Graduates conference on drop out from school and tertiary studies, examined the enrolment rates and performance outcomes for boys and girls at primary, secondary and tertiary levels. This study was done to identify impact of the government of Rwanda’s EFA policy. The study sought to explain the gender disparity by reviewing direct and indirect discrimination against girls within the education sector. From the findings it was noted that at the primary level girls net enrolment slightly surpassed that
of boys, and at higher levels men were more, meaning there were gender disparities in higher education in Rwanda in favour of men.

Onsongo did two studies on gender. The first study (Onsongo, 2002), was conducted in Kenyan universities on the participation of women in university management and a review of literature on enrolment of male and female students in the universities. The second study (Onsongo, 2005) surveyed views and perceptions of university managers (men and women) and senior academic staff on the factors affecting women’s participation in university management in Kenya. From her findings, in the first study, it was noted that growth of private universities in Kenya is not enhancing gender equity in higher education.

In the second study Onsongo investigated the women’s experiences, their career history in university teaching, how they got into management, the challenges they had faced and their coping strategies. In her findings she stated that there were fewer women holding academic and management positions compared to men in both public and private universities. Onsongo’s studies were on women in administration and management at university level both public and private, while the evaluators study was on enrolment of students in TVET institutions. And so the evaluator filled the gap on enrolment in TVET institutions.

A done study by NCST (2010) stated that there were glaring disparities in admissions at institutions of higher learning, in employment and in promotion of females in technical and science based careers. The study revealed that the capacity of women to engage in science, technology and innovation knowledge in the Kenyan society was
grossly under-developed and under-utilized. The study further stated that few institutions had some policy guidelines on gender mainstreaming though the guidelines were not specific on gendered roles and so could not abate the gender bias in science and technology, the study only covered some research institutions and one university, no TVET institution was covered in the research. This being a Kenyan study necessitated the evaluator to want to find out specifically what was happening in TVET institutions in terms of implementation of the gender mainstreaming policy.

A study done by Maina (2011) on promoting educational equity in Kenya, addressed factors affecting girls participation in education in ASAL areas. The study covered cultural reasons why girls do not participate in education. To face the challenge Maina suggested that the Government of Kenya address limitations on access and retention. Maina’s study looked at education across all levels, while the evaluator concentrated on selected TVET institutions in Kenya so as to get an in-depth picture of gender mainstreaming at this level.

The evaluator considered the situation of both the male students and female students in the implementation of the gender policy in selected TVET institutions, in Kenya. As noted in the above studies, when focus is on one gender the other gender may stagnate in terms of access to education and to development as a whole. From the studies Onsongo looked at University management, while the evaluator carried out this evaluation study on students and gender mainstreaming in selected TVET institutions. The NCST also covered one university and no TVET institution yet TVET institutions are crucial in the development of skills in the science and technology field. After
analyzing literature on gender mainstreaming in institutions, it is necessary to look at the implementation of the policies as this is the core element to achieve gender mainstreaming in institutions (putting the plans in the policies into action).

### 3.5 Strategies to Enhance Gender Mainstreaming in Institutions

As already mentioned in earlier literature, and according to World Bank, (2008), in many developing nations, the number of females studying or involved in science, mathematics, and technology is proportionately lower than the number of males. Results from national and international achievement assessments, consistently show that males perform better than females in science and technology subjects, while females perform better than males in literacy and other social studies. To enhance girls’ ability to compete in the global economy, particularly in high-value industries (for example, information technology, biotechnology, semiconductor manufacturing), it is important to support innovative approaches and strategies, such as mathematics-language or technology-arts cross-curricular programs that confound traditional gendered associations and enhance the learning of girls and boys across a given curriculum (World Bank, 2008). This will go a long way in enhancing gender mainstreaming in education and in the process eliminate gender discrimination in learning institutions and the field of work.

A study done by Walker and Temba (1999), on addressing gender issues in education in Mozambique proposed lessons on girls’ education from the experience of Gender in Education in Mozambique project. The lessons learned included; that gender approach to girls’ education was more appropriate when it involved boys in the movement to promote a better life for girls and for themselves as current and future
companions of girls/ women. It also taught that working through and with the local community authority structures promotes development of appropriate strategies for addressing gender relations in the local context. It also promotes community ownership of the initiative and sustainability, however, slow to change among other things, strengthening and engendering the school community and linking organizational structures promote sustainability while enabling local initiatives to develop in a systematic way.

Some of the positive aspects of the project by Walter and Temba (1999) among others were that; it gave visibility to issues, feedback of practical experiences in schools and community involvement to national and provisional level staff. It used existing mechanisms for advocacy and educational purposes, dealt with resistance to change by enabling people to see what they could gain by changing, developed strategies and interventions suggested by local people. It also acknowledged that there was resistance to change, to address the resistance there was need to look for room to maneuver and provided regular monitoring through planning meetings (Bunyi & Okelmo, 2000). The study was more of an impact assessment. With gender mainstreaming ingrained in various strategic plans in Kenya, there was need to find out the strategies in place in the selected TVET institutions in Kenya, how they are being implemented and the models being used in implementing the strategies.

A Case study done by Bunyi (2003) on interventions that increase enrolment of women in African tertiary institutions, the study suggested interventions which included affirmative action, engendering tertiary institutions, gender sensitization, outreach
programmes, expansion of tertiary places and addressing relevance of tertiary education programmes. These are strategies Bunyi (2003) felt could work to enhance enrolment of female students in tertiary institutions in Africa and especially sub Saharan Africa.

The case studies from the Philippines’ (Misola, 2010) showed a mixture of changes that were used to make it happen, for example, policies being put in place, physical infrastructure improvement, funding provided, support services for example guidance and counseling done and learning environment improved and made gender sensitive among others. Notable among the support measures were recruitment campaigns, placement of women in jobs, teacher upgrading and prioritization of women for classroom management among others. The presence of women provided role models, while policy shifts and support provided equal opportunities. The studies stated what works with reference to increasing enrolment of female students in formerly male dominated fields.

The studies above showed what has worked or been suggested in other countries as strategies that have worked or can work. Some of these strategies tie with strategies that the government of Kenya has put forward as strategies in its policy documents, among them being: use of affirmative action, use of role models, involving stakeholders, gender sensitization, improving physical facilities. This study looked at strategies in place those that are working and some strategies were suggested to enhance gender mainstreaming. This evaluation study links what has worked in other places as best practices and can be replicated in Kenya as strategies that can work in gender mainstreaming. From strategies to enhance gender mainstreaming, there was need to find
out the perception and attitude to gender mainstreaming as this affects the embracing of gender mainstreaming by stakeholders in education.

3.6 Implementation of Gender Mainstreaming in Tertiary Institutions

Misola (2010) reports on case studies conducted on TVET institutions in selected countries including Visayas and other regions of the Philippines. The studies focused on improving the participation of female students in TVET programmes formerly dominated by males. The results of the study were to throw light on the promotion of equal access for women to TVET programmes in selected institutions. The institutions included in the survey were selected from TVET providers in Region VI and other regions of the Philippines (30 institutions were used in the study – private and public). Case studies from the Philippines stressed the need for implementing and monitoring schemes to be reinforced. The researchers analysed and described policies and practices in the case studies that were obtained from the selected institutions in the Philippines, to improve the participation of females in male dominated TVET courses. This study provided insights into gender mainstreaming in TVET institutions in other countries.

Morley (2007), on findings from a research project investigating gender equity in Commonwealth higher education interrogated enablers and impediments to gender equity in South Africa, Nigeria, Sri Lanka, Uganda and Tanzania. The focus of inquiry was access, curriculum transformation and staff development. The study examined one aspect of the project, that is, how the principles of gender mainstreaming had been applied to curriculum transformation. It explored the context of the implementation gap between macro international and national policies for gender equality and meso and micro level
change. Policies for gender equality in general, and how gender mainstreaming had been developed internationally, and interpreted at national and organisational levels. The comparative nature of the project helped to broaden debates on equity in the globalised knowledge economy. Morley stated that implementation was a concern in the Commonwealth countries researched on, as policy commitments to gender evaporated during implementation. This study shades light on implementation of gender policies.

Case studies from The Government of Zambia’s National Policy on Education (1995), provide a good example of mainstreaming gender into education policy. The ideological framework was set in the preamble of the policy. There is a commitment to gender equity in terms of two critical indicators, school enrolment and school management. The guiding philosophy of the document did not explicitly mention gender or any other social category, but spoke of the creation of total human being who exercises tolerance for other people’s views – in defense of individual liberties and human rights. The priority objectives were placed in immediate, short, medium and long term categories and gender concerns were addressed at two priority levels. In the short term (1995–2000) there was the need to achieving gender equity in school enrolment and in management posts at all levels of the education system, stated as an objective, while attaining gender parity in enrolment in mathematics, science and technical subjects at all levels as a long term (after 2015) goal (Rhynie and the Institute of Development and Labour Law, 1999). Implementation is part and parcel of a policy, and attainment of the long term objective of 2015 attaining gender parity in enrolment in mathematics, science and technical subjects at all levels, 2015 is yet to pass though formative evaluation could
inform policy makers on progress of policy implementation. Implementation of policy was not mentioned.

A Case study was done by Bunyi (2003) on interventions that increase enrolment of women in African tertiary institutions, the study was for a regional training conference on improving tertiary education in Sub-Saharan Africa: the conference was titled ‘things that work’ in Accra. The recommendations she came up with among others included, the need to carry out monitoring and evaluation of strategies and activities implemented and the progress being made towards reaching equity. This study also showed implementation as being a gap in gender policy and achieving gender mainstreaming.

Matula, (2009), in her study looked at implementation of gender equity policies in Public Primary Teacher Training Colleges (PPTTC). Matula’s findings concurs with gender stereotypes which encourage women to pursue a career in education, and child development. Matula’s study looked at factors influencing implementation of gender policies.

From literature collected above; the case studies done in Zambia did not address implementation process which is a critical area of any policy, while case studies done in the Philippines, Misola (2010), a study done by Morley (2007), and a case study done by Bunyi (2003), all recommended that implementation activities to be monitored and evaluated. Matula (2009) gave a recommendation for the government to put mechanisms in place to ensure implementation of gender policies is done. It was noted from Matula’s study that women preferred education related courses and so there was need to find out what the trend was like in the technical and vocational courses. The evaluator carried out
an evaluation of the implementation process to find out if policy commitments evaporated during implementation (Morley, 2007). This study was to fill the gap identified in the studies above on implementation processes. Studies on implementation process cannot be covered singly without looking at strategies proposed and those being put in place during implementation process.

3.7 **Lecturers and Students Perception and Attitude to Gender Mainstreaming**

Education and Training institutions are not gender friendly when they discriminate against both boys and girls. Discrimination against boys involves the constant reinforcement of those dominant masculinities that encourage boys to underperform and perceive girls as socially inferior and weaker. In turn, the girls buy into this masculine construction of femininity as powerless and voiceless and of masculinity as all powerful. As a consequence, boys and men in schools behave in ways that limit the full participation of girls and women in structures and processes of schooling (World Bank, 2008). There is need to be gender sensitive so as to have gender friendly institutions that can bring about gender equality, which is the end means to gender mainstreaming and a development indicator to the achievement of EFA and MDGs. As stated by Okhoya (2004), there is need to develop science to meet current and future needs by recasting perceptions of science within a culture of sustainable development.

Mazrui’s (2004), presented a paper on the impact of Cultural perceptions on gender issues in Kenya as noted in UNESCO (2006). The paper looked at perceptions of stereotypical images and words that portray women negatively and hinder the fight for gender equality and equity. On science and technology she was general on girl child
education across board, she was not specific on any level of education (UNESCO, 2006). This evaluation study will fill this gap as it was more specific to TVET education and training.

Onsongo (2002), surveyed the perceptions of university managers (men and women), and senior academic staff. Her survey was on the factors affecting women’s participation in university management, in Kenya. She wanted to find out their perceptions on gender roles and the impact of these perceptions on their performance as managers. From Onsongo’s findings it was noted that the work environment in public universities in Kenya was perceived as hostile, the hostile work environment in the public university positioned women as ‘outsiders within’ the university. This study looked at perception of lecturers and attitude of students to gender mainstreaming in TVET institutions.

3.8 Methodologies used in Previous Studies

The case studies from the Philippines used descriptive research (survey) which focused on analysing and describing successful approaches by selected institutions using questionnaires. Respondents of the survey were teachers, supervisors and deans. A follow-up interview was conducted in selected colleges and training institutions to obtain a deeper understanding of the factors that influenced the success of the institutions. A documentary analysis was used to support various aspects of the cases presented. The case studies applied both quantitative and qualitative research methods.

A Case study was done by Boigny (2003) on interventions that increase enrolment of women in African Tertiary institutions. It was a case of Université de Cocody, and
sought to find ways to raise female enrolment rate. This was a country case study and so the results could not be generalized to other institutions. In the study by Huggins and Randall, (2007), in Zambia, descriptive data was used, for example, percentages, ratios, bar graphs, and pie charts. In this case only descriptive statistics were used and no qualitative data.

In Onongo’s (2002) study, the universities were selected using stratified random sampling procedures. The university managers were selected purposively whereas senior academic staff was selected by stratified random sampling using academic ranks. Data was gathered through questionnaires, semi-structured interviews and document analysis. While, in Matula’s (2009) study, she used purposive and simple random sampling, she sampled college administrators, lecturers, and students. On instruments she used interview guide, observation schedule, document analysis guide and questionnaires. These two studies used both quantitative and qualitative research methods.

A study done by Odongo (2007) on factors that contribute to gender disparities in choice of courses in technical institutes, she did not use any theoretical framework to guide the study. In methodology, Odongo used cluster sampling and systematic random sampling. For research instruments she used semi-structured questionnaires. To test reliability of instruments she used split half reliability.

The evaluator in this evaluation study used both qualitative and quantitative research techniques in order to capitalize on the strengths of one method and minimize on the weaknesses of the other method. She used stratified, simple random sampling and purposive sampling, she also used three types of instruments which included:
questionnaires, document guide, interview guide. She also borrowed a lot from the study done in the Philippines and the studies done by Onsongo and Matula as they used both qualitative and quantitative research methods.

3.9 Summary on Literature Reviewed and Gaps identified

From studies analysed above it can be concluded that in gender mainstreaming, gender parity should be a key determinant as and not just improving the enrolment rate of one gender. More detailed statistics were necessary in particular disciplines where women had made gains and where they lagged behind. This evaluation study not only evaluated the implementation process but also provides statistics on enrolment in various courses of both males and females in selected TVET institutions. This evaluation study provides sex-segregated data that is required for decision making and also will act as a source of reference during implementation and for those studies on enhancing gender equality.

It is also noted that there are strategies that could be used to make it happen, that have been used in other countries. This being an evaluation of the implementation process of the gender policy, some of the suggested strategies from the case studies could be incorporated into the strategies in place so that the objectives of gender mainstreaming can be achieved. Literature on perception and attitude to gender mainstreaming was reviewed, this is because perceptions of stereotypical images and words that portray women or men negatively hinder the fight for gender equality and equity and should be addressed.
This evaluation study borrowed a lot from the case studies carried out in the Visayas and other regions of the Philippines as these are third world countries. The study also used qualitative and quantitative methods as used by Onsongo (2005) and Matula (2009). In this evaluation study, the evaluator carried out a mixed method research design, where there was triangulation of research instruments to get more information on the subject matter, and in-depth information to cater for all the areas of the policy implementation process.

Apart from the case studies done in the Philippines, the studies done in Kenya were done in universities Onsongo (2005) and Bunyi (2003), teacher training colleges (Matula, 2009) and a case study on one TVET institution Odongo (2007). Also apart from the case studies in the Philippines, none of these studies was an evaluation of the implementation process of gender policies, yet monitoring and evaluation has been sighted as a major challenge to policy implementation. This evaluation study was to fill this gap of monitoring and evaluation.

Recommendations on the way forward were suggested by other researchers to attain gender mainstreaming in tertiary institutions and other institutions of higher learning. These recommendations are very crucial as they act as input for further implementation of the policy and for corrections or adjustments to be done where those strategies in place are not working or where the implementation process is not yet effective. This evaluation study shade light on those recommendations as suggested by other researcher and so these suggestions can be married with those suggested by
respondents on the ground to come up with workable strategies and an effective implementation process.
CHAPTER FOUR

EVALUATION STUDY DESIGN AND METHODOLOGY

4.1 Introduction

This chapter gives a detailed description and justification of the evaluation design used. It also includes the target population, sample and sampling procedure used, and description of subjects. In addition, description of instruments, piloting and testing for reliability and validity, procedure for instrument administration, data collection, and data analysis techniques are described.

4.2 Evaluation Design

The evaluator adopted a mixed method research design; she used survey research design (quantitative) and naturalistic research design (qualitative). The two evaluation designs complemented each other and yielded the necessary information required to evaluate the implementation process of the Gender Policy in Education (2007) in selected TVET institutions. When using a mixed method research design the researcher capitalized on the strengths of each method while compensating on the weaknesses of each of the research designs. As stated by Henn, Weistein and Foard (2009), a multi-strategy research approach enables the researcher to investigate a particular research area from a variety of different angles and perspectives, focusing on different questions and issues, collecting different types of data, analysing these data using different techniques, and interpreting the results from a variety of different positions. As stated by Johnson and Onwuegbuzie (2004), by utilizing quantitative and qualitative techniques within the same framework, mixed methods research can incorporate the strengths of both methodologies.
All possible dimensions of the research field are examined and all possible meaning extracted from the data and as a result the dissertation is comprehensive.

Survey research design is used to explain or explore existing status of two or more variables at a given point in time (Mugenda & Mugenda, 1999). The design was, therefore, used to explore on the implementation process of the gender policy in selected TVET institutions. Specifically, it was used to explore the extent of the policy implementation process, inform if policy was being implemented, highlight the strengths or any weaknesses encountered, and assess what strategies were working. Further, the design helped in recommending what improvements could be made on and to suggest way forward for the policy implementation process.

Lincoln and Guba (1985) posit that, naturalistic inquiry should be conducted in a natural setting by the evaluator since the evaluation context is integral to any meanings induced. The evaluator builds upon her tacit knowledge using evaluator – centered methods such as interviews, observations and document analysis in an iterative cycle of four elements: purposive sampling, inductive analysis, grounded development and emergent design. The evaluator used face to face interview and document analysis.

4.3 Target Population

The study targeted 35 national polytechnics, technical training institutes and institutes of technology that had been operational for at least five years prior to the evaluation study. These institutions trains in technical and vocational education and were co-educational. These included: 2 national polytechnics with a total student population of 4,917, 19 TTIs with a total student population of 14,605 and 15 ITs which had an
enrolment of 11,696. Also targeted were the 2,260 lecturers, 247 Heads of Departments in the 35 TVET institutions as shown in the table below.

Table 4.1

Target population

<table>
<thead>
<tr>
<th>Type of Population</th>
<th>National polytechnics</th>
<th>Institutes of technology</th>
<th>Technical training institutes</th>
<th>Total population</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of students</td>
<td>4,917</td>
<td>11,696</td>
<td>14,605</td>
<td>31,218</td>
</tr>
<tr>
<td>Number of lecturers</td>
<td>259</td>
<td>902</td>
<td>1,358</td>
<td>2,260</td>
</tr>
<tr>
<td>Number of head of</td>
<td>20</td>
<td>104</td>
<td>123</td>
<td>247</td>
</tr>
<tr>
<td>departments</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grand Total</td>
<td></td>
<td></td>
<td></td>
<td>33,725</td>
</tr>
</tbody>
</table>

### 4.4 Sample Size and Sampling Procedures

Sampling was done so as to allow the detailed study of part, rather than the whole, of a population. The evaluator used probability sampling, and non probability sampling techniques. The former was appropriate for survey research design as it allows for generalizability of results to the total population and gives each member of the defined target population a chance of being selected into the sample (Ross, 2005). Non probability sampling was used to give in-depth information on the subject matter at hand. The evaluator utilized stratified, systematic, multistage random sampling design, whereby the population units were first stratified into categories, then they were hierarchically
arranged and the sample selected in stages corresponding to the levels of the hierarchy (Linn, 2004) after choosing institutions as shown in Table 4.1.

The evaluator first stratified the population by dividing the institutions into national polytechnic, technical training institute, and institutes of technology. Stratification was done to ensure that different groups of the population were represented in the sample. Second, the evaluator worked out the Gender Parity Index (GPI) for each institution, as shown in Table 4.2. This was done by use of the enrolment rates of the institutions sampled, the net intake rate for girls was divided by the net intake rate for boys to yield GPI for the year 2009. The institutions were listed in each strata/category as per the GPI of the institution.
**Table 4.2**

*Gender parity index in TVET institutions*

<table>
<thead>
<tr>
<th>N. Polytechnic</th>
<th>GPI</th>
<th>TTI</th>
<th>GPI</th>
<th>Cont. TTI</th>
<th>GPI</th>
<th>IT</th>
<th>GPI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kisumu</td>
<td>0.470</td>
<td>Ollessos</td>
<td>1.219</td>
<td>Kabete</td>
<td>0.641</td>
<td>Friends Kaimosi</td>
<td>2.63</td>
</tr>
<tr>
<td>Eldoret</td>
<td>0.491</td>
<td>Machakos</td>
<td>1.092</td>
<td>Sigalagala</td>
<td>0.63</td>
<td>Mathenge</td>
<td>1.777</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Mombasa</td>
<td>1.090</td>
<td>Thika</td>
<td>0.62</td>
<td>Siaya</td>
<td>1.524</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Michuki</td>
<td>0.904</td>
<td>P.C Kinyanjui</td>
<td>0.538</td>
<td>Rwika</td>
<td>1.386</td>
</tr>
<tr>
<td>Rift valley</td>
<td>0.891</td>
<td>Bushiangala</td>
<td>0.533</td>
<td>Gusi</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>NEP</td>
<td>0.807</td>
<td>Keroka</td>
<td>0.485</td>
<td>Nyandarua</td>
<td>1.082</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Maasai</td>
<td>0.781</td>
<td>Kitale</td>
<td>0.480</td>
<td>Coast</td>
<td>1.015</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mawego</td>
<td>0.75</td>
<td>Shamerere</td>
<td>0.373</td>
<td>Ramogi</td>
<td></td>
<td>0.914</td>
<td></td>
</tr>
<tr>
<td>Wote</td>
<td>0.747</td>
<td>Kaiboi</td>
<td>0.317</td>
<td>Sang’alo</td>
<td>0.778</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nyeri</td>
<td>0.744</td>
<td>Kisiwa</td>
<td>0.181</td>
<td>Rift Valley</td>
<td>0.695</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Nairobi</td>
<td>0.742</td>
<td>Matili</td>
<td>0.108</td>
<td>Murang’a</td>
<td>0.664</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bumbe</td>
<td>0.733</td>
<td>Kiambu</td>
<td></td>
<td>0.625</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Kiirwa</td>
<td>0.7</td>
<td>Kirinyaga</td>
<td></td>
<td>0.604</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Meru</td>
<td>0.675</td>
<td>Moi</td>
<td></td>
<td>0.418</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Key: N. Polytechnics – National Polytechnics  G.P.I – Gender Parity Index  IT – Institutes of Technology  TTI – Technical Training Institutes*

*Source: Enrolment data for 2009 in TIVET institutions, unpublished 2009 data for MoHEST (MoHEST, 2010b)*

From Table 4.2, the evaluator then chose per strata institutions with highest GPI, those with near gender parity and those with lowest GPI. The institutions selected are
listed below, they were spread across the country in the six provinces as shown, apart from the two already mentioned in the study.

*Table 4.3*

*Institutions sampled, their GPI and provinces where they are located*

<table>
<thead>
<tr>
<th>Type of institution</th>
<th>Name of institution</th>
<th>GPI</th>
<th>Province</th>
</tr>
</thead>
<tbody>
<tr>
<td>National polytechnic</td>
<td>Kisumu</td>
<td>0.470</td>
<td>Nyanza</td>
</tr>
<tr>
<td>Technical training institute</td>
<td>Ollessos</td>
<td>1.219</td>
<td>Rift valley</td>
</tr>
<tr>
<td></td>
<td>Machakos</td>
<td>1.092</td>
<td>Eastern</td>
</tr>
<tr>
<td></td>
<td>Mombasa</td>
<td>1.090</td>
<td>Coast</td>
</tr>
<tr>
<td></td>
<td>Michuki</td>
<td>0.904</td>
<td>Central</td>
</tr>
<tr>
<td></td>
<td>Kitale</td>
<td>0.480</td>
<td>Rift valley</td>
</tr>
<tr>
<td></td>
<td>Kaiboi</td>
<td>0.317</td>
<td>Rift valley</td>
</tr>
<tr>
<td>Institutes of technology</td>
<td>Friends college Kaimosi</td>
<td>2.63</td>
<td>Western</td>
</tr>
<tr>
<td></td>
<td>Coast</td>
<td>1.015</td>
<td>Coast</td>
</tr>
<tr>
<td></td>
<td>Moi</td>
<td>0.418</td>
<td>Nyanza</td>
</tr>
</tbody>
</table>

This sample was representative of all the TVET institutions in Kenya as the sample cut across the country and so the results of this sample can be generalized and applied to the whole country when implementing the gender policy. After the ten (27.78%) institutions had been sampled from the three strata, one lecturer in charge of gender mainstreaming was purposively selected from each institution. It was assumed that each institution had a lecturer in charge of gender mainstreaming activities. Four Heads of
Departments were selected from each institution as per the evaluators instructions sent to the college Principals. They were sampled using simple random sampling: one HOD sampled from engineering and related courses, one from institutional management and related courses, one from business studies and related courses and one from the applied science/ Information Technology and related studies department. All the institutions had between four to ten departments and when broadly grouped the departments came down to four. There was no single institution offering all the TVET courses.

Once the HODs had been sampled, the HODs then sampled at least two lecturers in each department using simple random sampling technique. Simple random sampling was used to select the students for the evaluation study. This was done by lecturers so as to make sure that the students that were selected were a representation of the students in the population. For non-probability sampling, the evaluator purposively picked the Technical Education Officer in charge of bursaries for female students in science, engineering and technology courses. Purposive sampling was done so as to gain more insight in the disbursement of bursaries to institutions. As stated by Palys (n.d) research participants are not always the same, a well placed informant can advance the objectives of the research better than any randomly sampled participant.

4.4.1 Sample Size

The sample was taken from ten TVET institutions (27.78 %) out of the 36 TVET institutions, the target population (excluding polytechnic university colleges). The respondents in the study included ten lecturers in charge of gender mainstreaming activities (one from each of the ten institutions), 40 Heads of Departments were selected.
(four from each of the ten TVET institutions), 80 lecturers (8 from each of the ten TVET institutions) and 180 students (18 from each of the ten TVET institutions). Also included in the sample was one Technical Education Officer. Total sample size to 311 was respondents.

4.4.1.1 Technical Vocational Education and Training institutions

The sample was selected from 36 Technical Vocational Education and Training institutions under MoHEST. The researcher sampled six TTIs from a total of 19 (31.56 %). Three ITs from a total of 15 (20 %), and one (50 %) national polytechnic from the two national polytechnics. This brought the total institutions sampled to ten institutions (27.78 %). As stated by Mugenda and Mugenda (1999), for descriptive studies ten percent of the accessible population is enough. A percentage of 27.78 for the 36 TVET institutions were deemed representative enough for the evaluation study.

4.4.1.2 Lecturers dealing with Gender Mainstreaming activities

There were ten lecturers dealing with gender mainstreaming activities from the ten sampled institutions. The lecturers dealing with gender mainstreaming activities were an important sample to the study as they are the ones who deal with gender issues in the institutions. These lecturers have the duty of bringing about gender equality and could influence decision making on issues that affect gender. They also make deliberate efforts to sensitize students and staff on gender issues and influence the creation of gender parity in the courses on offer. They are charged with implementation of the gender in education policy or advice where necessary.
4.4.1.3 Heads of Department

From each of the ten TVET institution, four Heads of Departments were sampled using simple random sampling method. The number totaled to 40 (16 %) Heads of Departments out of 247 Heads of Departments from the selected TVET institutions. Heads of Departments run the day to day activities of departments in institutions and in most cases make decisions for the department on behalf of the Principal. They are usually involved in selection of students into these departments. They are in a position to implement gender mainstreaming activities in the various departments, and usually advice management in relation to mainstreaming activities.

4.4.1.4 Lecturers

From the ten TVET institutions, 80 lecturers out of a total population of 2,260 lecturers were sampled for the evaluation study. Eight lecturers were sampled from each institution from departments that had been picked through stratified sampling. The lecturers were selected from each department by use of simple random sampling by the Heads of Departments. Each Head of Department randomly selected two lecturers. The lecturers are the ones in charge of the various courses on offer and were familiar with the attitudes of students towards the various subjects and courses offered. Their perceptions towards gender mainstreaming in the institutions was also important as they could influence students’ choice of subjects and courses. The lecturers are the ones who deal with students on a daily basis during lectures.
4.4.1.5 Students

There were 180 students involved in the evaluation study; 18 from each institution. The students were sampled by use of simple random sampling, this ensured that all students had an equal chance of being sampled. This was the most appropriate method as segregating them along gender lines would have disadvantaged the group with the list numbers. The sampling of students was done by the lecturers. Students are the recipients of gender mainstreaming activities and strategies and their views on why they enroll for particular courses and their attitudes towards gender mainstreaming could not be ignored.

4.4.1.6 Technical Education Officer

There was one Technical Education officer from MoHEST headquarters. The officer was in-charge of facilitating gender mainstreaming activities by disbursing bursaries to females students who had enrolled in science, engineering and technology courses. He was purposively sampled, and in particular the stakeholder sampling was used. This type of sampling is useful in the context of evaluation research and policy analysis as it gives those involved in the programme a chance to be involved in the evaluation (Palys, n.d), the officer had the knowledge required by the evaluator. As earlier mentioned this type of information could not have been accessed by any other method of sampling.

4.5 Evaluation Instruments

The evaluator developed three types of instruments, namely; document analysis guide, interview guide and four sets of questionnaires. The three types of instruments
were used to achieve methodological triangulation. Triangulation is where more than one method of data collection is used so that the evaluator decreases deficiencies and biases that stem from one method and creates the potential of counter balancing the flaws or weaknesses of one method with the strengths of other methods (Thurmond, 2001). The four sets of questionnaires were used to get information the evaluator required from the respondents. As stated by Nachmias and Nachmias, (1996) it is cheap to use questionnaires as they covers a large area.

Document analysis was done for gender in education policy (2007) document as it was the basis for the evaluation study. Other documents in various institutions from within the Ministry were studied. Document analysis was conducted to reveal what people did in a natural setting and also to complement the enrolment data collected from the field. The evaluator also did a face to face interview with one of the Technical Education Officers. Although interviews are time consuming and resource intensive, they allow for probing and asking follow-up questions. The officer interviewed was in charge of disbursing funds to TVET institutions.

4.5.1 Questionnaires for Lecturers dealing with Gender Mainstreaming activities and Heads of Departments

The questionnaires for lecturers dealing with gender mainstreaming activities and for Heads of Department had closed ended questions and a few open ended questions. The closed ended questions had pre-determined responses so that respondents reply to the same set of questions with fixed alternative responses. The respondents’ words were held to a minimum, to make it easy for the evaluator to analyze the data (Kothari, 2004).
open ended questions were to elicit more information where necessary. The instruments had three sections; section one eliciting demographic data, section two eliciting data on enrolment of students in various course and section three eliciting information on gender mainstreaming.

The instruments for lecturers dealing with gender mainstreaming activities sought demographic information of respondents and had six items in the section. For the second section, information on enrolment of students as per gender and as per course from 2007 to 2011 from various departments was sought where the lecturers were required to fill in a table. There were follow up questions on the number of course offered in the institutions and the gender representation in the courses was sought. Section three sought information on gender awareness, implementation of policy, strategies in place and the challenges faced when implementing the strategies and ways of improving the strategies. The instruments for Heads of Departments were similar to those of lecturers in charge of gender mainstreaming activities but had extra items eliciting information at departmental level.

4.5.2 Questionnaire for Lecturers and Students

Questionnaire for lecturers and for students had three sections. Section one, elicited demographic information on the respondents, section two elicited information on policy awareness and discrimination, while section three had a perception scale for lecturers and an attitude scale for students. The respondents were required to indicate their agreement or disagreement with each statement in the instrument. The perception scale was a six point likert scale, and sought information on the perceptions of lecturers
towards implementation process of gender mainstreaming policy. The scale consisted of statements which expressed either a favourable (strongly agree) or unfavourable (strongly disagree) perception. The attitude scale, was a five point likert scale and sought information on the attitudes of students towards gender mainstreaming activities. It also consisted of statements which expressed either a favourable (strongly agree) or unfavourable (strongly disagree) attitude. Each response was given a numerical score, indicating its favourableness or unfavourableness, and the scores totaled to measure the respondent’s perception or attitude. As stated by Kothari (2004), the overall score represents the respondent’s position on the continuum of favourable-unfavourableness towards an issue.

4.5.3 Document Analysis Guide

Documentary qualitative evidence such as policy document, institutional files, statistical data from institutions to the Ministry and other records were used in the evaluation study. Document analysis guide was to act as unobtrusive measurement instrument which was naturalistic (Worthen & Sanders, 1987). Document analysis was included, as the evaluator wanted to study the documents without any obstruction from those involved in the evaluation study. This was also important as data on bursaries was at the Ministry Headquarters. Instead of asking college principals to retrieve the information from institutions it was easy to access the information for all institutions in one document from the Ministry.

The Gender Policy 2007 document especially the section that dealt with gender in TVET education was analysed. The policy document was the basis for the evaluation
study. Data were also collected on bursaries awarded and enrolment trends from individual institutional files at the Ministry. Other documents with information on bursary disbursement, adherence to affirmative action, implementation of other strategies, and on improvement needed in the implementation process in order to bring about gender equity in TVET institutions was sought. The analysis of the documents provided insights on the enrolment trends in institutions, strategies in place and those proposed among other issues that were important to the evaluation study (Flechtling, Sharp & Westat, 1997).

4.5.4 Interview Guide

Interview guide was used to obtain information from the Technical Education Officer in-charge of bursaries. Bursaries are meant to facilitate gender mainstreaming activities in institutions by enhancing enrolment of female students in science technology, engineering and mathematics courses. The face to face interview helped the evaluator to ask for elaboration of some points stated by the respondent for clarity. It also helped the evaluator pursue leads in order to gain insight into the implementation process of the Gender Policy in Education in selected TVET institutions, and in particular on the issue of bursaries for female students in science, engineering and technology courses.

4.6.1 Validity of Evaluation Instruments

Validity is the degree to which a test measures what it purports to be measuring (Pallant, 2007). Content validity was carried out on the four sets of questionnaires used the evaluation study. Content validity is the extent to which an instrument provides adequate coverage of the topics under study, it is judgmental and intuitive (Kothari, 1990;
Orodho, 2005). Content validity of the instruments is matched or fitted to the objectives set, and human judgment is relied upon (Kubiszyn & Borich, 1993). Content validity was achieved by having the instruments reviewed and evaluated for validity by five experts, who the evaluator was able to access. These were lecturers in Research and Evaluation, Economics of Education, Educational Planning and Gender Studies from Catholic University of Eastern Africa, and its constituent college, Tangaza College and Kenyatta University. The five experts evaluated the instruments by reading through and critically evaluating the instruments in relation to the topic and objectives set to make sure the instruments measured what they were supposed to measure. Their expert opinion, recommendations and suggestions were reflected in the final draft of the questionnaires.

As stated by Shenton (2004), credibility of an evaluation is sought by adopting well established evaluation methods, that is, the line of questioning pursued in data collection and method of data analysis. In this case the evaluator used methodological triangulation including such instruments as document analysis guide, interview guide and questionnaires. The evaluator also employed peer scrutiny of the evaluation instruments. This was done to give a fresh perspective to the evaluation so that the evaluator is detached from the evaluation study.

4.6.2 Piloting of Evaluation Instruments

After validity of the instruments had been done, to make sure that instruments measure what they were supposed to measure, piloting of the instruments was done. Piloting was done on a sample of respondents from Nairobi Technical Training Institute and the Ministry of Higher Education Science and Technology in Nairobi. This sample of
respondents for piloting included a Technical Accreditation and Quality Assurance Officer, lecturers and students. It had identical characteristics like the subjects in the study. The sample was drawn from Nairobi as no institution was used in the study from Nairobi province. Piloting was used to help find out if the questionnaires were giving appropriate answers, if the wording was clear, and if the respondents interpreted questions in a similar manner (Orodho, 2005). The evaluator used multistage simple random sampling to select two Heads of Departments, who selected the ten lecturers and the lecturers selected 18 students using simple random sampling.

Problems that arose during piloting were addressed by adjusting the questions appropriately. The subjects in the pilot study were encouraged to make comments and suggestions concerning specific items and instructions in the instruments. After piloting, the evaluator worked reliability of the instruments

4.6.3 Reliability of Evaluation Instruments

The evaluator edited the instruments after piloting by removing outliers (scores that were extremely outside the range of scores when the piloted instruments were compared), and rewording items that were negatively worded. Reliability of an instrument is the consistency in producing a reliable result. It focuses on the degree to which empirical indicators are consistent across two or more attempts to measure the theoretical concept (Orodho, 2005).

To test for reliability, the evaluator tested internal consistency of the instruments. This was done by use of Cronbach’s coefficient alpha using Statistical Package for Social Sciences computer software on the instruments with attitude and perception scales. Split
half method for internal consistency was used for the other two questionnaires without Likert scale (questionnaires for Heads of Departments and lecturers in charge of gender mainstreaming activities). Cronbach’s coefficient alpha was used on the likert scales: the perception scale and attitude scale. Cronbach alpha provides an indication of the average correlation among values indicating greater reliability. Nunnally in Pallant (2007) recommends a minimum level of 0.7. The evaluator applied the Cronbach alpha on the two instruments and the reliability scores for the perception scale and attitude scale were above .7 (perception scale score 0.6645 rounded off to 0.7 and attitude scale 0.7048) which is the minimum level that is recommended and so the instruments were reliable, meaning the instruments consistently gave reliable results.

For the other two questionnaires the evaluator applied the split half reliability method using SPSS computer soft ware, the scores were 0.8 and 0.6. Split half correlates half of the test with the other half and so these does not reflect scores for complete instruments. Therefore a correlation factor (Spearman Brown Prophesy formula) was applied on the computed correlation coefficient and the adjusted coefficient for the whole instruments were: 0.8889 and 0.75, respectively. These scores showed that the instruments for lecturers dealing with gender mainstreaming activities and Heads of Departments were reliable.

For reliability of the qualitative evaluation instruments the evaluator looked at dependability of the instruments. This was done through the use of a clearly stated evaluation research design and the procedure of carrying it out, clearly stated operational detail of data gathering, and reflective appraisal of the dissertation.
4.7 Data Collection Procedures

The evaluator sought permission for evaluation study from the Catholic University of Eastern Africa. Once permission was granted from the institution, the evaluator sought permit from the NCST, before embarking on the evaluation study. The principals of the ten TVET institutions were notified about the intended evaluation study through telephone. This was done in order to form rapport with the principals and inform them about the questionnaires that were to be sent by mail.

The evaluator administered the questionnaires through mail because the institutions were scattered across the country and so it would have been expensive for the evaluator to visit the institutions personally. This method employed helped in covering a larger area. The mailed questionnaires to the institutions had a covering letter stating the purpose of the evaluation, instructions on sample selection, and how the questionnaires were to be filled out. The principals were to instruct the Heads of Departments to collect the filled out questionnaires from the course tutors after two weeks. The course tutors had a week to fill out the questionnaires while the students also had a week to complete the questionnaires that is why they were given two weeks. The questionnaires were to be mailed back to the evaluator after one month. The evaluator sent stamped envelopes and with return address so that the respondents did not have an excuse of not sending them back once they had been responded to. She also did a follow up by calling to remind the principals about the questionnaires that had been sent for them to facilitate the returning process.
The evaluator collected more data by use of document analysis guide from MoHEST. The evaluator first visited MoHEST headquarters to seek permission from registry staff to be allowed to carry out the document analysis. Once permission was granted, the evaluator made an appointment with the staff so that documents were availed when she came. The documents availed included: institutional files on staffing and enrolment. The Gender in Education (2007) policy document, had already been sourced from the Ministry of Education offices. The evaluator, used tables in the document analysis guide to collect enrolment data for the students for the years indicated as per course. The evaluator collected data on number of lecturers in each institution and the number of Heads of Departments per institution.

The evaluator interviewed the Technical Education Officer personally. The Technical Education Officer in charge of disbursing bursaries for female students in the SET courses was interviewed. The evaluator paid a visit to the Technical Education Officer to create rapport and book an appointment with the Officer. This was done so as to make sure the officer was available and also to brief him on the evaluation study and the nature of the study. The officer was also briefed on the topic so as to have him prepare the necessary documents that he might require during the interview. On the day of the interview, the evaluator spent about two hours interviewing the officer. The evaluator took notes during the interview on gender policy implementation and disbursement of bursaries to TVET institutions. The evaluator sought information on implementation process and, on other strategies MoHEST had put in place to bring about gender equity and equality in TVET institutions as per the gender policy.
4.8 **Data Analysis Procedures**

After data had been collected, before starting the compilation and coding, the evaluator edited the instruments to make sure the instruments were completely filled out, were accurately answered and there was uniformity in interpretation of questions. Editing procedure was used to improve the quality of data for coding. After editing the questionnaires, they were coded before entering them into the computer for processing. The SPSS computer application package software (Version 19) was used to analyse descriptive data. The SPSS programme helped to save time as it had a capacity to handle large amounts of data effectively.

The qualitative data collected through interview guide, document analysis guide and open ended questions, were organized into themes pertinent to the study. Data were then reduced, and displayed in the themes and conclusion drawn and verified as proposed in the three stages of Miles and Huberman in Frechtling, Sharp and Westat (1997). The three stages include: data reduction, where data is organized and reduced; data display where organized and reduced data is compressed to permit conclusion drawing; and finally from conclusions drawn, data is checked for confirmability. Data were then organized in emerging trends in line with the evaluation questions used.

4.9 **Ethical Considerations**

Ethical research or evaluation practices are those that lead to protection of human and non human subjects (Sproull, 1995). To this end the evaluator used appropriate methodology. She also drew conclusions and recommendations based on actual findings.
Before starting the evaluation the evaluator reviewed the factors and practices involved with the evaluation ethics.

The evaluator also obtained free and informed consent from participants and assured them of confidentiality and privacy. Permission for evaluation was sought from relevant authorities to conduct the evaluation as per the attached permit.
CHAPTER FIVE
PRESENTATION OF DATA, ANALYSIS AND DISCUSSION OF FINDINGS

5.1 Introduction

This chapter undertakes an analysis of data as presented from questionnaires, document analysis guide and interview guide. The analysed data were based on the evaluation questions set. Qualitative and quantitative data were collected on: demographic information of respondents; strategies in place; strategies that were working; enrolment trends in the selected TVET institutions; implementing of the gender policy; attitude and perception of students and lecturers to gender mainstreaming; challenges to gender mainstreaming; improvement needed and suggestion for new strategies to enhance gender mainstreaming, and finally the way forward for the gender policy implementation process in TVET institutions were collected. Data from the mentioned areas were presented using descriptive statistics and patterns pertinent to the study and then analysed and findings discussed.

The purpose of the evaluation study was to evaluate the implementation process of the gender policy of 2007 developed by Ministry of Education, in TVET institutions in Kenya. The evaluator used the CIPP evaluation model which is a management oriented model and also used the Liberal Feminist theoretical framework to guide the evaluation study.

5.2 Instrument Return Rate

A total of 310 questionnaires were sent out, of these, ten questionnaires were sent to lecturers in charge of gender mainstreaming activities in selected TVET institutions, 40 questionnaires were sent to Heads of Departments in the selected TVET institutions,
80 questionnaires were sent to lecturers and 180 questionnaires were sent to students in the selected TVET institutions. The response from questionnaires and interview guide totaled to 276 persons, this was 89 percent response which was quite impressive, noting it was done by mail. Questionnaires from one of the institutions (Ollessos T.T.I) were not returned to the evaluator and so information from this institution was only collected by use of document analysis guide.

5.3 Demographic Data

The demographic profile of the respondents is presented first. The demographic information of the respondents in the evaluation study was necessary so that it could show the characteristics of the respondents for the purpose of drawing conclusion from them. This information includes sex, age, academic qualifications and teaching experience of some of the respondents. Sex of the respondents was also important in the evaluation to show the views of male and female respondents on the evaluation of the implementation process of the gender policy in the selected TVET institutions in Kenya. From the three types of evaluation instruments (document analysis guide, questionnaires and interview guide) used, the study population was 276. Table 5.1 shows the distribution of respondents by gender.
Table 5.1

Distribution of Respondents by gender

<table>
<thead>
<tr>
<th>Respondents</th>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>Freq.</td>
<td>%</td>
</tr>
<tr>
<td>Lecturers dealing with gender mainstreaming activities</td>
<td>2</td>
<td>29</td>
<td>5</td>
</tr>
<tr>
<td>Heads of Department</td>
<td>22</td>
<td>77</td>
<td>8</td>
</tr>
<tr>
<td>Lecturers</td>
<td>40</td>
<td>57</td>
<td>30</td>
</tr>
<tr>
<td>Students</td>
<td>88</td>
<td>52</td>
<td>80</td>
</tr>
<tr>
<td>Technical education officer</td>
<td>1</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>153</td>
<td>55</td>
<td>123</td>
</tr>
</tbody>
</table>

From the table 5.1 there were 153 (55%) male and 123 (45%) female respondents. More female respondents were noted in the group of lecturers dealing with gender mainstreaming activities (71%), while there were more male respondents in the other three categories of respondents (77%, 57%, 52% and 100% respectively as shown in Table 5.1).

5.3.1 Lecturers dealing with Gender Mainstreaming activities

These were lecturers who had been given the responsibility of dealing with gender issues in the selected TVET institutions. Table 5.2 shows the demographic information of
the lecturers dealing with gender mainstreaming activities. The demographic information includes age of the lecturers, gender, and teaching experience.

Table 5.2

Demographic characteristics of lecturers in charge of gender mainstreaming activities

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-40</td>
<td>5</td>
<td>71</td>
</tr>
<tr>
<td>41-50</td>
<td>2</td>
<td>29</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>Female</td>
<td>5</td>
<td>71</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching experience</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5 years</td>
<td>2</td>
<td>29</td>
</tr>
<tr>
<td>6-10 years</td>
<td>3</td>
<td>42</td>
</tr>
<tr>
<td>10-15 years</td>
<td>2</td>
<td>29</td>
</tr>
</tbody>
</table>

Out of the seven respondents, five (71 %) were females and two (29 %) were males. Five (71%) of them were between ages 31 to 40 years and the other two (29%) were between 41 to 50 years. The seven did not hold any administrative posts in the institutions. On teaching experience: two (29%) lecturers dealing with gender mainstreaming activities had teaching experience of between one to five years: three (42%) had between six to ten years: while the other two (29%) had teaching experience of between 11 and 15 years as shown in Table 5.2.

The lecturers were relatively young compared to the Heads of Department who are appointed through an interview, by the Teachers Service Commission (TSC) basing
on merit, years of experience and qualification. By having lecturers below age 50 being in charge of gender issues, the evaluator hopes that these age brackets have no mind sets about what courses are for male students and what courses are for female students.

This category was the only one with more women than men, the reason could be that Principals still associated gender issues with female issues. As stated by Geisler, Keller and Norman, (1999) that when some people think of gender, they mean women. The European Union and Socrates – Grundtvig programme (2007) also states that gender theme remains associated to women’s issues, and majority of organizations or institutions working with gender issues are women or feminist oriented. Therefore, Principals might tend to appoint female lecturers to be in charge of gender mainstreaming activities as they still relate this term with women issues.

5.3.2 Heads of Departments

The Heads of Departments were lecturers either appointed by the TSC or by the institutional management who had appointed them to be in–charge of the various departments. They had the responsibility of running the day to day activities of the departments, and were assisted by either Deputy Heads of Department or Section Heads. Table 5.3 shows the demographic information of the Heads of Departments. The information includes age of the Heads of Departments, gender, and teaching experience.
Table 5.3

Demographic characteristics of Heads of Department

<table>
<thead>
<tr>
<th>Age</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>31-40</td>
<td>10</td>
<td>33</td>
</tr>
<tr>
<td>41-50</td>
<td>17</td>
<td>57</td>
</tr>
<tr>
<td>51-60</td>
<td>3</td>
<td>10</td>
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</table>

<table>
<thead>
<tr>
<th>Gender</th>
<th></th>
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</thead>
<tbody>
<tr>
<td>Male</td>
<td>22</td>
<td>73</td>
</tr>
<tr>
<td>Female</td>
<td>8</td>
<td>27</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teaching experience</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-5</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>6-10</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>11-15</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>16-20</td>
<td>6</td>
<td>20</td>
</tr>
<tr>
<td>21-25</td>
<td>7</td>
<td>23</td>
</tr>
<tr>
<td>26+</td>
<td>3</td>
<td>10</td>
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</tbody>
</table>

According to the demographic data from Table 5.3, ten (33%) of the heads of department were between ages 31 to 40, 17 (57%) were between ages 41 to 50 and three (10%) were above age 51. In terms of qualifications: majority, 13 were bachelor’s degree holders, four had higher national diplomas, 11 had ordinary diplomas, and two were
master’s degree holders. On teaching experience majority of the Heads of Departments had between 11-15 (23 %) years and 21 -25 (23%) years as shown in Table 5.3. This being an evaluation study of the gender policy, it was necessary to know the gender of the Heads of Departments and the department they headed. Table 5.4 shows this information.

Table 5.4
Heads of Department and departments they headed

<table>
<thead>
<tr>
<th>Department</th>
<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering and related studies</td>
<td>10</td>
<td>33</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Business studies</td>
<td>5</td>
<td>17</td>
<td>2</td>
<td>7</td>
</tr>
<tr>
<td>Applied science</td>
<td>2</td>
<td>7</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>I.T and related studies</td>
<td>4</td>
<td>13</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Institutional Management</td>
<td>1</td>
<td>3</td>
<td>5</td>
<td>17</td>
</tr>
<tr>
<td>Agriculture</td>
<td>-</td>
<td>-</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>Total</td>
<td>22</td>
<td>73</td>
<td>8</td>
<td>27</td>
</tr>
</tbody>
</table>

From Table 5.4, Eight (27 %) of the 30 Heads of Department were females and the rest were males. It can also be noted that, five (17%) of the female heads of department were in-charge of institutional management and related studies department
and two were in – charge of business studies (secretarial studies, accounting, and business management courses) and related studies departments.

There were 22 male Heads of Departments who responded to the questionnaires sent: ten (33 %) were in-charge of engineering and related studies departments. For purposes of this evaluation study, agricultural engineering was included in the engineering and related studies while general agriculture was on its own. Five (17%) male Heads of Department were in-charge of business studies and related studies departments, four (13%) of the male Heads of Department were in charge of computer and related studies as shown in Table 5.4.

Whereas there was one (3%) male head of department in the institutional management and related studies department, there was no female head of department in the engineering and related studies department. This meant there were no female role models for the female student to emulate. The Heads of Departments were responsible for briefing the Principals on what was happening in the departments and advice where necessary. By being in charge of departments and handling day to day activities, they are in a position to influence gender related activities in the departments they head and advice Principals on the same. Misola (2010) stated that there is need to support measures in recruitment campaigns, placement of women in jobs, teacher upgrading and prioritization of women for classroom management among others. This encourages female students to enroll in these courses yet this was not the case. The Heads of Departments also could influence lecturers on how to handle gender issues, demographic information is shown below.
5.3.3 Lecturers

The demographic information of the lecturers was sought. This information included age, gender, and teaching experience of the lecturers, as shown in Table 5.5.

Table 5.5

Demographic characteristics of lecturers

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>21-30</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>31-40</td>
<td>22</td>
<td>31</td>
</tr>
<tr>
<td>41-50</td>
<td>28</td>
<td>40</td>
</tr>
<tr>
<td>51-60</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Gender</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>37</td>
<td>53</td>
</tr>
<tr>
<td>Female</td>
<td>33</td>
<td>47</td>
</tr>
<tr>
<td>Teaching experience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1-5</td>
<td>22</td>
<td>31</td>
</tr>
<tr>
<td>6-10</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>11-15</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>16-20</td>
<td>16</td>
<td>23</td>
</tr>
<tr>
<td>21-25</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>26+</td>
<td>5</td>
<td>7</td>
</tr>
</tbody>
</table>

From table 5.5, 33 (47 %) were female lecturers and 37 (53 %) were male lecturers. On the ages of the lecturers majority 28 (40 %) of them were in the 41-50 age bracket. On qualifications, three were craft holders, 23 were diploma holders, 12 were higher national diploma holders, 28 were bachelor degree holders and four were master
degree holders. It was also noted from the above table that most of the female lecturers were between ages 21 to 30 (34%) and 41 to 50 (49%) for male lecturers respectively.

It was noted from the data that there were more male lecturers than female lecturers. Most of the female lecturers were young compared to the male lecturers. On representation of lecturers in various departments Table 5.6 summarizes the departments and the number of lecturers in each department.

Table 5.6

Number of lecturers in the various departments

<table>
<thead>
<tr>
<th>Department</th>
<th>Male</th>
<th>%</th>
<th>Female</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.T and related studies</td>
<td>2</td>
<td>3</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Engineering and related studies</td>
<td>21</td>
<td>30</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Institutional management</td>
<td>4</td>
<td>6</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Business studies</td>
<td>8</td>
<td>12</td>
<td>13</td>
<td>19</td>
</tr>
<tr>
<td>Applied science</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>37</td>
<td>53</td>
<td>33</td>
<td>46</td>
</tr>
</tbody>
</table>

From Table 5.6 most of the lecturers 24 (34%), were from the engineering and related studies departments followed by business studies and related studies department
21 lecturers (30%). Only four lecturers (6%) were from agriculture department and applied science department.

It can be noted from the above data most of the male lecturers were from the engineering and related studies departments followed by business studies and related studies department, while most of the female lecturers were from the business studies and related studies department, followed by institutional management and related studies departments. This study concurs with a study done by NCST (2010), stating that the capacity of women to engage in science, technology and innovation knowledge in the Kenyan society was grossly under-developed and under-utilized. These lecturers were in a position to influence students on gender issues. Below is demographic information of students as collected from the instruments.

5.3.4 Students

There were 166 student respondents who comprised of 92% of the target population. The Table 5.7 shows the number of student respondents, their gender and departments they belonged to.
Table 5.7

Students by gender and the department they belong to

<table>
<thead>
<tr>
<th>Course</th>
<th>Gender</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Male</td>
<td>%</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>Freq.</td>
<td></td>
<td>Freq.</td>
</tr>
<tr>
<td>Business studies</td>
<td>25</td>
<td>15</td>
<td>30</td>
</tr>
<tr>
<td>Engineering and related courses</td>
<td>33</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Agriculture</td>
<td>6</td>
<td>04</td>
<td>4</td>
</tr>
<tr>
<td>Applied science</td>
<td>6</td>
<td>04</td>
<td>3</td>
</tr>
<tr>
<td>I.T and related courses</td>
<td>9</td>
<td>05</td>
<td>9</td>
</tr>
<tr>
<td>I.M and related courses</td>
<td>7</td>
<td>04</td>
<td>17</td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>52</td>
<td>80</td>
</tr>
</tbody>
</table>

From Table 5.7, there were more male student respondents (52 %) than female student respondents (48 %) from the selected TVET institutions in Kenya. Out of the 86 male student respondents 33 (20 %) were in the engineering and related studies departments, followed by 25 (15 %) who were in the business studies and related studies department. Most of the female student respondents 30 (18 %) were in the business studies departments, 17 were from the engineering and related department and a similar number were from the institutional management and related studies departments.

From the above analysis, it was noted that there were more male students enrolled in the engineering and related studies department. The female students were more in the
institutional management and related studies department, and in the business studies and related studies department. This data is in line with the study done by UNESCO (2003) stating that female presence is weakest in engineering, manufacturing and construction courses and in science and agriculture. In the same study, it was stated that women have continued to progress in their traditional fields, such as social sciences, humanities, services and health related programmes.

5.3.5 Technical Education Officer

One male Technical Education Officer was involved in the evaluation study, he was above 40 years and held position of Principal Technical Education officer. He was in-charge of disbursing bursaries to TVET institutions for female students enrolled in SET courses. He was stationed at the Ministry Headquarters. By including the Technical Education Officer, the evaluator was able to get more in-depth information on strategies to enhance enrolment of female students in TVET institutions in Kenya.

5.4 Strategies of Gender Mainstreaming in place

The evaluation study sought to find out the strategies in place to bring about gender equity and equality. The Government of Kenya through the stipulated Gender Policy document set up strategies to bringing about gender parity and equality in TVET institutions and it was necessary to find if they were being implemented and to find out how well they were being implemented.

5.4.1 Strategies in place to achieve Gender Mainstreaming in TVET institutions

Lecturers in charge of gender mainstreaming activities and Heads of Departments were asked what strategies were in place to bring about gender equity and quality in the
selected TVET institutions. Table 5.8 shows the responses from the lecturers in charge of gender mainstreaming activities on strategies that were in place to bring about gender mainstreaming in the selected TVET institutions.

*Table 5.8*

*Lecturers in charge of gender mainstreaming activities responses on Strategies for gender mainstreaming*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role models</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td>affirmative action</td>
<td>2</td>
<td>28.6</td>
</tr>
<tr>
<td>Scholarships/bursaries</td>
<td>3</td>
<td>42.8</td>
</tr>
<tr>
<td>Others</td>
<td>1</td>
<td>14.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>7</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

From Table 5.8, three (42.8%) of the lecturers in charge of gender mainstreaming activities stated that bursaries were in place, two (28.6%) mentioned use affirmative action. While two stated that role models were in place, and finally one stated a policy was in place. From the above information, it shows that several policies were in place.

Heads of Departments were also asked which strategies were in place, they responded as shown in Table 5.9.
Table 5.9

Head of department responses on Strategies for gender mainstreaming

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Role models</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Sensitization</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>Bursaries</td>
<td>15</td>
<td>50</td>
</tr>
<tr>
<td>Affirmative action</td>
<td>3</td>
<td>10</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

From the Table 5.9, 15 (50%) Heads of Departments stated that bursaries were in place, and 8 (26.7%) Heads of Departments stated that sensitization of students was in place, as a strategy to bring about gender equity and equality.

Bunyi (2003), in her study suggested gender sensitization as one way of increasing enrolment of women in tertiary institutions. Misola (2010) on the other hand suggested providing funding which from the evaluator’s point of view could include bursaries. This strategy had also been set up. These strategies were in line with what had been suggested in other countries as strategies for gender mainstreaming. Further the evaluator asked what strategies were working from those mentioned above.

5.4.2 Strategies that were Working

The strategies in place were expected to bring about gender equality and equity in the TVET institutions in Kenya as mentioned. The Technical Education Officer stated that provision of bursaries, and sensitization on gender issues, were strategies that had a positive impact on gender mainstreaming. Four lecturers in charge of gender mainstreaming activities stated that bursaries and scholarships were working, two
mentioned that sensitization on gender issues was working, one stated that use of role
models was working, and finally three stated that a gender responsive environment was
working.

Heads of Departments were asked which strategies were working from those that
had been implemented in the selected TVET institutions. Table 5.10 shows responses of
Heads of Departments on strategies that were working.

Table 5.10

Heads of Departments responses on Strategies that were working

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use of role models</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Bursaries and scholarships</td>
<td>10</td>
<td>33.3</td>
</tr>
<tr>
<td>Sensitization</td>
<td>8</td>
<td>26.7</td>
</tr>
<tr>
<td>Affirmative action</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td>Others</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Affirmative action and bursaries/scholarships</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the above table it was noted that the provision of bursaries or scholarships
(33 %) and sensitization on gender issues (27 %) were strategies that Heads of
Departments felt were working to bring about gender equity and equality. Three (10%)
Heads of Departments stated that use of role models was the strategy that was working.

From the above data it was noted that several strategies were working.
There were other specific strategies in place to address special cases, for example on the issue of female students who got pregnant. All the lecturers dealing with gender mainstreaming activities stated that students came back to the institutions after delivery of their babies to continue with studies. Heads of Department were asked the same and Table 5.11 shows the responses.

*Table 5.11*

**Responses of Heads of Department on students who got pregnant**

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Came back after giving birth</td>
<td>28</td>
<td>93.33</td>
</tr>
<tr>
<td>No strategy</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td>Counseled to avoid pregnancy</td>
<td>1</td>
<td>3.33</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

From the above table, 28 Heads of Departments stated that female students who get pregnant while still in college were allowed to give birth, then come back after delivery to continue with their studies. This was in line with what the lecturers dealing with gender mainstreaming activities had stated.

As stated by Misola (2010), a mixture of changes was used to make gender mainstreaming take place in the Philippines, these included among others: funding which could be in the form of bursaries and scholarships, and gender sensitization, the same strategies were in place in the selected TVET institutions and can play a part in gender mainstreaming in TVET institutions in Kenya. However, no one strategy can make
gender mainstreaming take place but a number of strategies put together. Most of the strategies that were mentioned as being in place had also been proposed by Bunyi (2003) these included: affirmative action, and sensitization. Misola (2010) also stated use of role models as a model that can work, among other strategies. As per the policy document (RoK, 2007) scholarships were supposed to be in place, others were affirmative action, rehabilitation of facilities, role modeling programmes, bridging programmes among others, all these the evaluator noted were not in place.

5.5 Implementation of Gender Mainstreaming in the selected TVET institutions

The purpose of implementing the policy was to achieve gender parity and equality in educational institutions in terms of management, administration, enrolment, research and others (RoK, 2007). In order to evaluate the implementation process of gender mainstreaming policy, enrolment data were necessary. The implementation of the policy is expected to affect the enrolment trends in terms of the ratios between male and female students. This would in turn affect the outcome from these institutions in terms of placement and career progression after training.

5.5.1 Enrolment Trends in the selected TVET institutions

Data were collected on enrolment trends in the selected TVET institutions. Table 5.12 shows the institutions, their enrolment in 2009 and 2011. The 2009 data were available in the Ministry headquarters while the 2011 data were captured from the field during the evaluation study. Also shown in the table is the Gender Parity Index showing the ratio of males and females enrolled in 2009 and 2011. The gender parity index was calculated by the evaluator.
Table 5.12

Institutions, enrolment and GPI for 2009 and 2010

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Kisumu Poly.</td>
<td>1207</td>
<td>569</td>
<td>1774</td>
<td>1775</td>
<td>770</td>
<td>2545</td>
<td>0.470</td>
<td>0.434</td>
</tr>
<tr>
<td>Kitale T.T.I</td>
<td>706</td>
<td>339</td>
<td>1045</td>
<td>881</td>
<td>520</td>
<td>1401</td>
<td>0.480</td>
<td>0.590</td>
</tr>
<tr>
<td>Kaiboi T.T.I</td>
<td>341</td>
<td>108</td>
<td>449</td>
<td>806</td>
<td>254</td>
<td>1060</td>
<td>0.317</td>
<td>0.315</td>
</tr>
<tr>
<td>Ollessos T.T.I</td>
<td>360</td>
<td>439</td>
<td>799</td>
<td>758</td>
<td>813</td>
<td>1571</td>
<td>1.219</td>
<td>1.073</td>
</tr>
<tr>
<td>Michuki T.T.I</td>
<td>156</td>
<td>141</td>
<td>297</td>
<td>318</td>
<td>279</td>
<td>597</td>
<td>0.904</td>
<td>0.877</td>
</tr>
<tr>
<td>Machakos T.T.I</td>
<td>818</td>
<td>893</td>
<td>1711</td>
<td>1478</td>
<td>1239</td>
<td>2717</td>
<td>1.092</td>
<td>0.838</td>
</tr>
<tr>
<td>Mombasa T.T.I</td>
<td>557</td>
<td>607</td>
<td>1164</td>
<td>1386</td>
<td>1070</td>
<td>2456</td>
<td>1.090</td>
<td>0.772</td>
</tr>
<tr>
<td>Coast I.T</td>
<td>324</td>
<td>329</td>
<td>653</td>
<td>591</td>
<td>588</td>
<td>1179</td>
<td>1.015</td>
<td>0.995</td>
</tr>
<tr>
<td>Moi I.T</td>
<td>550</td>
<td>230</td>
<td>780</td>
<td>838</td>
<td>667</td>
<td>1504</td>
<td>0.418</td>
<td>0.796</td>
</tr>
<tr>
<td>Friends College</td>
<td>151</td>
<td>397</td>
<td>548</td>
<td>521</td>
<td>705</td>
<td>1226</td>
<td>2.63</td>
<td>1.353</td>
</tr>
<tr>
<td>Total &amp; Mean G.P.I</td>
<td>9220</td>
<td>0.957</td>
<td>16254</td>
<td>0.804</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 5.12, it was noted that there was a general increase in enrolment from 9,220 students in 2009 to 16,254 students in 2011; a 43 percent increase in the sampled institutions. However, the GPI dropped from 0.957 to 0.804. This means that as much as more women enrolled in 2011 compared to 2009 the ratio of the male students to female
students who enrolled in 2009 was more compared to those enrolled in 2011. In order to show the above data and trends in enrolment clearly, the same data were captured graphically. Figure 5.1 show the enrolment trends for the two years.

![Enrolment for the selected TVET institutions for 2009 and 2011](image)

**Figure 5.1**

*Enrolment for the selected TVET institutions for 2009 and 2011*

The upper line in Figure 5.1 shows enrolment in 2011 in the ten institutions, while the lower line shows enrolment in 2009. From the two lines it can be noted that general enrolment improved in the ten institutions. This increase could be attributed to the revamping of TVET institutions in line with Vision 2030 of investing in science technology and innovation in order for the country to achieve EFA and MDG goals. The difference in the GPI are shown in Table 5.13.
Table 5.13

Percentage difference in GPI per institution

<table>
<thead>
<tr>
<th>Name of institution</th>
<th>GPI 2009</th>
<th>GPI 2011</th>
<th>% difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kisumu Polytechnic</td>
<td>0.470</td>
<td>0.434</td>
<td>7 Decrease</td>
</tr>
<tr>
<td>Kitale T.T.I</td>
<td>0.480</td>
<td>0.590</td>
<td>39.6 Increase</td>
</tr>
<tr>
<td>Kaiboi T.T.I</td>
<td>0.317</td>
<td>0.315</td>
<td>0.63 Decrease</td>
</tr>
<tr>
<td>Ollessos T.T.I</td>
<td>1.219</td>
<td>1.073</td>
<td>11.9 Decrease</td>
</tr>
<tr>
<td>Michuki T.T.I</td>
<td>0.904</td>
<td>0.877</td>
<td>4.09 Decrease</td>
</tr>
<tr>
<td>Machakos T.T.I</td>
<td>1.092</td>
<td>0.838</td>
<td>23.26 Decrease</td>
</tr>
<tr>
<td>Mombasa T.T.I</td>
<td>1.090</td>
<td>0.772</td>
<td>29.17 Decrease</td>
</tr>
<tr>
<td>Coast I.T</td>
<td>1.015</td>
<td>0.995</td>
<td>1.97 Decrease</td>
</tr>
<tr>
<td>Moi I.T</td>
<td>0.418</td>
<td>0.796</td>
<td>90.43 Increase</td>
</tr>
<tr>
<td>Friends College Kaimosi</td>
<td>2.63</td>
<td>1.353</td>
<td>19.44 Decrease</td>
</tr>
</tbody>
</table>

From the GPI of the selected institutions, it was noted that the GPI for most institutions dropped, save for the GPI of Kitale TTI and Moi IT. The GPI for both institutions increased from 0.480 to 0.590 and from 0.418 to 0.796 respectively. This means that the ratio of the number of female students to the male students who enrolled in these institutions in 2011 was more compared to the ratio of female students to the number of the male students who enrolled in these institutions in 2009. Incidentally, both institutions were headed by female Principals at the time of the evaluation study. This could mean that these Principals acted as role models or made deliberate efforts to
encouraged female students to enroll by putting in place measures that made the institutions gender sensitive. Figure 5.2 further illustrated the GPI differences graphically.

**Figure 5.2**

*GPI for the selected TVET institutions for 2009 and 2011*

From the Figure 5.2 above, the drop in GPI in the eight institutions, is clearly seen. This was at a time when the strategy on giving bursaries to female students doing SET courses was in place and this raises concern. As stated by Vimala (2010), gender inequality; be it for men or women is an area for concern. The enrolment ratio was supposed to increase to show that the strategy was working.
5. 5.2 Departmental Enrolment in the selected TVET institutions

The evaluator sought to find out enrolment of male and female students in the various departments in the selected TVET institutions. Specifically, information on sex segregated data to determine the gender disparities in the various departments was sought.

Lecturers dealing with gender mainstreaming activities were asked to state which departments were male dominated, which were female dominated and which had almost gender parity. Table 5.14 shows the responses from lecturers dealing with gender mainstreaming activities, in the selected TVET institutions.
### Table 5.14

*Lecturers in charge of gender mainstreaming activities responses on enrolment in various courses*

<table>
<thead>
<tr>
<th>Courses</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Female dominated courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business studies</td>
<td>6</td>
<td>55</td>
</tr>
<tr>
<td>Institutional management</td>
<td>4</td>
<td>36</td>
</tr>
<tr>
<td>Applied Sciences</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td><strong>Male dominated courses</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering and related studies</td>
<td>7</td>
<td>87</td>
</tr>
<tr>
<td>Computer studies</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td><strong>Courses with gender parity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No gender parity in courses on offer</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Business studies</td>
<td>3</td>
<td>30</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Tourism (Institutional management)</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Applied Science</td>
<td>1</td>
<td>10</td>
</tr>
<tr>
<td>Social work and community development</td>
<td>1</td>
<td>10</td>
</tr>
</tbody>
</table>

From Table 5.14, seven (87%) lecturers dealing with gender mainstreaming activities stated that engineering and related courses were male dominated. Six (55%)
lecturers dealing with gender mainstreaming activities, stated that business studies were female dominated, four (36 %) stated institutional management and related studies. On those courses with almost gender parity: three (30 %) lecturers dealing with gender mainstreaming activities stated that there was no gender parity in courses on offer, meaning almost all course were either male dominated or female dominated and this means that, there could still be stereotyping in choosing the courses on offer.

Training institutions are not gender friendly, if they discriminate against both boys and girls or male and female students in course selection. As stated by World Bank (2008) discrimination against boys or men involves the constant reinforcement of those dominant masculinities that encourage boys or men to underperform and perceive girls or women as socially inferior and weaker. In turn, the girls or women buy into this masculine construction of femininity as powerless and voiceless and of masculinity as all powerful. As a consequence, boys and men in schools and institutions behave in ways that limit the full participation of girls and women in structures and processes of schooling. This scenario leads to courses either being female dominated or male dominated, thus the need for gender mainstreaming not only in institutions but also in courses on offer.

The Heads of Departments were asked to indicate the departments that were male dominated, those that were female dominated, and those that had almost gender parity in enrolment. Table 5.15 shows the responses from Heads of Departments on courses that were male dominated, those that were female dominated and those that had almost equal representation in courses on offer.
Table 5.15

Heads of Department responses on enrolment in various courses

<table>
<thead>
<tr>
<th>Female dominated</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I. M and related studies</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Business studies</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>General agriculture</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>Applied science</td>
<td>2</td>
<td>6.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Male dominated</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Engineering &amp; related courses</td>
<td>9</td>
<td>30.0</td>
</tr>
<tr>
<td>Business studies</td>
<td>2</td>
<td>6.7</td>
</tr>
<tr>
<td>Agriculture</td>
<td>1</td>
<td>3.3</td>
</tr>
<tr>
<td>I.T and related studies</td>
<td>2</td>
<td>6.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Gender parity</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>I.T related studies</td>
<td>4</td>
<td>13.3</td>
</tr>
<tr>
<td>Business studies</td>
<td>2</td>
<td>6.7</td>
</tr>
</tbody>
</table>

From Table 5.15 above, nine (30 %) Heads of Department stated that engineering and related studies departments were male dominated. Six (20%) Heads of Department stated that institutional management and related studies were female dominated apart from Tour Guiding an option in the tourism management department that was male dominated. Five (16.7%) Heads of Departments stated that business studies and related departments were female dominated and specially the secretarial studies course.
This information was supported by documents analysed from the Ministry of Higher Education Science and Technology on enrolment in various courses (departments). It was noted that Kitale TTI and Kisumu Polytechnic had no male student enrolled between 2007 and 2011 in secretarial studies, Kitale had an average of 24 female secretarial students per year. While, Kisumu Polytechnic had an average of 23 female students per year and Moi Institute of Technology enrolled two male students in 2010 and four male students in 2011. Moi Institute of Technology had an average of 26 female students per year for the two years in the secretarial studies. Kaimosi Friends College had enrolled one male student each year since 2007, while on average it had enrolled of 98 female secretarial students per year over the same period. Kaiboi TTI admitted two male students in 2010 and one male student in 2011 in the secretarial course, while it had admitted an average of 32 female secretarial students per year for the same period.

The other subject with notable difference in gender was the accounting course where three heads of department stated that it was male dominated. For instance, Kisumu Polytechnic had 31 female students and 70 male students on average for the five years between 2007 and 2011; Moi Institute of Technology had 24 female students and 34 male students for the period between 2008 and 2011. And Kaiboi TTI had 27 female students in accounting and 37 male students in the same course for the period between 2007 and 2011.

In terms of gender parity in courses on offer, it was noted that there were more male students enrolled in the engineering and related courses, while there were more female students enrolled in the business related courses. Apart from accounting option
that had more male students, and the secretarial course that was purely a female course. It was also noted that institutional management was female dominated but the tour guide management option was male dominated. Only computer related studies had gender parity and in some institutions the business studies departments. It can be stated that choice of courses was along gender lines, these could be due to the fact that stereotyping in the choice of courses still is the factor. These findings were also in line with the findings from the study done by UNESCO (2003), which showed that the preferred courses for women were humanities and arts. It was noted that Women had continued to progress in their traditional fields, such as social sciences, humanities, services and health related programmes.

5.6 Implementation of the Gender Policy in selected TVET institutions

The evaluator wanted to find out if gender mainstreaming was being implemented in the TVET institutions as it was envisioned in the policy. In addition, information on policy being practiced in departments was sought, and if gender awareness had been carried out. This information was to inform the evaluator on the progress of the implementation process. Table 5.16 shows responses of lecturers in charge of gender mainstreaming activities on implementing the gender in education policy.
Table 5.16

Lecturers in charge of gender mainstreaming activities responses on implementation of policy

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Implementation of policy</td>
<td>5</td>
<td>71</td>
</tr>
<tr>
<td>No implementation</td>
<td>2</td>
<td>29</td>
</tr>
</tbody>
</table>

From Table 5.16, five (71 %) lecturers dealing with gender mainstreaming activities in the selected TVET institutions said the policy was being implemented the way it was envisioned, two of the lecturers dealing with gender mainstreaming activities (29 %) said the policy was not being implemented the way it was envisioned.

The Technical Education Officer said that gender mainstreaming, and especially the provision of bursaries for female students in SET courses, was being implemented the way it was envisioned. The Officer said;

“the bursary scheme for female students in Science, Engineering and Technology (SET) courses was established in the financial year 2007 / 2008. The disbursement of funds has been decentralized, structures have been established in institutions to disburse the bursary funds and institutions have set up Institutional Bursary Allocation Committee (IBAC)”.

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He continued “the bursaries are being advertised in the local media by our Ministry”. He further noted;

“students apply for these bursaries and the IBAC meets to pick those who qualify, the records for the beneficiaries are available for public scrutiny in the institutions. The Ministry has set up ISO procedure for the disbursement of the bursary funds” he concluded.

Heads of Departments were also asked if gender mainstreaming was being practiced in departments, Table 5.17 shows the responses from the heads of department on putting in place gender mainstreaming policy.

*Table 5.17*

*Heads of Departments responses on practicing Gender mainstreaming*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender policy in place</td>
<td>24</td>
<td>80.0</td>
</tr>
<tr>
<td>No gender policy in place</td>
<td>6</td>
<td>20.0</td>
</tr>
<tr>
<td>Total</td>
<td>30</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From Table 5.17, 24 (80 %) Heads of Department stated that gender mainstreaming was being practiced in the departments they headed. Six (20 %) Heads of Departments stated that gender mainstreaming was not being practiced in their departments as shown in the same table. This means, the gender policy had not been completely implemented in the TVET institutions. Heads of Departments were further asked if students were given equal opportunities in departmental activities. All the 30
Heads of Department stated that students were given equal opportunities in departmental activities. The evaluator noted that gender mainstreaming was being practiced in most departments in the institutions sampled, and so the implementation of the policy was taking place. However, since 20 percent of Heads of Departments had said it was not being practiced in their departments this means implementation was not taking place in all institutions.

Further on implementing the Gender Policy, lecturers in charge of gender mainstreaming activities were asked if students were given equal opportunities. Table 5.18 shows the responses from the lecturers in charge of gender mainstreaming activities.

*Table 5.18*

*Lecturers in charge of gender mainstreaming activities responses on students being given equal opportunities*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Provision of equal opportunities</td>
<td>6</td>
<td>86.0</td>
</tr>
<tr>
<td>No provision of equal opportunities</td>
<td>1</td>
<td>14.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

From Table 5.18, six (86 %) lecturers dealing with gender mainstreaming activities stated that students were given equal opportunities in leadership, in co-curricular activities and other college activities. Only one stated that there were no equal opportunities for students in leadership, co-curricular activities and in other college activities.
From the above data it was noted that gender mainstreaming was being implemented in some of the selected TVET institutions, however in some institutions it was not taking place. Bunyi (2003) had stated that there was a gap in implementation of gender policy and achieving gender mainstreaming. There seems to be progress on the implementation of the gender policy. However, there was no complete implementation of the policy guidelines and strategies and so the evaluator concurs with Morley (2007) who noted that implementation was a concern in the Commonwealth countries researched on. Morley further noted that policy commitments to gender evaporated during implementation. Meaning the zeal with which the policies were developed with was not the same zeal that went into implementation of the policies. This state could result in institutions not being keen on implementing the policy in all the departments.

5.6.1 Gender Policy Awareness

In line with the implementation process, there was need to find out if awareness of the gender policy had been carried out in the selected TVET institutions. Awareness of a policy goes hand in hand with implementation as people cannot implement what they do not know. The lecturers and students were asked respectively if they had received any gender awareness sensitization sessions. Table 5.19 shows the responses from the lecturers on gender mainstreaming.
Table 5.19

*Lecturers response on gender mainstreaming awareness*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender awareness done</td>
<td>41</td>
<td>58.6</td>
</tr>
<tr>
<td>No gender awareness done</td>
<td>29</td>
<td>41.4</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From the Table 5.19, 29 (41 %) lecturers stated they had not received any gender policy awareness (9 female lecturers, and 20 male lecturers), while 41 (59 %) lecturers stated they had received awareness on gender policy (21 female and 20 male). This means awareness was done to just slightly more than half of the lecturers.

Further on gender mainstreaming awareness, students were asked if they had received any gender awareness. The responses were as shown in Table 5.20.

Table 5.20

*Students response on gender mainstreaming awareness*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender awareness done</td>
<td>99</td>
<td>60</td>
</tr>
<tr>
<td>No gender awareness done</td>
<td>65</td>
<td>40</td>
</tr>
<tr>
<td>Total</td>
<td>164</td>
<td>98.8</td>
</tr>
</tbody>
</table>

From Table 5.20, 65 (39 %) students had not received gender mainstreaming awareness (31 female students and 34 male students), while 99 (59 %), students had
received gender mainstreaming awareness (48 female and 51 male). This shows that gender awareness had not reached all the students. And this means complete implementation of policy had not taken place just as stated in the previous section. This data is in line with what Bunyi (2003) stated. She noted that implementation process of the gender policies was a gap in gender mainstreaming and achieving gender equality and equity. The evaluator agrees, implementation could still be a challenge in mainstreaming gender in institutions.

5.6.2 Behavior Change after Gender Awareness

After the gender policy awareness, it was expected that those who had received awareness on the gender policy could exhibit behavior change in terms of gender issues. Students and lecturers were asked if the awareness of gender policy had any impact on the way they behaved towards gender issues. Table 5.21 shows the responses of lecturers on impact of gender mainstreaming awareness.

**Table 5.21**

*Lecturers response on impact of gender mainstreaming awareness*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of gender awareness</td>
<td>36</td>
<td>51.4</td>
</tr>
<tr>
<td>No impact on gender awareness</td>
<td>16</td>
<td>22.9</td>
</tr>
<tr>
<td>Total</td>
<td>52</td>
<td>74.3</td>
</tr>
</tbody>
</table>

From the Table 5.21, 16 (30 %) lecturers (eight female and eight male) said there was no impact on behavior change after gender awareness, while a total of 36 (51 %)
lecturers (16 female and 20 male) said there was impact on behavior changes after gender awareness. 18 (25 %) lecturers did not respond to the question on gender policy awareness. This was because 29 (41 %) lecturers had stated that there was no gender policy awareness in the previous item (item eight) and so did not respond to the continuation of the item on impact of the gender policy awareness. This mean awareness sessions made little change and so there is need to review how awareness is being carried out in order to have the effect required of behavior change.

Students were also asked to state if there was any behavior change towards gender mainstreaming after the gender policy awareness. Table 5.22 shows responses from students on impact of gender awareness.

*Table 5.22*

*Student responses on the Impact of gender issues awareness*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Impact of gender awareness</td>
<td>91</td>
<td>54.8</td>
</tr>
<tr>
<td>No impact on gender awareness</td>
<td>62</td>
<td>37.3</td>
</tr>
<tr>
<td>Total</td>
<td>153</td>
<td>92.2</td>
</tr>
</tbody>
</table>

Form Table 5.22, 91 (55 %) students stated that there was impact on behavior change, while 62 (37 %) stated that there was no behavior change. This is shown in Tables 5.22, it was also noted that 40 percent of the student respondents did not respond to the item as they had stated that there was no gender awareness in the previous item (item six). This mean awareness sessions had not made any impact and so there is need to
review how awareness is being carried out in order to have the effect required of behavior change. As depicted by Walter and Temba (1999) in Bunyi and Okelmo (2000), to deal with resistance to change, it is necessary to enable people to see what they could gain by changing. And so it is necessary to inform people of the importance of gender mainstreaming and what they will gain by changing their perception and attitude towards gender issues. Further Walter and Temba noted that gender approach to girls’ education was more appropriate when it involved boys in the movement to promote a better life for girls and for themselves as current and future companions of girls and women, and so the need for behavior change. So there is need to review the approach of gender awareness to make sure there is impact from the awareness.

5.6.3 Gender Discrimination

With the implementation of the Gender Policy in TVET institutions, and the gender policy awareness, it was expected that the institutions environment would be gender responsive and so no cases of gender discrimination. A gender responsive environment is one of the objectives of the gender policy. Lecturers and students were asked if they had faced any gender discrimination in the selected TVET institutions. The responses from lecturers on gender discrimination were as shown in Table 5.23.
Table 5.23

*Lecturers responses on gender discrimination*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced gender discrimination</td>
<td>16</td>
<td>22.9</td>
</tr>
<tr>
<td>Did not experience gender discrimination</td>
<td>54</td>
<td>77.1</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100.0</td>
</tr>
</tbody>
</table>

From Table 5.23, a total of 54 (77 %) lecturers (20 female Lecturers and 34 male lecturers) stated that there was no gender discrimination. A total of 16 (23 %) lecturers (10 female and six male lecturers) stated that there was gender discrimination.

The evaluator also sought to find out the forms of gender discrimination. The lecturers responses to forms of gender discrimination were as stated: four male lecturers had faced gender discrimination and the forms of discrimination were: allowance payment, job placement, student enrolment and promotion to senior position. Nine female lecturers had stated that they had faced gender discrimination and these included: job placement, responsibility and duty allocation, men dominating leadership positions, discrimination against careers (engineering), verbal sexual harassment and form of dressing for female students restricted. From the data collected it was noted that more female lecturers had faced gender discrimination than male lecturers in the TVET institutions that were sampled.

Lecturers were also asked how they responded to the forms of gender discrimination. One lecturer stated “I proved my capability when whoever was chosen
did not perform”, while another stated “advocating for participation of all gender in all activities on merit”. Another two female lecturers when responding to forms of discrimination, one said “ trying to balance number of male to female in sharing of responsibilities” and the other stated that she/he avoided contact with the person concerned. In essence this made the environment not gender friendly. Students were also asked if they had faced any gender discrimination, Table 5.24 shows the responses from students on gender discrimination. 

Table 5.24

Students who had experienced gender discrimination

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Experienced gender discrimination</td>
<td>72</td>
<td>43.4</td>
</tr>
<tr>
<td>Did not experience gender discrimination</td>
<td>89</td>
<td>53.6</td>
</tr>
<tr>
<td>Total</td>
<td>161</td>
<td>97.0</td>
</tr>
</tbody>
</table>

From Table 5.24, 89 (54 %) students stated that there was no gender discrimination. A total of 72 (43 %) students (30 female and 42 male students) stated that there was gender discrimination. Five students did not respond to the question asking them if they had faced any form of gender discrimination. From the analysed data it can be noted that there were still some form of gender discrimination among students. As stated by World Bank (2008) education and training institutions are not gender friendly when they discriminate against both boys and girls. Onsongo (2002) also noted that a hostile work environment in tertiary institutions positions women as ‘outsiders within’
the institution. The evaluator concurs with the previous studies, when the environment is hostile those discriminated upon are outsiders within their own institutions.

Further on gender discrimination, the Students were asked the forms of gender discrimination, Table 5.25 shows the responses from the students on the forms of gender discrimination.

Table 5.25

Students responses on form of gender discrimination

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female favored in bursary</td>
<td>13</td>
<td>7.8</td>
</tr>
<tr>
<td>Allocation of duties</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Being ignored</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Choice of courses</td>
<td>5</td>
<td>3.0</td>
</tr>
<tr>
<td>Job opportunities</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>Leadership opportunities</td>
<td>9</td>
<td>5.4</td>
</tr>
<tr>
<td>Undermining women</td>
<td>10</td>
<td>6.0</td>
</tr>
<tr>
<td>Sexual harassment</td>
<td>1</td>
<td>0.6</td>
</tr>
<tr>
<td>Allocation of resources</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>No response</td>
<td>108</td>
<td>75.1</td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
<td>100</td>
</tr>
</tbody>
</table>

A total of 108 students did not respond to the item, this was so because more than 50 percent of the students had stated that they had not had any gender discrimination in
the institutions. For those who faced gender discrimination, majority of the male students felt that by providing bursaries to female students, that was a way of discriminating against them. The evaluator also collected qualitative data on gender discrimination, one student stated “female students being handled as more important than men”. It was further noted that ten students felt that there was gender discrimination towards women in form of undermining them, and one student stated “in choosing student leaders’ ladies are sidelined”. Another 10 students felt that there was discrimination in terms of job opportunities, and so there was need to provide equal opportunities all students. The students were asked how they dealt with gender discrimination, Table 5.26 shows the responses on how the students dealt with gender discrimination.

Table 5.26

Students responses on dealing with gender discrimination

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reported to management</td>
<td>48</td>
<td>28.9</td>
</tr>
<tr>
<td>Did nothing</td>
<td>54</td>
<td>32.5</td>
</tr>
<tr>
<td>No response</td>
<td>56</td>
<td>33.7</td>
</tr>
<tr>
<td>Others</td>
<td>8</td>
<td>4.8</td>
</tr>
<tr>
<td>Total</td>
<td>166</td>
<td>100</td>
</tr>
</tbody>
</table>

While 33.7 percent of the students did not respond to the question, 48 percent reported the gender discrimination to the management. While 54 percent did nothing, meaning majority of the students opted to do nothing about the gender discrimination
they faced. As earlier stated there is need for a gender responsive environment as depicted by the Gender in Education Policy (2007) document, to achieve equality and equity in education a gender responsive environment is necessary. This is one of the objectives set. There is need to reduce incidences of discrimination, as stated by UNESCO (2003) there is need to have legal measures to non-discrimination and protection of fundamental freedom, these are necessary bases for gender equality as they will eliminate sexist stereotypes. Also as stated by World Bank (2008) institutions are not gender friendly when they discriminate against both boys and girls, or male and female for that matter. This discrimination against boys involves the constant reinforcement of those dominant masculinities that encourage boys to underperform and perceive girls as socially inferior and weaker. As earlier stated, in turn the girls buy into this masculine construction of femininity as powerless and voiceless and of masculinity as all powerful. As a consequence, boys and men in schools behave in ways that limit the full participation of girls and women in structures and processes of schooling. For this matter no one gender is superior to the other discriminating against one gender is in essence discriminating against both genders and so there is need to do away with all forms of gender discrimination.

5.7 The Attitudes and Perceptions of Lecturers and Students towards Gender Mainstreaming in selected TVET institutions

There was need to find out the perception of lecturers towards gender mainstreaming and the attitude of students towards gender mainstreaming. This was done to find out how the lecturers and students viewed gender issues and gender
mainstreaming activities. Lecturers deal with students on a daily basis and so are involved in the implementation process as they could encourage or discourage students from certain courses. Students are the recipients of gender mainstreaming strategies and so their views were necessary in the evaluation study.

5.7.1 The Attitudes of Students towards Gender Mainstreaming in selected TVET institutions

To measure attitudes, an attitude scale was used to assess the attitude of students towards gender mainstreaming. Seven- items scale was used with 5- point likert-like scale (1 = strongly disagree, 2 = disagree, 3 = undecided, 4 = agree and 5 = strongly agree). The respondents were asked to respond to each of the statements, showing agreement or disagreement. The most favourable response was given the highest score of five, and the least favorable response given a score of one, while the neutral response was given score of three. Since the statements were seven, most favorable responses yielded score of 22 to 35, showing favorable opinion. Those with exact score of 21 suggested neutral attitude and below 20 showed unfavorable response to gender mainstreaming. Table 5.27, shows the mean scores of the items on the likert scale.
Table 5.27

Descriptive Statistics of the attitude mean scores

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender equality is necessary</td>
<td>165</td>
<td>1.00</td>
<td>5.00</td>
<td>4.1697</td>
</tr>
<tr>
<td>There is need for gender mainstreaming</td>
<td>162</td>
<td>1.00</td>
<td>5.00</td>
<td>3.3765</td>
</tr>
<tr>
<td>There is no stereotyping in the choice of courses</td>
<td>151</td>
<td>1.00</td>
<td>5.00</td>
<td>2.5894</td>
</tr>
<tr>
<td>Female students should be encouraged to study</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engineering and Technology related courses</td>
<td>163</td>
<td>1.00</td>
<td>5.00</td>
<td>4.0245</td>
</tr>
<tr>
<td>Male students should be encouraged to study</td>
<td>165</td>
<td>1.00</td>
<td>5.00</td>
<td>3.7273</td>
</tr>
<tr>
<td>Institutional Management and Secretarial courses</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>There should be equal representation of male and</td>
<td>165</td>
<td>1.00</td>
<td>5.00</td>
<td>4.0242</td>
</tr>
<tr>
<td>female students</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gender equality has brought positive change to the</td>
<td>165</td>
<td>1.00</td>
<td>5.00</td>
<td>3.6000</td>
</tr>
<tr>
<td>department</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

From Table 5.27, item three had a mean score 2.59, meaning that students strongly disagreed that there was no stereotyping in the choice of courses, while item two had a score of 3.34, meaning most students were undecided on the need for gender mainstreaming. All the other items scored more than 3.60 to 4.17 meaning the students had a positive attitude towards gender mainstreaming but as stated in item three there was stereotyping in the choice of courses by students.
The summary of the attitude scale from the score ratings: 25 (15 %) students scored 20 and below showing that they had a negative attitude towards gender mainstreaming, six (3.6 %) students were neutral to gender mainstreaming activities and 117 students (79.1 %) scored above 22, showing a positive response to gender mainstreaming.

It can be noted that the students had a positive attitude towards gender mainstreaming activities though there was stereotyping in the choice of courses. This statement is in line with a study done by Mbarika, Payton, Kvasny and Amadi (2006), which stated that women saw themselves as peers to men who are able to compete with men in a male dominated profession. They wanted to help in the development of their country, and never spoke of advancing women at the expense of men, however stereotyping should be addressed.

5.7.2 Perceptions of Lecturers towards Gender Mainstreaming in selected TVET institutions

To measure perceptions, a perception scale was used on lecturers. A seven- item perception scale with 6 - point perception, likert-like scale (1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree and 6= strongly agree) was designed to measure perception towards gender mainstreaming in the selected TVET institutions. The respondents were asked to respond to each of the statements, showing agreement or disagreement. The most favourable response was given the highest score of six, and the least favorable response given a score of one, while those who were not so sure were given a score of 3 and 4 (somewhat agree and somewhat disagree). Since the
statements were seven, most favorable responses yielded score of 29 to 42, showing favorable opinion. Those with score between 21 and 28 had a note so clear perception (somewhat) and below 20 showed unfavorable response to gender mainstreaming in the selected TVET institutions. Table 5.28 shows the mean scores.

Table 5.28

Descriptive Statistics of the perception mean scores

<table>
<thead>
<tr>
<th>Item</th>
<th>N</th>
<th>Min</th>
<th>Max</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender policy has been implemented effectively</td>
<td>70</td>
<td>1.00</td>
<td>6.00</td>
<td>3.7000</td>
</tr>
<tr>
<td>Lecturers are supporting gender mainstreaming activities</td>
<td>69</td>
<td>1.00</td>
<td>6.00</td>
<td>4.5797</td>
</tr>
<tr>
<td>Gender mainstreaming is not a waste of time</td>
<td>69</td>
<td>1.00</td>
<td>6.00</td>
<td>5.3768</td>
</tr>
<tr>
<td>Gender mainstreaming solves problems of equity and equality</td>
<td>68</td>
<td>1.00</td>
<td>6.00</td>
<td>4.8235</td>
</tr>
<tr>
<td>Students have role models</td>
<td>69</td>
<td>1.00</td>
<td>6.00</td>
<td>3.5072</td>
</tr>
<tr>
<td>Retrogressive cultural practices does not hinder choice of subjects</td>
<td>69</td>
<td>1.00</td>
<td>6.00</td>
<td>2.5507</td>
</tr>
<tr>
<td>Gender equality has brought positive change to the department</td>
<td>67</td>
<td>1.00</td>
<td>6.00</td>
<td>4.1493</td>
</tr>
</tbody>
</table>

From Table 5.28, items 1, 5 and 6 scored less than four (3.7, 3.5 and 2.6) meaning the lecturers scored them negatively. This means the lecturers were not in agreement with the statements. However, four of the items scored more than four (4.6, 5.4, 4.8 and 4.1) meaning lecturers had a positive attitude towards gender mainstreaming
but as mentioned in item one the implementation process had not been effective, item five students had no role models and item six retrogressive cultural practices were hindering gender mainstreaming activities.

The summary of the perception scale from the mean score ratings: 34 (51.5%) lecturers had positive response to gender mainstreaming, 29 (43.9%) had a score of 21 to 28 meaning a somewhat response to gender mainstreaming and three (4.5) had a score of less than 20, meaning a negative response to gender mainstreaming. It can be concluded that more lecturers had positive response to gender mainstreaming activities.

A better perception and attitude of both male and female students and lecturers attitudes and perceptions were necessary so that strategies to address these attitudes and perceptions are developed, and are effective. The lecturers had positive perception towards gender mainstreaming but also felt retrogressive cultural practices were hindering gender mainstreaming activities, students lacked role models, and lack of proper implementation, were hindering gender mainstreaming activities.

The summary from the likert scales concurs with what was stated by the European Union and Socrates – Grundtvig programme (2007), that men also suffer from expectations of stereotypes of masculinity which is directed at them, and so to enhance gender mainstreaming, stereotyping should be addressed. Further in the same document it is stated that “a better understanding of men’s perceptions and positions is essential to be able to transform efficiently to the existing situation” (p. 13). The evaluator agrees with these statements.
5.8 Strengths and Weakness of Gender Mainstreaming in TVET institutions

During implementation of policies, challenges always arise and there is always need to know the strengths and weaknesses of the implementation process in order to build on the strengths and address the weaknesses. The evaluator sought to know the strengths and weaknesses of the implementation process. Also sought were the strengths and weaknesses of strategies in place to enhance implementation of the gender policy in selected TVET institutions in Kenya. This was done in order to give advice for adjustments or correction in the implementation process and of the strategies in place.

5.8.1 Strengths and Weaknesses of Gender Mainstreaming activities in selected TVET institutions

The Technical Education Officer was asked what strengths and weaknesses, the Ministry had encountered in implementing the gender policy strategies. Lecturers dealing with gender mainstreaming activities and Heads of Departments, were also asked if there were any hindrances to gender mainstreaming in the selected TVET institutions. The Technical Education Officer stated that the provision of bursaries was supported by donor funding. He further said;

“bursary fund has encouraged more female students to enroll in SET courses as the enrollment of female students has risen to 30.4 percent of the male enrolment in 2011 in SET courses” he continued “this is .4 percent more than the target of 30 percent set by the Ministry to enhance gender mainstreaming in SET courses in TVET institutions”.

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The Technical Education Officer further stated that there was limited funding, this he stressed was a challenge, he noted that the bursaries provided were not enough, and that the bursary only catered for tuition and so the female sponsored students who were not able to pay for accommodation had a challenge. He also mentioned that the disbursement procedure was long and so this affected the effectiveness of the bursary scheme. The officer also stated that there was no record to track down those who had benefited from the bursary fund. This meant no follow-up to know if it added value in terms of gender mainstreaming issues. The Officer also noted that sensitization was in place and especially during the regional KETISA meetings, though more needs to be done.

It was noted that bursary scheme catered for female students only and so male students felt discriminated upon and so there was need to provide bursaries for all students. As stated by Morley (2007), focus on gender equality as an objective, rather than women as a target group ensures that initiatives not only respond to gender differences but seeks to reduce gender inequality, more attention is paid to men and their role in creating a more equal society. The Ministry had achieved its target of 30 percent but on close scrutiny, the ratio of female students who had enrolled in 2009 and 2011 in most institutions had dropped compared to men as earlier noted. This was a Ministry target, as stated by Walker and Temba (1999), there is need to work through and with the local community, authority structures or institution for that matter in addressing gender relations in the local context as this promotes community or institution ownership of the
initiative and sustainability. When the Ministry sets targets at the Ministry head quarter and pass them down then they are not promoting community ownership.

The Heads of Department were asked what was hindering the effective implementation of gender policy. Table 5.29 shows responses of the hindrances to effective implementation of the gender policy.

*Table 5.29*

**Heads of Department response on hindrance to the implementation process**

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Stereotyping</td>
<td>7</td>
<td>23.3</td>
</tr>
<tr>
<td>Lack of role models</td>
<td>5</td>
<td>16.7</td>
</tr>
<tr>
<td>Lack of sensitization</td>
<td>15</td>
<td>50.0</td>
</tr>
<tr>
<td>Other reasons</td>
<td>3</td>
<td>10.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>30</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 5.29, 15 (50 %) Heads of Department stated that lack of sensitization was a major hindrance to the implementation of the gender mainstreaming policy, one was specific and said “the policy was not even made public”. Seven (23 %) Heads of Department stated that stereotyping was a hindrance to implementation of the gender policy, five (16.7%) mentioned lack of role models as hindering implementation of the gender policy. For those who stated other reasons: one mentioned that female students abandoning science based subjects at an early stage, in secondary school. This was a
hindrance to the implementation of the policy as they did not meet the entry requirements, to SET courses.

As stated lack of sensitization was a major hindrance to effective implementation of policy. Vimala (2010), states that sensitization of the stakeholders and decision-makers involves extensive consultations with students, teachers and administrators; and opening up of a broader, free and frank dialogue on gender and higher education. To address the challenges facing implementation, proper implementation is required. Sensitization is very necessary for people to understand the importance of gender mainstreaming without proper sensitization, the recipients will not be receptive to the programme being implemented.

5.9 Improvement and Suggestion for New of Strategies to achieve Gender Mainstreaming in TVET institutions in Kenya

This being an evaluation study, the evaluator sought to know what improvements were required to the implementation process or the strategies in place. The evaluator also sought to know what other strategies the respondents thought would work. This was to cater for specific needs in the institutions, so that institutions own the gender mainstreaming process.

5.9.1 Improvement to Strategies in place to Enhance Gender Mainstreaming in TVET institutions in Kenya

With strategies in place, there was need to review them frequently with a view of improving them so as to meet the set objectives. Lecturers and students were asked to suggest improvements that could be done to the strategies that were in place to improve
gender mainstreaming in their respective departments. Table 5.30 shows responses from lecturers on how the strategies could be improved.

Table 5.30

Lecturers responses on how to improve gender mainstreaming

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seminars, workshops and Sensitization</td>
<td>15</td>
<td>21</td>
</tr>
<tr>
<td>Employ male lecturers in female dominated courses and vice versa</td>
<td>11</td>
<td>16</td>
</tr>
<tr>
<td>Encourage gender equity in enrolment and other activities in institutions</td>
<td>10</td>
<td>14</td>
</tr>
<tr>
<td>Girls encouraged to take up male dominated courses</td>
<td>9</td>
<td>13</td>
</tr>
<tr>
<td>Bursaries for both girls and boys</td>
<td>8</td>
<td>11</td>
</tr>
<tr>
<td>Use of appropriate (modern ) facilities</td>
<td>5</td>
<td>7</td>
</tr>
<tr>
<td>Provide equal opportunities</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Employment opportunities for female students in engineering courses</td>
<td>6</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>70</td>
<td>100</td>
</tr>
</tbody>
</table>

From Table 5.30, 15 (21%) lecturers suggested carrying out seminars, workshops and creating gender mainstreaming awareness (to all the education stakeholders – students, lecturers and even management). A further 11 (16 %) lecturers suggested that there was need to employ more male and female lecturers in the institutional management department and in the engineering and business studies department respectively. The
lecturers felt that the lecturers would act as role models and so encourage male and female students to enroll in the mentioned departments. Ten (14%) lecturers suggested that more female students should be encouraged to join engineering related courses while male students should be encouraged to join institutional management and related studies.

Another nine (13%) lecturers suggested that there was need to make a deliberate effort to have gender equity in the enrolment of students, in activities of departments including the need to take gender balance into consideration when making appointments, allocating duties and responsibilities. Five (7%) lecturers suggested use of appropriate equipment and furniture to encourage gender equity and equality (for example, with computerizing typing more males can enroll as type writers were associated with women), another six (9%) lecturers suggested liaising with industry so that they can sponsor female students in male dominated courses and vice versa. From all the suggestions given above, it concurs with a study done by World Bank (2008) that stated that, it is important to support innovative approaches and strategies that confound traditional gendered associations and enhance the learning of girls and boys across a given curriculum, which the lecturers put in mind as they suggested the strategies.

These were suggestions from the lecturers, who are the implementers of curriculum or implementers of any policies that are prepared to be implemented in institutions, Walter and Temba (1999) as stated in Bunyi and Okelmo (2000) depicted that to address resistance of some policies it is important for the people involved to be part of the development of policies and suggest interventions, which is what the lecturers
did. Students were asked on how gender mainstreaming could be improved; Table 5.31 shows responses from students on how the strategies could be improved.

Table 5.31

*Students responses on how to improve gender mainstreaming*

<table>
<thead>
<tr>
<th>Response</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sensitization and career guidance</td>
<td>32</td>
<td>19.3</td>
</tr>
<tr>
<td>Affirmative action</td>
<td>3</td>
<td>1.8</td>
</tr>
<tr>
<td>Use of role models</td>
<td>1</td>
<td>.6</td>
</tr>
<tr>
<td>Girls encouraged to take up male dominated courses</td>
<td>2</td>
<td>1.2</td>
</tr>
<tr>
<td>Bursaries for both girls and boys</td>
<td>22</td>
<td>13.3</td>
</tr>
<tr>
<td>Marketing strategy improved</td>
<td>9</td>
<td>5.4</td>
</tr>
<tr>
<td>Provide equal opportunities</td>
<td>34</td>
<td>20.5</td>
</tr>
<tr>
<td>More facilities for access</td>
<td>6</td>
<td>3.6</td>
</tr>
</tbody>
</table>

From Table 5.31, it was noted that 34 students (20%) felt that there was need to provide equal opportunities for all to encourage gender mainstreaming, and achieve equity and equality. A further 32 students (19%) stated that sensitization on gender issues was needed and more so through career guidance and counseling. Some students were specific and stated that this need to be done when students are still at secondary school level or even primary school level. They further noted that when this is done early it helps the learners change their perception towards some subjects. Another strategy that students felt would encourage gender mainstreaming was provision of bursaries for both
male and female students, unlike what was in place where only female students were provided with bursaries to study in the SET courses. Male students also stated they needed the bursaries, and more so in areas where enrolment was low.

Sensitization and guidance and counseling were as strategies that were suggested that would improve gender policy implementation. There was need for the sensitization strategy to be started at an early stage preferably in primary or secondary school level, the evaluator agrees with this suggestion as it was also stated in Vimala (2010), that tertiary (higher) education does not stand alone. Being at one end of a linear scale, the cumulative baggages of educational, social and gender-based disadvantages are carried into the higher education space from lower levels and so it is necessary that sensitization is done form an early level. All education stakeholders also need to be sensitized and be involved in the implementation process.

5.9.2 Suggested Strategies to Enhance Gender Mainstreaming in TVET institutions

The evaluator sought to get some suggestions on strategies that the respondents thought would enhance gender mainstreaming in TVET institutions. This information was sought from Technical Education Officer, lecturers in charge of gender mainstreaming activities in TVET institutions and Heads of Departments. Below are some of the strategies that were suggested;

5.9.2.1 Sensitization, Capacity Building and Career Guidance and Counseling

The Technical Education Officer stated that there was need to sensitize the students at an early age and especially when they were in secondary schools on the
courses on offer and what subjects they required to pass in order to qualify for the courses on offer. He also stated that there was need to sensitize the student on cultural limitations and advise on how they can do away with them. Further, four lecturers in charge of gender mainstreaming activities stated that there was need to sensitize the public on gender mainstreaming. Two lecturers in charge of gender mainstreaming activities stated that there was need to have capacity building for those in charge of gender mainstreaming activities, and seven heads of department stated that there need to sensitize the public on gender mainstreaming.

From research done on best practices in other countries as stated by Vimala (2010) Training a group of people drawn from different institutions in gender mainstreaming has limited value because the trainees have to go back and work among people who have not shared the same experience. Those trained are likely to feel isolated and may gradually lose their enthusiasm. There is need to involve a group of people who work together and have different responsibilities in the same organisation to have greater impact. This, the evaluator agrees will have an impact on capacity building.

Two heads of department felt that there was need for career guidance and counseling so as to encourage secondary school leavers to join various courses on offer, also encourage secondary school students to embrace science subjects to enable them do engineering based courses. This could also be done to remove stigma associated with some subjects for example secretarial being a female domain. There was also need to do away with stereotyping due to cultural limitations, this was also stated in the attitude scale and perception scale.
5.9.2.2 Role Models, more Scholarships/Bursaries to Deserving Students

Two lecturers in charge of gender mainstreaming activities stated that there was need to have role models. This was to motivate the students into joining male/female dominated courses. These sentiments were also echoed by one Head of Department, who stated that there was need to have role models.

The Technical Education Officer stated that there was need to provide more funds so that the students get full bursaries. Two lecturers in charge of gender mainstreaming activities and nine Heads of Departments felt there was need for more bursaries or scholarships for gender mainstreaming activities. This would be used to bring on board more female students in the engineering related courses.

5.9.2.3 Gender Resource Centre and use of Modern Equipment

One lecturer in charge of gender mainstreaming activities stated that there was need to have resource centers for gender mainstreaming activities to cater for gender needs, concerns and priorities. While another lecturer in charge of gender mainstreaming activities stated that there was need to use modern equipment in training. This would change the mentality towards some subjects there was need to make use of modern equipment.

5.9.2.4 Provide Job Opportunities for Female Students in SET and employ Male Lecturers in Hospitality Management Department

The Technical Education Officer stated that facilitation of placement of the students after completion of the course was necessary. One head of department felt that there was need to provide employment opportunities. This was to be done especially for
female students who do engineering related courses so as to encourage others to join the courses.

Two heads of department stated that there was need to employ more male lecturers in the institutional management departments. This was to encourage male students take up the course as most of the lecturers in those departments have been female lecturers. The male lecturers would act as role models, and to have gender friendly adverts for example female students or lecturers are encouraged to apply same to the male students and lecturers in the female dominated departments. As stated in the policy document (MoE, 2007), new departures and strategies that are aimed at ensuring greater participation of women and men and equal access to resources and distribution of benefits are necessary.

5.10 Way Forward for the Implementation Process of the Gender Policy in TVET institutions

Being an evaluation study of the implementation process of the gender policy, there was need to advice on the way forward. The evaluation of the implementation process as stated is supposed to act as source of information for decision makers, implementers and other stakeholders in the education sector to use in making implementation process better.

5.10.1 What was envisioned as per policy

The gender in education policy (2007) required that the following summarized strategies be put in place. These included: build capacity of management and staff to address gender issues, where possible provide bursaries, loans and scholarships to school
leavers especially the marginalized groups such as girls, children with special needs and persons from ASALs to study technical courses where they are underrepresented; implement affirmative action in polytechnic admissions for science related courses; encourage rehabilitation of sanitary facilities, learning facilities and physical infrastructure in public TVET institutions to ensure that they are gender friendly in order to create a gender-responsive environment; develop women role model programmes in TVET institutions and provide technical knowledge and vocational skills, as well as promote attitudes necessary for development, among others.

This was to be done to enable girls and boys meet admission requirements, and provide scholarships and bursaries for needy students, particularly girls pursuing SMT-based programmes; mobilize resources for SMT programmes and research with special focus on gender issues in SMT and institutionalize gender-responsive monitoring, evaluation and accountability mechanisms for SMT programmes improvement, progress and impact assessment.

Some of the mentioned strategies had been put in place as mentioned from the data collected. On capacity building some form of gender awareness had been done to just above 50 percent and so more need to be done. On funding (provision of bursaries, scholarships and loans), bursaries had been put in place but financial facilitation was a challenge as stated and so more needed to be done. No affirmative action had been implemented in terms of admissions to these institutions, facilities had been revamped in the institutions, but these had been done as a way of revamping the TVET sector as a whole and not specifically as a gender mainstreaming initiative. On role modeling of
programmes, as stated in the study, more needed to be done especially employing male or female lecturers in courses where they were few. Initiatives involving stakeholders were yet to be implemented, this included mobilization of resources for gender mainstreaming and finally building confidence of girls in SET or SMT courses a lot still needed to be done though some form of sensitization had taken place. Monitoring and evaluation was very necessary yet no form of monitoring and evaluation of the policy had been done to find out if objectives of the policy were being achieved.

It is necessary for the gaps identified, for example strategies not in place like affirmative action on entry points among others to be put in place, and frequent monitoring and evaluation to take place. As stated by Misola (2010) endeavors need be made to mainstream gender across all initiatives in order to ensure women’s equal participation. Also as stated by Bunyi (2003) to increase the enrolment of women in tertiary education there is need to; use affirmative action, carry out monitoring and evaluation of strategies and activities implemented. As stated by Matula (2009) the Government of Kenya should put in place mechanisms and support systems to ensure appropriate implementation of gender equity policies in all sectors of development, education sector inclusive. The recommendations given from previous studies should be incorporated in review of the policy document to address the gaps identified.

From the data presented, analysis and discussion done, it can be summarized that strategies were in place to enhance gender mainstreaming, implementation of the gender policy (2007) was taking place. It was also established that the attitude of students and perception of lecturers to gender mainstreaming was positive. There were challenges to
the gender mainstreaming process and the strategies in place. The respondents made
some suggestions for improvements to be made to the implementation process and to the
strategies in place to enhance gender mainstreaming. Suggestions were also made on new
strategies that can enhance gender mainstreaming.
CHAPTER VI
SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

6.1 Introduction

This chapter looks at summary of finding of the evaluation study. It draws conclusions from the evaluation study as per the evaluation questions. Recommendations are given and finally suggestions for further research and evaluation are stated.

6.2 Summary of Evaluation Study

The purpose of the evaluation study was to evaluate the implementation process of the gender policy in TVET institutions in Kenya. The study covered strategies that were in place, strategies that were working, the implementation process of the gender policy. It also looked at the attitude and perception of students and lecturers towards gender mainstreaming in TVET institutions, the strengths and weaknesses of the implementation process and strategies in place and finally improvement to make gender mainstreaming possible and way forward.

This evaluation study was done in ten TVET institutions in six provinces in Kenya, namely: Western province, Nyanza province, Rift valley province, Eastern province, Coast province and Central. The evaluation study was done between August and November, 2011. A total of 276 respondent, (153 males and 123 females), 55 percent males and 45 percent females were involved in the evaluation study. Questionnaires from Ollessos T.T.I were not returned and so the information from this institution was collected through document analysis guide from the documents at the Ministry offices.

The evaluation study used the CIPP evaluation model, which is a management oriented model that looks at the process of implementation and uses feedback given to
improve implementation processes. The study employed a Liberal Feminism theoretical framework, which advocates for equal access to opportunities and resources and equal rights for both men and women.

Information was sought from one Technical Education Officer, lecturers in charge of gender mainstreaming activities in TVET institutions, Heads of Departments, lecturers, and students. More information was collected from documents from the Ministry of Higher Education Science and Technology head office. The evaluation instruments included; interview guide, document analysis guide and four sets of questionnaires. The questionnaires had closed ended questions, and a few open ended questions to elicit more information. Two of the four sets of questionnaires had attitude scale and perception scale. This elicted information on attitudes and perceptions from students and lecturers respectively. To answer the evaluation questions set in the evaluation study.

The data elicited from the respondents and from the document analysed were organized and analysed through descriptive statistics such as frequency distributions, tables, percentages along simple narrative descriptions. The evaluation study made several findings, based on the evaluation of the implementation process of the gender policy in selected TVET institutions in Kenya.

6.3 Key Findings

The evaluation study established the following key findings: Some strategies were in place and some of these strategies were working, which meant implementation of the gender policy was taking place. The strategies in place included: bursaries, sensitization,
affirmative action and use of role models. Those that were working included provision of bursaries and, sensitization.

The enrolment from the selected TVET institution increased, but the GPI of the TVET institutions dropped from 0.957 to 0.804 instead of moving towards 1 (one). The courses were still sex–segregated, channeling males and females into different courses. For instance, engineering and related courses were still male dominated, while institutional management and related studies were still female dominated. Also business studies and related studies and secretarial studies were female dominated while accounting studies were male dominated.

Gender mainstreaming was being implemented though the implementation process was not 100 percent. This was as reported by some Heads of Departments and lecturers in charge of gender mainstreaming activities who stated that the policy was not being implemented in their departments or institution as had been envisioned. On gender policy awareness, not all students and lecturers had received gender policy awareness, and so gender policy awareness had not been effectively implemented. There was some form of gender discrimination making the environment not gender responsive.

On perception and attitude, students had a positive attitude towards gender mainstreaming activities though there was stereotyping in the choice of courses. The lecturers also had a positive perception towards gender mainstreaming but also felt regressive cultural practices were hindering gender mainstreaming activities, students lacked role models, and there was lack of proper implementation. These were hindering gender mainstreaming activities.
Implementation of bursaries as a strategy had some challenges though structures had been set up for disbursement of the same. Lack of sensitization was a major hindrance to gender mainstreaming. On the way forward, most of the strategies had not been implemented as per the policy document of Gender in Education (2007).

6.4 Conclusions

From the evaluation study findings, the following conclusions were made: strategies of gender mainstreaming were in place and they contributed to implementation of the gender policy in TVET institutions. Such included provision of bursaries to female students taking courses in SET programmes and sensitization. Structures for bursary disbursement were in place and procedures that were ISO certified had been set up. Sensitization of the lecturers and students on gender issues was being done.

Gender mainstreaming was being implemented in the sampled TVET institutions, though not all students and lecturers had received gender policy awareness. The mean GPI was 0.957 in 2009 and it reduced to 0.804 in 2011 in the selected TVET institutions, meaning the institutions were moving further from gender parity rather than closing the gap and reaching gender equity in enrolment.

On perceptions and attitudes of lecturers and students respectively towards gender mainstreaming in TVET institutions, the lecturers had positive perceptions towards gender mainstreaming activities and students also had positive attitudes to gender mainstreaming activities. The two groups were in agreement that cultural issues were hindering gender mainstreaming (stereotyping and retrospective cultural practices).
Strengths of gender mainstreaming in TVET institutions included bursary disbursement structures had been set up, and the results of those awarded were available for public scrutiny. However, bursaries only catered for tuition and so those who could not pay for accommodation were disadvantaged. The bursaries also only catered for female students and so the male students felt discriminated against. There were some forms of gender discrimination and this made the environment not completely gender responsive. It can be concluded that there were fewer strengths and a lot of weaknesses that need to be addressed.

A lot of improvements were suggested as needed in implementing the gender policy in TVET institution in order to achieve gender mainstreaming in TVET institutions, these included: providing equal opportunities for all, employing male lecturers in female dominated courses and female lecturers in male dominated courses to act as role models, more sensitization is required on gender mainstreaming and especially to education stakeholders. As stated in policy document, new departures and strategies are required to ensure greater participation of all in TVET education.

6.5 Recommendations

From the conclusions made, the evaluator made the following recommendations and suggestions for further research and evaluation.

The Ministry of Education Science and Technology to do more in terms of gender policy implementation process, financial support for institutions to carry out gender mainstreaming activities should be enhanced. The Ministry should also provide terms of reference for gender mainstreaming, while TVET institutions should put in place
mechanisms for complete implementation of policy so as to achieve gender equity and equality.

TVET institutions should have consultative meetings with stakeholders with a view to sensitizing them on gender mainstreaming and its importance. The institutions should incorporate gender awareness in training activities and programmes and strengthen guidance and counseling services of trainees. This should be combined with career guidance and counseling, this will prepare students for career options ahead and the world of work.

The government through the Ministry of Education Science and Technology should enhance bursary disbursement. The bursaries should be for all students, both male and female and not just for female students. When providing bursaries alone for women, this isolates the female students.

The Ministry of Education and Science and Technology and development partners should sensitize all stakeholders in education, informing them of the need to create diversity in the work place and to do away with cultural issues that hinder gender mainstreaming for optimal production and ultimately industrialization and economic growth. The Ministry and development partners should inform stakeholders on the importance of synergy from men and women in the work place, which will create power houses as they both will bring to the table different talents, as they are gifted differently, they reason differently. Whereas women may be good in design in term of engineering, the men can do the other masculine work, in terms of tailoring men come out as good tailor and if the men and women work together in the clothing industry creative work can
be done. They should be informed that depending on one’s gender alone at the end of the day denies the organization or country valuable talents that need to be exploited.

The Ministry of Education Science and Technology and TVET institutions should come up with innovative strategies that should be considered to encourage gender mainstreaming in the TVET institutions. Programmes or strategies should incorporate both male and female so that both benefit. There is need for complete implementation of proposed strategies, as proposed in the policy document.

The Ministry of Education Science and Technology should put in place structures for full implementation of the gender in education policy document. It should set a 50/50 ratio per gender target for a given year in the job market basing on merit and capabilities of the persons required. To attain full utilization of the scientific and intellectual capacities of men and women in the economic, social and political decision making, the government should not tie itself to the 1/3 rule of either gender where one gender is disadvantaged, the rule locks out 20 percent of the disadvantaged gender. This strategy is restrictive, an impediment to harnessing full potential of the disadvantaged gender.

6.6 **Suggestion for Further Research and Evaluation studies**

It is hoped that researchers and evaluators will consider the following suggestions for further research and evaluation:

1) An impact evaluation on females and males who have done traditionally referred to as male courses or female courses on what would work in gender mainstreaming in the economic, social and political spheres.
2) A study to be done on gender mainstreaming in private TVET institutions as these institutions play a major part in skills development in TVET training.

3) A study to be done on challenges facing implementation of gender policies in tertiary education in Kenya.

4) A study to be done on other objectives of the policy document, these include: retention, transition and achievement in TVET institutions for girls and women in TVET institutions.

5) An evaluation study should be done on models of programme implementation used during implementation of programmes in Kenya, to find out which implementation model works best in Kenya.

6) From the gender roles assigned traditionally or culturally, there is need for a study on conventional roles, how males and females are engaging in diverse practices such as education, career progression, public mobility and male and female interactions in the current world.
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Appendix A:

Document Analysis Guide

1) Name of institution…………………………………………………………

2) Total enrolment in 2010/2011………………………………………………

3) Courses offered by the institution
   a)……………………………………
   b)……………………………………
   c)……………………………………
   d)……………………………………
   e)……………………………………
   f)……………………………………
   g)……………………………………
   h)……………………………………
   i)……………………………………
   j)……………………………………

4) Enrolment in various courses from 2006 to 2011 years

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<thead>
<tr>
<th>Course</th>
<th>Business Studies</th>
<th>Engineering (electrical &amp; electronics)</th>
<th>Engineering (plant&amp; mechanical)</th>
<th>Applied Sciences</th>
<th>Building Technology</th>
<th>I.T &amp; related courses</th>
<th>Institutional Management</th>
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5) Number of female students sponsored in the institution in the various courses

<table>
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<tr>
<th>Course</th>
<th>Business Studies</th>
<th>Engineering and related studies</th>
<th>Applied Sciences</th>
<th>Building Technology</th>
<th>I.T &amp; related courses</th>
<th>Institutional Management</th>
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</table>

6) Difference in enrolment in the last five years

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<th>Course</th>
<th>Business Studies</th>
<th>Engineering and related studies</th>
<th>Applied Sciences</th>
<th>Building Technology</th>
<th>I.T &amp; related courses</th>
<th>Institutional Management</th>
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7) Strategies that MoHEST has put in place to bring about gender equity

8) Strategies that can be put in place to bring about gender equity

9) Guidelines to institutions at the time of the evaluation on gender equity
Appendix B:

Questionnaire for Lecturers dealing with Gender Mainstreaming activities

The purpose of this evaluation questionnaire is to collect feedback on the extent to which gender mainstreaming (gender policy) has been implemented in TVET institutions in Kenya. Please respond to the questions. Provide your answer in the space provided, or tick the correct choice.

Section one: Demographic information

1) What is the name of your institution………………………………………………
2) What is your gender ….Male ( ) Female ( )
3) What is your age ….21-30 ( ) 31 - 40( ) 41- 50 ( ) 51 – 60( )
4) What are your qualification …Craft ( ) Diploma ( ) Higher National Diploma ( ) Degree ( ) Masters ( )
5) What is your teaching experience in years 1-5 ( ) 6 – 10( ) 11 – 15 ( ) 16 – 20 ( ) 21 – 25 ( ) above 25 ( )
6) What position do you hold in the institution …Principal ( ) Registrar ( ) Dean ( ) Deputy Principal ( ) Others ( )

Section two: Enrolment information

7) Indicate the enrolment of male (M) and female (F) students in the mentioned courses for the period indicated

<table>
<thead>
<tr>
<th>Course</th>
<th>Business Studies</th>
<th>Engineering and related studies</th>
<th>Applied Sciences</th>
<th>Building Technology</th>
<th>I.T &amp; Related Courses</th>
<th>Institutional Management</th>
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<td>2007</td>
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<td>2011</td>
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</table>
Section three: Gender mainstreaming

8) Do you understand what gender mainstreaming is… yes (   ) no (   )
9) Is gender mainstreaming being implemented consistent with the way it was envisioned………yes (   ) no (   )
10) Is gender mainstreaming reaching the students…… Yes (   ) no (   )
11) How many programmes/courses do you run
   a) Between 1 and 10 (   ). b) Between 11 and 20 (   ). c) Above 20 (   )
12) Is there gender parity in enrolment in all the programmes you run? If no which are; a) Male dominated………………………………………………
   b) Female dominated………………………………………………
   c) Which ones have equal representation…………………………

13) Are students given equal opportunities in a) leadership…yes (   ) no (   )
 b) Co-curricular activities…yes (   ) no (   ) c) Other college activities…………………………………………………………………………
14) Are there cases of female students getting pregnant..yes (   ) no (   )
15) What strategy do you have in place for female students who get pregnant
   a) Come back after delivery (   ) b) No follow up (   )
   c) They are expelled (   ) d) others (name)……………………………
16) What factors are hindering implementation of the gender policy… a) Lack of sensitization (   ) b) Lack of role models (   )
   c) Stereotyping (   ) d) Others (name)…………………
17) What strategies have you put in place to enhance implementation of the gender policy a) Affirmative action (   ) b) Use of role models (   )
   c) Gender responsive environment (   ) d) Nothing in place (   ) e) bursaries (   )
   f) Others (name) ……………
18) What strategies appear to be working so far
   a) Bursaries/scholarships (   ) b) Sensitization (   ) c)Use of role models(   )
   d)Affirmative action (   ) e) Gender responsive environment (   ) f) Others (name)…………………
19) What additional strategies would you recommend to the government to employ in order to attain gender equity in your institution indicate of your choice
   You can add more information on separate paper. Thank you for your time.
Appendix C:

Questionnaire for Lecturers

The purpose of this evaluation questionnaire is to collect feedback on the extent to which gender mainstreaming has been implemented in TVET institutions in Kenya. Please respond to the questions as sincerely, and as fully as possible. Provide your answer in the space provided, or tick the correct choice.

Section one: Demographic information

1) Name of Department

2) Name of institution

3) What is your gender….Male (  ) Female (  )

4) What is your age .....21-30 (   ) 31 - 40(   ) 41- 50 (   ) 51 – 60(   )

5) What are your qualification ...Craft (   ) Diploma (   ) Higher National Diploma (   ) Degree (   ) Masters (   )

6) What is your teaching experience in years 1-5 (  ) 6 – 10(  ) 11 – 15 (  ) 16 – 20 (  ) 21 – 25 (  ) above 25 (  )

Section two: Gender mainstreaming

7) Have you received any gender mainstreaming (policy) awareness…yes (   ) no (   )

8) Did the policy awareness have any impact on behaviour change…Yes (   ) no (   )

9) Have you ever experienced any form of gender discrimination…Yes (   ) no (   )

10) If yes what form of gender discrimination was it

11) How did you deal with the discrimination? Briefly explain
### Section three: Perception scale

12) On a scale of 1 to 6 rate the level of gender mainstreaming in your departments

<table>
<thead>
<tr>
<th></th>
<th>Strongly agree (6)</th>
<th>Agree (5)</th>
<th>Somewhat agree (4)</th>
<th>Somewhat Disagree (3)</th>
<th>Disagree agree (2)</th>
<th>Strongly disagree (1)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Gender policy has been implemented effectively</td>
<td></td>
<td></td>
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<tr>
<td>2</td>
<td>Lecturers are supporting gender mainstreaming activities</td>
<td></td>
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<tr>
<td>3</td>
<td>Gender mainstreaming is not a waste of time</td>
<td></td>
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<tr>
<td>4</td>
<td>Gender mainstreaming solves problems of equality and equity</td>
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<td>5</td>
<td>Students have role models</td>
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<td>6</td>
<td>Retrogressive cultural practices does not hinder choice of some subjects</td>
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<td>7</td>
<td>Gender equality has brought positive changes to the department</td>
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</table>

13) Suggest ways of improving gender mainstreaming in your department…………………………………………………………………………………
…………………………………………………………………………………………………………………………………………………. ……………………………………………………………………………………………………………………………………………………..

Feel free to add more information on gender mainstreaming below. Thank you for your time.
Appendix D:

Questionnaire for Students

The purpose of this evaluation questionnaire is to collect feedback on the extent to which gender policy has been effectively implemented in TVET institutions in Kenya. Please feel free to answer questions as sincerely, and as fully as possible. Provide your answer in the space provided, or tick the correct choice.

Section one: Demographic information
1) Name of your Department …………………………………………………………………
2) Name of your institution……………………………………………………………………
3) What is your gender…………male (   ) female (   )

Section two: Gender mainstreaming
4) In your opinion what is gender equality (mainstreaming)……………………
   a) Women issues (   ) b) providing equal access to resources and opportunities (   ) c) making women be equal to men (   ) d) others……….
5) Have you received any gender equality awareness…Yes ( ) no (   )
6) Did the awareness have any impact on behaviour change…Yes ( ) no (   )
7) Have you ever experienced any form of gender discrimination…yes (   ) no (   )
8) If yes what form of gender discrimination was it
   ………………………………………………………………………………………………………
9) How did you deal with the gender discrimination…………………………
   a) Reported to management (   ) b) Did nothing (   ) c) Indicate other option taken……………………………………………………………………
### Section three: Attitude scale

10) On a scale of 1 to 5 rate the level of gender mainstreaming in your institution across departments

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly agree (5)</th>
<th>Agree (4)</th>
<th>Undecided (3)</th>
<th>Disagree (2)</th>
<th>Strongly agree (1)</th>
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<tr>
<td>Gender equality is necessary</td>
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<tr>
<td>There is need for gender mainstreaming in activities</td>
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<tr>
<td>There is no stereotyping in the choice of courses</td>
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<td>Female students should be encouraged to study Engineering and Technology related courses</td>
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<td>Male students should be encouraged to study Institutional Management and Secretarial courses</td>
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<td>There should be equal representation of female and male students</td>
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<td>Gender equality has brought positive change to the department</td>
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11) Suggest ways of improving enrolment of male/female students in your department

You can add any more information below. Thank you for your time.
Appendix E:

Questionnaire for Heads of Department

The purpose of this evaluation questionnaire is to collect feedback on the extent to which gender mainstreaming has been implemented in TVET institutions in Kenya. Please respond to the questions as sincerely, and as fully as possible. Provide your answer in the space provided, or tick the correct choice.

Section one: Demographic information

1) Name of department……………………………………………………
2) What is your gender ....Male (   ) Female (   )
3) What is your age .....21-30 (   ) 31 - 40(   ) 41- 50 (   ) 51 – 60(   )
4) What are your qualification …Craft (   ) Diploma (   ) Higher National Diploma (   ) Degree (   ) Masters (   )
5) What is your teaching experience in years 1-5 (   ) 6 – 10(   ) 11 – 15 (   ) 16 – 20 (   ) 21 – 25 (   ) above 25 (   )

Section two: Enrolment in various courses

6) How many programmes do you run in the department.....................
7) Indicate the course and the number of students enrolled for the years indicated below as per gender

<table>
<thead>
<tr>
<th>Course</th>
<th>M</th>
<th>F</th>
<th>M</th>
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Section three: Gender mainstreaming

1) Is gender mainstreaming being practiced in department…yes ( )no ( )
   a) Between 1 and 10 ( ) b) Between 11 and 20 ( ) c) Above 20 ( )

2) Which programmes are: a) Male dominated male dominated………………

b) Female dominated……………………………………………………

c) Which ones have equal representation………………………………

3) Are students given equal opportunities in departmental activities…yes ( )
   no ( )

4) If no to the above state reason………………………………………………

5) What strategy do you have in place for female students who get pregnant……
   a) Come back after delivery ( ) b) No follow up ( )
   c) They are expelled ( ) e) Others (name)………………………….

6) What factors are hindering implementation of the gender policy
   a) Stereotyping ( ) b) Lack of role model ( ) c) Lack of sensitization ( )
   d) others (name)………………………………………………

7) What strategies are in place to achieve gender parity in your department
   a) Bursaries/scholarships( ) b) Sensitization( ) c) Affirmative action( )
   d) Role models ( ) e) Others (name)………………………….

8) What strategies appear to be working so far………………
   a) Use of role models ( ) b) Bursaries/ scholarships ( )
   d) Sensitization ( ) e) Affirmative action ( ) f) Others (name)…………

9) What additional strategies would you recommend to the government to employ in order to attain gender equity in your department
   Suggestions…………………………………………………………

Thank you for your time.
Appendix F:
Interview Guide for Technical Education Officer

Section one: Demographic information
1) Name of the technical officer
2) Gender of the technical officer
3) Job group of the technical officer

Section two: Gender mainstreaming
4) Is gender mainstreaming in place
5) Guidelines to institutions at the time of the evaluation on gender equity
   (probe: how did you give out the guidelines?)
6) Is gender mainstreaming being implemented consistent with the way it was envisioned
   (probe: what are the terms of reference to institutions?)
7) Is gender mainstreaming feasible
8) Do the benefits of gender mainstreaming justify the costs

Section three: strategies in place
9) What strategies has MoHEST put in place for gender mainstreaming
10) What strengths and weaknesses have you encountered in implementing the above strategies

11) What additional strategies would you recommend to MoHEST to employ in order to attain gender equity in your institution
   (probe: what is your source of reference?)
12) What strategies appear to be working so far

13) How much does it cost to implement gender mainstreaming policy
Appendix G:

Map of Kenya, and the Regions

The above map shows the eight provinces of Kenya and the major towns. The sampled institutions were scattered across six provinces, apart from Nairobi province and North Eastern province.